Yahoo Group Archive: loopantennas (2008 — 2012)

Yahoo Group summary: This is the Loop Antenna Group to Ask Your Questions, Get Answers and Information about Loop Antennas for improved your Radio Listening and Enjoyment. \n \n This is your "HOW TO" Loop Antenna Forum to : Get Information, Plan, Design and Build Loop Antennas for both Radio Reception and Transmission. Air loops, magnetic loops, ferrite loops, shielded, unshielded, SLF to any frequency you can make a loop antenna for.\n \n Loop antennas are used to reduce interference or can be used as compact antennas or for radio direction finding (RDF).\n \n Post Your Question Here! To Get Needed Information and Opinions about a Commercial "Ready-Made" Loop Antenna or help with a home-made loop.\n \n Discussion of this Group is focused on the subject of Loop Antennas. All types of Loop Antennas including Ferrite Rod Loop Antennas; Air-Core Loop Antennas, Shielded Coax Cable Loop Antennas; all types of loop antennas.\n \n Loop Antennas for All Bands : SLF, VLF, LF, MF, HF, VHF, UHF, SHF etc. Longwave, Me

These Yahoo Groups messages were archived in WARC format by ArchiveTeam in 2017. This PDF was generated by Digital Library of Amateur Radio & Communications from the WARC files in 2026.

Date span: 2008-01-01 through 2012-12-27

Source WARC: loopantennas.cgAJkQd.warc.gz

Source item: https://archive.org/details/yahoo-groups-2017-05-23T02-01-34Z-c8358f

Messages included in this PDF: 4753

Message records with no body available in the source archive: 1

Messages omitted as spam from this PDF: 7

Yahoo replaced the domain portions of email addresses with @... in the archived messages. Characters lost in Yahoo's archived text appear as ?.

Messages are presented in ascending Yahoo message-ID order. Gaps indicate records absent from the source WARC or messages omitted from this PDF as spam.

4627. Re: Stupid antenna tricks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-01 02:03:55 UTC
From: cank13cat
Topic: 4612 Message: 4627

Unfortunately an outdoor resonant antenna for anything other than, oh,
11 meters, is out of the question for me. I'm in an apartment and
while there's a large fenced in backyard where I could put up a
stealth antenna, it's on the wrong side of the building from my apartment.

I have been going outside with a portable to listen in on 6900-6955
(mostly 6925). It works well enough once I get away from the overhead
power lines, etc. But the chilly breeze is aggravating a respiratory
infection I'm trying to get over.

Looks like I'm back to considering a reasonably well designed (and
priced) loop.

--- In loopantennas@yahoogroups.com, "jr_dakota" <SG2112@...> wrote:
>
> The pirates all run low power, usually less than 100W so a resonant
> antenna cut for 6.925 Mhz is helpful here .... nearly all the Pirates
> use a simple resonant dipole and in my experience the best way (ie. -
> Cost vs. Complexity vs Performance) to receive them is using the same
> antenna
>
> Currently my multiband dipole (actually an inverted V) has one of the
> legs cut for 6.950 Mhz and trimmed with my AMQRP Antenna Analyzer
>
> New Years Eve is a good night for listening to Pirates, they are
> already out in force it looks like ...
>
http://www.frn.net/scripts/john/vines/forumdisplay.cgi?action=topics&forum=The+A*C*E*+Logg
ings&number=4&DaysPrune=30&LastLogin=
>
> JR
>

4628. Re: Stupid antenna tricks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-01 02:10:51 UTC
From: cank13cat
Topic: 4612 Message: 4628

Yup, I recall you mentioning that before. The PK loops are reasonably priced. Might be worthwhile to have one designed just for a particular meter band and stick with a random wire for everything else.

Heck, I get good enough reception of the major SW broadcasters with little more than a paper clip stuck into the Hi-Z input! So nothing fancy is necessary for listening to Radio Netherlands, CRI, Taiwan, Japan, any of the relays via Sackville or the propagation propaganda pros from Radio Havana Cuba (heck, it's worth listening to 'em dis the U.S. just for the music and Arnie Coro).

--- In loopantennas@yahoogroups.com, Richards <jruing@...> wrote:
>
> PK Loops in Australia can do just that - especially with AM loops
> for the MW band -- he made me a custom range loop that works
> OK and is only 14 inches diameter.
>
> And despite all my misgivings, I suppose your oddball loop thing
> will actually work in spite of its defiance of all things logical and
> natural!
>
> Hope it works even though it should not !!
>
> Happy trails ------------ Richards ------------------
> ==
>

4629. Re: [loopantennas] Re: 2 kinds

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-01 02:43:47 UTC
From: Richards
Topic: 4610 Message: 4629

Also,

Are you transmitting or receiving or both?
Frequencies and target stations?

////////////////// Richards //////////////

==========

aircheckclover wrote:
> --- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>> Does anyone have any info on Window or Deck antenna's?

==========

4630. Re: [loopantennas] Re: Stupid antenna tricks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-01 10:33:12 UTC
From: Ray Phillips
Topic: 4612 Message: 4630

Why not try a skirting board loop antenna?

In your largest room, run one or more turns of multi-stranded, insulated, copper wire (speaker cable should be OK) around the outside of the room up against the skirting board. Or one or more turns around the outside of the room under the carpet. Because a loop's capture ability is a function of its area, you get the maximum indoors catch area, in the warm, in an inconspicuous fashion. A 4 foot loop resonant at about 4 MHz will have a gain in the region of about -15 dB. A skirting board loop resonant at the same frequency can have a gain approaching 4 dB. Don't take my figures for gospel but there is a large difference. If any of the technophiles on the forum want to post the definitive comparison, I welcome them (I'd like to know but am too lazy to run the experiments).

The number of turns depends on the perimeter of your room relative to your frequency of interest plus a number of other factors such as the method of construction - eg is there iron mesh in the concrete floor?, position of electrical wiring, plumbing etc. A single turn loop in a room 24 feet by 20 feet in a wooden building should resonate somewhere around 8-9Mhz (This is a guess - anyone confirm or deny?). It is harder to get that perfect length than using a multiple turns on a small area loop because each turn is just so long but the performance benefits are worth the struggle.
Anyway you should aim for your loop to to be slightly shorter than the resonant length so you can tune it down to your desired frequency with a variable capacitor. Just connect the variable capacitor to the ends of the loop wire. If your length is right you will hear an increase in signal as you adjust the capacitor to resonate the loop at your frequency of interest. If the loop resonates above the FOI, lengthen it----resonates below, shorten it. You can, of course, use the loop untuned by running just one turn and leaving the capacitor out but the advantages of the tuned loop will be unavailable - just put in a loop with the largest area. There is no way to predict the actual performance of a skirting board loop because of the wide variability in the construction and location of rooms and so some experimentation is needed.

Inside the building you expose your antenna to more electrical interference. Self-adhesive aluminium foil tape under and on top of the loop will go a long way to provide some electrostatic rejection. This is because the aluminium is highly conductive to electricity but has poor magnetic abilities which allows the magnetic part of the radio signal to get to the magnetically sensitive loop. Don't make the tape continuous around the whole loop as it will become a shorted turn and suck all your signals away - leave a gap of a few inches (at the tuning capacitor is good).
The tape will alter the resonant frequency of the loop - experiment.

Now you've got to couple the loop to the radio. If your loop is tuned don't connect the ends of the loop directly to the radio because a tuned loop is a high impedance device. The input to most radios is a low impedance and this low impedance will load up the tuned loop and severely impair its performance. Wind a few turns of thin, insulated wire on a ferrite rod and connect the ends to a suitable plug using coax cable. Lay the rod across the loop.
If your loop is untuned, connect the ends to the coax or use a balun between the loop and the coax. I don't know what ratio balun to recommend because of the variability in room sizes and FOI but a 4:1 is a good place to start.

Before committing to lifting your carpet or other serious activities, just place the wire near as near as possible to its final position and do your experiments/adjustments. Once you've maximised its performance, put it into its final position, the performance won't change much.

Cost: speaker cable 40c/metre; ferrite rod <$5; plug $1.50; coax $1.10/metre; aluminium tape - don't know - never bothered; coupler wire (free - pull an old transformer apart).

> Unfortunately an outdoor resonant antenna for anything other than, oh,
> 11 meters, is out of the question for me. I'm in an apartment and
> while there's a large fenced in backyard where I could put up a
> stealth antenna, it's on the wrong side of the building from my apartment.
>

4631. Re: Stupid antenna tricks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-01 11:55:54 UTC
From: cank13cat
Topic: 4612 Message: 4631

I think my copy of Carr's "Receiving Antenna Handbook" has a very
similar scheme.

I've been trying to avoid using a tuner, for the sake of ease in
bandscanning, but I'm not sure that's practical. What I might end up
doing is attaching a random wire and tuned loop to the receiver via a
switchbox. Use the random wire just to check for signals in the clear
and switch to the tuned/tunable loop to improve reception, reduce
noise, etc.

As a photographer I've accumulated way too many tripods. I'll
probably dedicated one of 'em to a loop stand. The nearly infinitely
adjustable angles should make it handy for reorienting a loop to
minimize local noise.

--- In loopantennas@yahoogroups.com, "Ray Phillips" <ray@...> wrote:
>
> Why not try a skirting board loop antenna?
>
> In your largest room, run one or more turns of multi-stranded,
insulated,
> copper wire (speaker cable should be OK) around the outside of the
room up
> against the skirting board. Or one or more turns around the outside of
> the room under the carpet. Because a loop's capture ability is a
function
> of its area, you get the maximum indoors catch area, in the warm, in an
> inconspicuous fashion. A 4 foot loop resonant at about 4 MHz will
have a
> gain in the region of about -15 dB. A skirting board loop resonant
at the
> same frequency can have a gain approaching 4 dB...
> (snip)

4632. Space-Challanged Lot...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-01 14:46:14 UTC
From: Donald Saunders
Topic: 4632 Message: 4632

Hi All,

I'm in a unique predicament. My double city lot is only
60' wide, but 275' long. There are electrical high lines
at the back of the lot and the service line comes from a
pole on the back, Northeast corner along the East side of
the lot about 100 feet to a "pick-up" pole (Electric Co's
definition), then crosses over the yard to the Southwest
and attatches to the back, middle of the house.

Not wanting to put up a wire antenna over an electical drop,
I'm some what handi-capped, both physically by space and
body (severe arthritis). Do any of you have plans for a
rectangular full-wave loop that I could run (on the West
side of the house, say 25' wide and 200'long on the side?

I'll feed it with 450 ohm ladder line and use an MFJ 949-E
tuner to match the Icom 706 Mark II-G.

Thanks in advance,

Respectfully submitted,
73,
"Happy New Year!"

Don/KA5-LQJ

Grid Square: EM-32

4633. Re: Wearable Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-01 22:54:51 UTC
From: Hue Miller
Topic: 4633 Message: 4633

The Altoids tin would just be a box for the amplifier.
Then, in my imaginings, there would be a loop of
flexible spring wire coming out of it, off the narrow
end of the tin, so the amplifier proper can fit in a
jacket pocket. It occurred to me that i would want
to somehow retain VHF performance with this
antenna, whether tuned or untuned loop - i don't
think that's the most difficult part, however.

I saw in a recent "Radcom" some things offered for
add-ons for scanners but the vulnerability of some
add-on box that attaches to the antenna connector
on top the scanner looks scarey. I mean it does not
look convincing as to mechanical robustness, as well
as it's tuned by a knob to a single frequency, and i'm
more interested in wideband reception for a pocket
scanner.

Re picking up the hobby broadcasters on 40 meters:
will a portable with a whip antenna really do this?
Reception out here on the Oregon coast must be much
worse than there. Late night, it's amazing how empty the
SWBC bands are.

Re foxhole radios in Pacific War: very interesting and VERY
surprising to me. I would not thought a razor-blade radio
could pick up Japan HF broadcasts, as these radios were
just not as sensitive as a crystal radio with a more
conventional detector, and i've never known that aircrew
headphones were either reknown for sensitivity and i think
they were based at 600 ohms, is this not right. Plus, Japan
was broadcasting with power of (i think i read) 40 kw on its
shortwave transmitters. Still, this may have been possible;
It's an overwater route and in the hundreds of miles only.
Maybe that interesting anecdote will even inspire me to try
it out. If you had said, used razor blade radio to listen to the
local Armed Forces Radio, i could easily accept that; most
every island with a military population in the thousands, after
being pacified, got a AFRS radio station of 1 kw power, and
some smaller islands without an AFRS station had local-built
stations of lower power. But - i had NEVER heard or read
about the Pacific War connection to the foxhole radio - that
REALLY deserves to be more widely known. It occurred to
me that it must have been a bit difficult to set up these
foxhole radios to work - you had to have Japan on the air -
plus the fading normal to shortwave radio "may" have meant

trying to find a hot spot on the blade, a frustrating experience.
-Hue Miller

4634. Help finding

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-02 01:12:44 UTC
From: jefeickert
Topic: 4634 Message: 4634

I am trying to find the Email for Michael Herbert NH7SR
he wrote some stuff on Antenna's.'the one I found is n longer being used by him.
JIM F.

4635. Re: Help finding

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-02 16:19:10 UTC
From: msznh
Topic: 4634 Message: 4635

Put his call sign, NH7SR, as the keyword of the search option of this forum and you'll get all his emails.

Tom

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> I am trying to find the Email for Michael Herbert NH7SR
> he wrote some stuff on Antenna's.'the one I found is n longer being used by him.
> JIM F.
>

4636. OFF TOPIC discussions about posting Re: Foxhole set and such....

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-02 18:03:06 UTC
From: Steve
Topic: 4597 Message: 4636

OK, that's enough. Len, you keep straying into insults and bullying.
I've warned you before.

You could have simply said what I've left of your message below, and
changed the subject line since nothing in your post had anything to do
with foxhole radios or loop antennas:

--- In loopantennas@yahoogroups.com, Len Warner <novost@...> wrote:
snip
> And, after all those pious words, you yourself CBA to trim...
snip
> From Yahoo! Groups Help: ... trim all the irrelevant quoted text
> out of your message (as a courtesy to the other members of
> the group to make the digest easier to read).

-MY- thoughts on the subject:
Trim down to only what is needed to understand the reply.
Trim down to only what is needed to understand the reply.
Trim down to only what is needed to understand the reply.
Top, bottom, interleave posting, I don't care. Use proper quoting and
text only and it doesn't really matter. We've discussed this enough.

The facts: this isn't the old Fidonet. Back then, people bottom posted
because you also included much of the previous discussion as someone
might read your message weeks later and downloading old messages was
slow and difficult. Deleting selected portions was not that easy, it
meant manually moving your pointer with the arrow keys and hitting the
backspace over and over. It was socially acceptable then to bully
people right out for failing to bottom post. That is -not- acceptable
behavior here.

It isn't Fidonet any more. Even Usenet is different. Looking up the
old messages is much easier, and most of us get online to check email
at least every few days, so discussions are much easier to follow. As
a side effect, it's much easier to read a top-posted reply than bottom
posted. Sadly, this also means people tend not to notice just how much
old message is attached and trimming, although -much- simpler with a
mouse, gets forgotten. I consider it sufficient to send a reminder now
and then. No sense using a bazooka to kill a few mosquitoes, that's
how more than one list has destroyed itself.

If you wish to discuss this more, contact me -off- list. If necessary,
I'll start a separate list to discuss posting rules or lack thereof,
but NOT ON THIS LIST.

Steve Greenfield
listowner and only moderator of loopantennas

4637. Active Antenna Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-02 18:23:39 UTC
From: Chris Trask
Topic: 4637 Message: 4637

Over the holidays, I took a great deal of time to investigate some ideas that I had with regard to the design of lossless feedback amplifiers in an effort to improve the dynamic range of active antennas, both in terms of noise figure (NF) and distortion (IMD products). I had quite a bit of success, and wrote a monologue about some of what I did:

http://www.home.earthlink.net/~christrask/Lossless%20Feedback%20Amplifiers.pdf

The details of all this, plus some other advanced techniques, are part of a full article that I'm presently writing.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4638. Re: Space-Challanged Lot...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-02 23:02:00 UTC
From: Bruce Conner
Topic: 4632 Message: 4638

--- In loopantennas@yahoogroups.com, "Donald Saunders" <ka5.lqj@...>
wrote:

> Not wanting to put up a wire antenna over an electical drop,
> I'm some what handi-capped, both physically by space and
> body (severe arthritis). Do any of you have plans for a
> rectangular full-wave loop that I could run (on the West
> side of the house, say 25' wide and 200'long on the side?

Don,

I'm trying to visualize your situation from the description. Would you be able to put up a narrow(ish) delta shape with the pointy end toward one corner of the house without being too close or crossing the power drop? You certainly have the room for a full wave 80 meter delta there if you can avoid the powerlines. Failing that, maybe a bobtail curtain or something? Not sure where your pattern would end up pointing with that though. With a corner fed delta, a big lobe comes off the feed point and opposite. Mine works FB.

Bruce
WB8OGK

4639. qrpbear@yahoo.com

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-03 04:04:17 UTC
From: jefeickert
Topic: 4639 Message: 4639

Hello there
I am going to build the Antenna that is in this article.
I have a few Question on this parp.
If your receiver has an external antenna jack use a short length of coaxial cable to connect
from the jack to the antenna. For the horizontal doublet connect the shield to one leg of the
antenna and the center conductor to the other leg. For the vertical doublet connect the shield
to the center of the antenna and the center conductor to a point about 6" to 12" higher. Hose
clamps are ideal for this and permit moving the center conductor feed point up or down to
find the best spot. The same technique is used for the loop. Connect the shield to the center
of the bottom member and the center conductor some 6" to 12" away

I really don't understand this
JIM F.

4640. Re: qrpbear@yahoo.com

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-03 09:51:11 UTC
From: jr_dakota
Topic: 4639 Message: 4640

Sounds to me like he's talking about a Gamma Match .... It's used a lot in transmit small loops and Yagis .... Try Googling the term Gamma Match and I bet you'll find what you are needing to know

JR

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> Hello there
> I am going to build the Antenna that is in this article.
> I have a few Question on this parp.
> If your receiver has an external antenna jack use a short length of coaxial cable to connect
> from the jack to the antenna. For the horizontal doublet connect the shield to one leg of the
> antenna and the center conductor to the other leg. For the vertical doublet connect the shield
> to the center of the antenna and the center conductor to a point about 6" to 12" higher. Hose
> clamps are ideal for this and permit moving the center conductor feed point up or down to
> find the best spot. The same technique is used for the loop. Connect the shield to the center
> of the bottom member and the center conductor some 6" to 12" away
>
> I really don't understand this
> JIM F.
>

4641. Re: [loopantennas] Re: qrpbear@yahoo.com

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-03 14:17:26 UTC
From: james feickert
Topic: 4639 Message: 4641

It has to do with his article on "3 ANTS. TXT" read it
first!
JIM.F Binden*
--- jr_dakota <SG2112@...> wrote:

> Sounds to me like he's talking about a Gamma Match
> .... It's used a
> lot in transmit small loops and Yagis .... Try
> Googling the term Gamma
> Match and I bet you'll find what you are needing to
> know
>
> JR
>
> --- In loopantennas@yahoogroups.com, "jefeickert"
> <jefeickert@...> wrote:
> >
> > Hello there
> > I am going to build the Antenna that is in this
> article.
> > I have a few Question on this parp.
> > If your receiver has an external antenna jack use
> a short length of
> coaxial cable to connect
> > from the jack to the antenna. For the horizontal
> doublet connect the
> shield to one leg of the
> > antenna and the center conductor to the other leg.
> For the vertical
> doublet connect the shield
> > to the center of the antenna and the center
> conductor to a point
> about 6" to 12" higher. Hose
> > clamps are ideal for this and permit moving the
> center conductor
> feed point up or down to
> > find the best spot. The same technique is used for
> the loop. Connect
> the shield to the center
> > of the bottom member and the center conductor some
> 6" to 12" away
> >
> > I really don't understand this
> > JIM F.
> >

>
>
>

Be a better friend, newshound, and
know-it-all with Yahoo! Mobile. Try it now.
http://mobile.yahoo.com/;_ylt=Ahu06i62sR8HDtDypao8Wcj9tAcJ

4642. Re: qrpbear@yahoo.com

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-03 17:18:11 UTC
From: Michael Hebert
Topic: 4639 Message: 4642

Jim,

I have only a very vague recollection of that article but, as JR points out, the description of the feed method for the vertical doublet and the loop is that of a simple gamma match. The coax shield is connected to the zero-voltage point at the center of the doublet or loop. The coax center connector is connected to a point offset from center that experimentally provides a match to the cable (usually 50 Ohms).

73,

'Bear' NH7SR

4643. funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-03 18:59:40 UTC
From: jefeickert
Topic: 4643 Message: 4643

Richard ,
I put wire around the deck on the E,W,N sides
it also runs in the house 30'(north) the 3' East then back to South
to the radio.I had about 20' left over, I was tuning the radio found station
but it was not to clear so I drop the 20' on the floor and the radio was so clear and loud.
so I left well enough along. At 9 AM CST. today I pick up China International
at 13739.
JIM F.

4644. Re: [loopantennas] funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-03 23:05:48 UTC
From: Richards
Topic: 4643 Message: 4644

Sounds like that is an improvement. I cannot, however, trace
the course of this wire in my mind's eye... I guess it doubles
back on itself 30 feet? Typically, they do not work so well if
they double back against themselves. But, then again, sometimes
they just defy all logic and work well in spite of any theory!

Can you draw out the pattern somehow?

But good to hear you are making progress !!

////////////// Richards - K8JHR ////////////////
---

jefeickert wrote:

> I put wire around the deck on the E,W,N sides
> it also runs in the house 30'(north) the 3' East then back to South
> to the radio.

. today I pick up China International

==========

4645. Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-04 09:35:19 UTC
From: jefeickert
Topic: 4643 Message: 4645

ok I went the 10' along the wall on the deck
then went 12' along the length of the deck
then went 10' on the other side of deck.(outside)
In side -the wire comes in the condo thru the same hole that the Satellite dish
uses. then went across the floor joyices 30' to other side of basement.
then 3' I made a left turn towards (in) the basement.
then back 8' towards the radio. remember the deck is 5-6' higher than the basement.
I guess out side it looks like a horse shoe(3 sided)
None of the wire crosses or touch.
JIM F.

4646. Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-04 18:06:34 UTC
From: cank13cat
Topic: 4643 Message: 4646

The funky thing about voodoo antenna rigging is that they usually work very well within at least one narrow frequency range.

I'm continually tweaking my crude indoor antennas and find that I can usually optimize performance for a certain meter band, but at the expense of broadband performance. Sometimes it's just a matter of rerouting a leg of a misshapen random wire to improve reception on one band, then tweaking it again for another meter band.

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> ok I went the 10' along the wall on the deck
> then went 12' along the length of the deck
> then went 10' on the other side of deck.(outside)
> In side -the wire comes in the condo thru the same hole that the Satellite dish
> uses. then went across the floor joyices 30' to other side of basement.
> then 3' I made a left turn towards (in) the basement.
> then back 8' towards the radio. remember the deck is 5-6' higher than the basement.
> I guess out side it looks like a horse shoe(3 sided)
> None of the wire crosses or touch.
> JIM F.
>

4647. Re: [loopantennas] Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-04 21:14:33 UTC
From: james feickert
Topic: 4643 Message: 4647

My radio is a Realistic DX 440 PLL Synthesized circuit
I paid $215.)) in1989. works perfect cause I treat it
perfect.
JIM F.
--- cank13cat <wa_jenkins@...> wrote:

> The funky thing about voodoo antenna rigging is that
> they usually work
> very well within at least one narrow frequency
> range.
>
> I'm continually tweaking my crude indoor antennas
> and find that I can
> usually optimize performance for a certain meter
> band, but at the
> expense of broadband performance. Sometimes it's
> just a matter of
> rerouting a leg of a misshapen random wire to
> improve reception on one
> band, then tweaking it again for another meter band.
>
> --- In loopantennas@yahoogroups.com, "jefeickert"
> <jefeickert@...> wrote:
> >
> > ok I went the 10' along the wall on the deck
> > then went 12' along the length of the deck
> > then went 10' on the other side of deck.(outside)
> > In side -the wire comes in the condo thru the same
> hole that the
> Satellite dish
> > uses. then went across the floor joyices 30' to
> other side of basement.
> > then 3' I made a left turn towards (in) the
> basement.
> > then back 8' towards the radio. remember the deck
> is 5-6' higher
> than the basement.
> > I guess out side it looks like a horse shoe(3
> sided)
> > None of the wire crosses or touch.
> > JIM F.
> >
>
>
>

Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping

4648. Re: [loopantennas] Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-05 00:40:34 UTC
From: Richards
Topic: 4643 Message: 4648

Whoa -- Yes... I think I get it now..., you must be located
on the other side of the house away from the window
that is near the deck! That's quite a run. I thought you were
sitting inside that window on the same side of the house as
the deck is.

But... I take it the good news is that your reception is better!
Yes?

////////////////////////// Richards ////////////////////////

jefeickert wrote:
> ok I went the 10' along the wall on the deck
> then went 12' along the length of the deck * * * * *

==========

4649. Re: [loopantennas] Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-05 00:43:36 UTC
From: Richards
Topic: 4643 Message: 4649

Nice radio -- and I take care of my stuff the same way.
I cannot fathom how guys lose the battery covers and
bend the antennas and get them all covered with food
and such.

I just got a repair part to fix my old SONY ICF-5900w
SW receiver - the S-meter does not work - and it will
soon be back like new. I know how you feel about
taking care of it.

////////////////// Richards ////////////////

james feickert wrote:
> My radio is a Realistic DX 440 PLL Synthesized circuit
> I paid $215.)) in1989. works perfect cause I treat it
> perfect.

==========

4650. Re: Space-Challanged Lot...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-05 02:52:51 UTC
From: Donald Saunders
Topic: 4632 Message: 4650

Bruce,

Thanks for the reply. I might be able to put up wooden mast
at the end corner of the house (about 20' from the west
property line and run it the length of the house (about 50'),
then continue it into the back yard to about 30 feet from the
high power (77kV) lines then East for 30', then back towards
the house and over the house. About mid-point of the back
yard, I'm going to have a vertically wound antenna (takes to
long to explain) so the wire could attatch to the antenna
support and then to the house.

Thanks,

Don/KA5-LQJ

--- In loopantennas@yahoogroups.com, "Bruce Conner"
<bruce.conner@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Donald Saunders" <ka5.lqj@>
> wrote:
>
> > Not wanting to put up a wire antenna over an electical drop,
> > I'm some what handi-capped, both physically by space and
> > body (severe arthritis). Do any of you have plans for a
> > rectangular full-wave loop that I could run (on the West
> > side of the house, say 25' wide and 200'long on the side?
>
> Don,
>
> I'm trying to visualize your situation from the description. Would
> you be able to put up a narrow(ish) delta shape with the pointy end
> toward one corner of the house without being too close or crossing
the
> power drop? You certainly have the room for a full wave 80 meter
> delta there if you can avoid the powerlines. Failing that, maybe a
> bobtail curtain or something? Not sure where your pattern would
end up
> pointing with that though. With a corner fed delta, a big lobe
comes
> off the feed point and opposite. Mine works FB.
>
> Bruce
> WB8OGK
>

4651. Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-05 14:08:54 UTC
From: cank13cat
Topic: 4643 Message: 4651

Heh. You just described my Magnavox D2935. The membrane covered keypad makes it perfect for picnic DXing. I actually hafta wipe it off occasionally to remove the greasy pawprints. But that's why I love that radio. I wouldn't treat my Sony ICF-2010 or Palstar R30 that way.

I do get nitpicky about the way some folks slam down their antennas from the top instead of gently pulling 'em down from the bottom. I tried to fix my mom's Baygen antenna, which she'd half-broken at the top. She assumed it was fixed well enough to slam it down from the top and managed to completely break it this time. I'm not fixing it again.

I had a couple of DX-440s when they were made new. One of the jack sockets (headphone or external antenna?) was a bit fragile and broke when my ex- accidentally knocked it off a shelf. (I'm assuming it was an accident - she never did like my radio hobby.) I was disappointed by the relatively fragile construction, but it was easy enough to repair. Kinda wish I'd kept one of those radios but had too many and needed to thin out the herd.

--- In loopantennas@yahoogroups.com, Richards <jruing@...> wrote:
>
> Nice radio -- and I take care of my stuff the same way.
> I cannot fathom how guys lose the battery covers and
> bend the antennas and get them all covered with food
> and such.
>
> I just got a repair part to fix my old SONY ICF-5900w
> SW receiver - the S-meter does not work - and it will
> soon be back like new. I know how you feel about
> taking care of it.
>
> ////////////////// Richards ////////////////
>
> james feickert wrote:
> > My radio is a Realistic DX 440 PLL Synthesized circuit
> > I paid $215.)) in1989. works perfect cause I treat it
> > perfect.
>

4652. Re: [loopantennas] 2935 was:Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-05 14:59:41 UTC
From: C. Beijersbergen
Topic: 4652 Message: 4652

I do have the circuit diagrams and a wiring diagram available as jpg's. Are you anyway interested? I could mail them to you.

The keypad consists of separate mechanical switches on a PCB, each covered by a plastic knob with a flat front face which lines up with a flat surface of the main housing. On this a flexible foil is placed with an adhesive to keep it in place.
This solution was chosen because we did not consider in 1982 the rubber keypads that are more or less the standard solution nowadays to be reliable enough for this rather expensive receiver.

regards,

Cor Beijersbergen van Henegouwen

Heh. You just described my Magnavox D2935. The membrane covered
keypad makes it perfect for picnic DXing. I actually hafta wipe it
off occasionally to remove the greasy pawprints. But that's why I
love that radio.

[Non-text portions of this message have been removed]

4653. 2935 was:Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-05 18:44:58 UTC
From: cank13cat
Topic: 4652 Message: 4653

Very interested! Would my e-mail or snail mail address be more convenient?

The D2935 continues to amaze me with its fine performance and excellent audio. I've considered buying another to see whether it's feasible to install a slightly narrower filter and to experiment with different external antennas.

Thanks,

Lex

--- In loopantennas@yahoogroups.com, "C. Beijersbergen" <c.beijersbergen@...> wrote:
>
> I do have the circuit diagrams and a wiring diagram available as jpg's. Are you anyway interested? I could mail them to you.
>
> The keypad consists of separate mechanical switches on a PCB, each covered by a plastic knob with a flat front face which lines up with a flat surface of the main housing. On this a flexible foil is placed with an adhesive to keep it in place.
> This solution was chosen because we did not consider in 1982 the rubber keypads that are more or less the standard solution nowadays to be reliable enough for this rather expensive receiver.
>
> regards,
>
> Cor Beijersbergen van Henegouwen
>
>
> Heh. You just described my Magnavox D2935. The membrane covered
> keypad makes it perfect for picnic DXing. I actually hafta wipe it
> off occasionally to remove the greasy pawprints. But that's why I
> love that radio.
>
> [Non-text portions of this message have been removed]
>

4654. Re: [loopantennas] Re: funny antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-05 21:15:57 UTC
From: james feickert
Topic: 4643 Message: 4654

Also when they first came out I went to the expense
buying the blue
plastic stand that pots it a slant I added the felt.
JIM F
--- cank13cat <wa_jenkins@...> wrote:

> Heh. You just described my Magnavox D2935. The
> membrane covered
> keypad makes it perfect for picnic DXing. I
> actually hafta wipe it
> off occasionally to remove the greasy pawprints.
> But that's why I
> love that radio. I wouldn't treat my Sony ICF-2010
> or Palstar R30
> that way.
>
> I do get nitpicky about the way some folks slam down
> their antennas
> from the top instead of gently pulling 'em down from
> the bottom. I
> tried to fix my mom's Baygen antenna, which she'd
> half-broken at the
> top. She assumed it was fixed well enough to slam
> it down from the
> top and managed to completely break it this time.
> I'm not fixing it
> again.
>
> I had a couple of DX-440s when they were made new.
> One of the jack
> sockets (headphone or external antenna?) was a bit
> fragile and broke
> when my ex- accidentally knocked it off a shelf.
> (I'm assuming it was
> an accident - she never did like my radio hobby.) I
> was disappointed
> by the relatively fragile construction, but it was
> easy enough to
> repair. Kinda wish I'd kept one of those radios but
> had too many and
> needed to thin out the herd.
>
> --- In loopantennas@yahoogroups.com, Richards
> <jruing@...> wrote:
> >

> > Nice radio -- and I take care of my stuff the same
> way.
> > I cannot fathom how guys lose the battery covers
> and
> > bend the antennas and get them all covered with
> food
> > and such.
> >
> > I just got a repair part to fix my old SONY
> ICF-5900w
> > SW receiver - the S-meter does not work - and it
> will
> > soon be back like new. I know how you feel about
> > taking care of it.
> >
> > ////////////////// Richards ////////////////
> >
> > james feickert wrote:
> > > My radio is a Realistic DX 440 PLL Synthesized
> circuit
> > > I paid $215.)) in1989. works perfect cause I
> treat it
> > > perfect.
> >
>
>

Never miss a thing. Make Yahoo your home page.
http://www.yahoo.com/r/hs

4656. Re: Space-Challanged Lot...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-10 15:23:37 UTC
From: dldorrance
Topic: 4632 Message: 4656

Hi Don,

Is the issue here how to fit a loop onto your lot or do you also have
a qrn problem with the electrical line?

If the latter, some other considerations come into play beside the
solutions above.

Dave WA6YSO

--- In loopantennas@yahoogroups.com, "Donald Saunders" <ka5.lqj@...>
wrote:
>
> Hi All,
>
> I'm in a unique predicament. My double city lot is only
> 60' wide, but 275' long. There are electrical high lines
> at the back of the lot and the service line comes from a
> pole on the back, Northeast corner along the East side of
> the lot about 100 feet to a "pick-up" pole (Electric Co's
> definition), then crosses over the yard to the Southwest
> and attatches to the back, middle of the house.
>
> Not wanting to put up a wire antenna over an electical drop,
> I'm some what handi-capped, both physically by space and
> body (severe arthritis). Do any of you have plans for a
> rectangular full-wave loop that I could run (on the West
> side of the house, say 25' wide and 200'long on the side?
>
> I'll feed it with 450 ohm ladder line and use an MFJ 949-E
> tuner to match the Icom 706 Mark II-G.
>
> Thanks in advance,
>
> Respectfully submitted,
> 73,
> "Happy New Year!"
>
> Don/KA5-LQJ
>
> Grid Square: EM-32
>

4657. Re: Small Magnetic Loop Transmitting Antenna 10-30 MHz

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-09 14:30:16 UTC
From: capntripps2000
Topic: 4488 Message: 4657

I owned my AEA Isoloop 10-30 since 1993. Always attic mounted it faithfully performed beyond expectations even on 30M. This year the plastic housing broke rendering it useless.

I recently cut the antenna housing dumb-bell in two, salvaging the tuning capacitor assembly. Originally researching what it would take to modify the Isoloop for 40 meters I came upon Antennex and found much information on magnetic loops. I bought the 2 loop books on-line and using them as references built a 40/80M magnetic loop using the salvaged Isoloop tuning cap, 28 feet of 3/4" copper pipe, and some PVC. After a few nights spare time I had assembled a ground mounted 7' X 7' square loop. I laid down 8 ground radials 14ft long connected to each other but not the antenna (per recommendations of the Antennex loop books). I chose to use the gamma feed method rather than the Farday loop, since my goal was using the antenna on only 2 bands (gamma feed works for a 2:1 band spread while Farday loops are good for 5 bands). Getting the loop matched and tuned using an MFJ SWR analyzer was a breeze and I had the antenna on the air in one afternoon with excellent results. The AEA tuning cap range is approx. 36pf to 170pf. This made my loop tune 40M and 60M with an SWR < 1.5:1. I added a 7.5KV 150pf doorknob capacitor in parallel with the var cap and that brought the loop range down to 75/80M with SWR of 1.2:1 across the band. Adding the cap sacrificed 40M but the cap can be removed easily enough. 3:1 bandwidth is around 40Khz on 80M, not too bad. On the air tests were again impressive, in fact receiving was better on the loop as I was able to hear signals that were in the noise with my inverted L.

I will post a photo of the completed antenna in the photo section of this group.

The antenna is light enough to easily take into the garage for storage when not used during the day.

For anyone serious about building a magnetic transmitting loop antenna please review www.antennex.com and look into their two loop books. It made my work much easier and I am planning additional loops in the attic for the other bands.

Andrew N3LCW

>
> --- In loopantennas@yahoogroups.com, "kr4wsagn" <kr4ws@> wrote:
> >
> > I'm looking for an AEA Magnetic Loop. ....I know that MFJ sells
> a similar antenna but I have no direct experience with it, I know the

> AEA product will work well. Does anyone know if the MFJ Loop is equal
> or comparible to the AEA?
>

4658. AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-09 15:14:55 UTC
From: capntripps2000
Topic: 4658 Message: 4658

I owned my AEA Isoloop 10-30 since 1993. Always attic mounted it faithfully performed beyond expectations even on 30M. This year the plastic housing broke rendering it useless.

I recently cut the antenna housing dumb-bell in two, salvaging the tuning capacitor assembly. Originally researching what it would take to modify the Isoloop for 40 meters I came upon Antennex and found much information on magnetic loops. I bought the 2 loop books on-line and using them as references built a 40/80M magnetic loop using the salvaged Isoloop tuning cap, 28 feet of 3/4" copper pipe, and some PVC. After a few nights spare time I had assembled a ground mounted 7' X 7' square loop. I laid down 8 ground radials 14ft long connected to each other but not the antenna (per recommendations of the Antennex loop books). I chose to use the gamma feed method rather than the Farday loop, since my goal was using the antenna on only 2 bands (gamma feed works for a 2:1 band spread while Farday loops are good for 5 bands). Getting the loop matched and tuned using an MFJ SWR analyzer was a breeze and I had the antenna on the air in one afternoon with excellent results. The AEA tuning cap range is approx. 36pf to 170pf. This made my loop tune 40M and 60M with an SWR < 1.5:1. I added a 7.5KV 150pf doorknob capacitor in parallel with the var cap and that brought the loop range down to 75/80M with SWR of 1.2:1 across the band. Adding the cap sacrificed 40M but the cap can be removed easily enough. 3:1 bandwidth is around 40Khz on 80M, not too bad. On the air tests were again impressive, in fact receiving was better on the loop as I was able to hear signals that were in the noise with my inverted L.

I will post a photo of the completed antenna in the photo section of this group.

The antenna is light enough to easily take into the garage for storage when not used during the day.

For anyone serious about building a magnetic transmitting loop antenna please review www.antennex.com and look into their two loop books. It made my work much easier and I am planning additional loops in the attic for the other bands.

Andrew N3LCW

4659. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-11 16:12:05 UTC
From: dldorrance
Topic: 4658 Message: 4659

--- In loopantennas@yahoogroups.com, "capntripps2000"
<capntripps2000@...> wrote:

Hi Andrew,

What is the 2:1 SWR bandwidth on your loop?

Dave WA6YSO

4660. A slightly different version of the WL1030.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-13 00:33:24 UTC
From: swler1
Topic: 4660 Message: 4660

A friend has just built a slightly different version of the WL1030
active loop. It works as well as the unit that I built that used
Litz wire inside a plastic tube.
See <http://www.ng-ronde.nl/wl1030/>

The page is in Dutch so it will help to use Babel Fish translation
at <http://world.altavista.com/babelfish>. The syntax gets a little
mangled but the idea is clear.

Look at the next to last image. Bill used a piece of flat 1" by 1/16"
aluminum bent into a circle fastened as shown in the photo.

I expected the antenna to be noisier then the original version, but
joy of joys it performs exactly as the original.

Bill used ugly or "dead bug" construction and encased the electronics
in clear aquarium silicon. The type with an alcohol solvent. Do
>>NOT<< use standard silicon sealant as it will corrode the electronics.
Another option is to a poly-urethane spray to protect the electronics.

The original construction plans at <www/wl1030.com> should be studied.

This is a good loop antenna. I still favor active dipoles but this
is an inexpensive alternative to the much vaunted ALA1530.

Terry

4661. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-12 01:19:35 UTC
From: Don
Topic: 4658 Message: 4661

Hi All,

I am consistently amazed by the small loop antennas. I have made a 4.25 foot diameter loop, using a butterfly cap from a long salvaged GR Vacumn tube bridge. Its indoors, about 15 feet up, and hears just fantastic. I have a squashed Faraday loop coupling. I oversized the loop, then squashed it down for best signals, and did a quicky VSWR check at low power, and it was right on. Do not TX here in the apartment, but SWL'g is quite fun too.

My best DX with it, is that presently in the morings I am reliably hearing the half a megawatt SW broadcast station on 9870 KHz from All India Radio (AIR Vividh Bharati) up to S7. With the DREAM software DSP (I have modified my Drake TR7 with a 12 KHz IF output), its quite listenable as most of the broadcast is music. Just amazing. I was never a serious SWL before, and never heard anything from that far away that reliably even so.

4662. Aw: [loopantennas] A slightly different version of the WL1030.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-13 08:35:20 UTC
From: clemens.echt@arcor.de
Topic: 4660 Message: 4662

Hello Terry,

I'm looking for this Antenna since 2 or 3 month. Is it possible to get a PCB from you or your friend?

73

Clemens
DG9XE

----- Original Nachricht ----
Von: swler1 <swler@...>
An: loopantennas@yahoogroups.com
Datum: 13.01.2008 01:33
Betreff: [loopantennas] A slightly different version of the WL1030.

> A friend has just built a slightly different version of the WL1030
> active loop. It works as well as the unit that I built that used
> Litz wire inside a plastic tube.
> See <http://www.ng-ronde.nl/wl1030/>
>
> The page is in Dutch so it will help to use Babel Fish translation
> at <http://world.altavista.com/babelfish>. The syntax gets a little
> mangled but the idea is clear.
>
> Look at the next to last image. Bill used a piece of flat 1" by 1/16"
> aluminum bent into a circle fastened as shown in the photo.
>
> I expected the antenna to be noisier then the original version, but
> joy of joys it performs exactly as the original.
>
> Bill used ugly or "dead bug" construction and encased the electronics
> in clear aquarium silicon. The type with an alcohol solvent. Do
> >>NOT<< use standard silicon sealant as it will corrode the electronics.
> Another option is to a poly-urethane spray to protect the electronics.
>
> The original construction plans at <www/wl1030.com> should be studied.
>
> This is a good loop antenna. I still favor active dipoles but this
> is an inexpensive alternative to the much vaunted ALA1530.
>
> Terry
>
>

4663. wl1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-14 07:11:23 UTC
From: Marc
Topic: 4663 Message: 4663

Dear,

I have such a PCB, I 've never built it.

Reason maybe: I built loopantennes myself, no amplification.

And since a year or so, there is the WAF: wife acceptance factor, or less time for hobbies...

Marc

4664. Titan Dx verse Butternut

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-15 01:28:05 UTC
From: Earl (Skip) Harman
Topic: 4664 Message: 4664

You we have any members that use either of these antennas?
I am looking at purchasing one or the other. I have read Ham Reviews, I am still undecided.

Skip KC9MQW /AG

4665. Re: [loopantennas] Titan Dx verse Butternut

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-15 01:38:25 UTC
From: Richards
Topic: 4664 Message: 4665

Yeah... me too... although kinda funny question on a LOOP antenna
forum... ;-)

But, still, inquiring minds want to know.

//////////////// JHR - K8JHR ////////////////////

Earl (Skip) Harman wrote:
> You we have any members that use either of these antennas?
> I am looking at purchasing one or the other. I have read Ham Reviews, I
> am still undecided.

==========

=

4666. Re: Titan Dx verse Butternut

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-15 01:41:00 UTC
From: Earl (Skip) Harman
Topic: 4664 Message: 4666

```
--- In loopantennas@yahoogroups.com, Richards <jruing@...> wrote:
>
> Yeah... me too... although kinda funny question on a LOOP antenna
> forum... ;-)
>
> But, still, inquiring minds want to know.
>
> ///////////////// JHR - K8JHR ////////////////////
>
>
> Earl (Skip) Harman wrote:
> > You we have any members that use either of these antennas?
> > I am looking at purchasing one or the other. I have read Ham
Reviews, I
> > am still undecided.
>
>
> ======================================================================
>
> =After I hit send I realized I was on a Loop Antenna forum ,, Me
bad :o(
>
```

4667. need a qrp 20m cw transceiver to buy

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-15 03:28:48 UTC
From: shubhamforme
Topic: 4667 Message: 4667

hello every1 i need a cw transceiver for 20m i.e 14mhz or even more if
available ......
it could be of any brand or even home brewed but working.....
it could be from 1to 50 watts.............
if any 1 has a cw transceiver to sell then i am there to purchase
it....
thanks
shubham tiwari.......
contact--
shubhamforme@...

4668. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-15 18:38:52 UTC
From: capntripps2000
Topic: 4658 Message: 4668

Dave,

I will need to check the SWR again this weekend. I rotated the position of the loop and the SWR did change. On 75M the 3:1 SWR was about 45 Khz, the 3:1 was around 20Khz on 40M. There is a wire fence less than 15 ft from the antenna as well as a porch 20 feet. I know there are losses as can be expected. I am pleased with the overall performance.

I am now building another 2 loops, a 6 ft diameter octagon to cover 40/30M and a 36 inch square to cover 20-10M.

I am finding the gamma match much easier to work with than the Faraday loop. I suspect I will need to make loops bigger and smaller than the calculations show and do trial and error to find the best size.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "capntripps2000"
> <capntripps2000@> wrote:
>
>
> Hi Andrew,
>
> What is the 2:1 SWR bandwidth on your loop?
>
> Dave WA6YSO
>

4669. Re: A slightly different version of the WL1030.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-16 00:15:49 UTC
From: swler1
Topic: 4660 Message: 4669

--- In loopantennas@yahoogroups.com, clemens.echt@... wrote:
>
>
> Hello Terry,
>
> I'm looking for this Antenna since 2 or 3 month. Is it possible to
get a PCB from you or your friend?
> 73
>
> Clemens
> DG9XE

No I am sorry to say.

My PCB was one of the originals and I do know know of source.

The reason why Bill went with "dead bug" construction was the
unavailability of PCBs.

Terry

4670. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-16 15:10:00 UTC
From: dldorrance
Topic: 4658 Message: 4670

Thanks for the reply, Andrew.

Agree that the gamma match (autoformer)is easier to tune than the sense loop, since all you need to do is move the end point for best match rather than having to deal with trying different sizes/configurations sense loops for a 50 ohm match.

The tough part of building small loops (my opinion) is keeping the loop Q as high as possible by controlling resistive losses in the system. The more solder joints the higher the loss resistance, so a circular loop (using soft copper tubing) with only capacitor connections trumps a square which trumps an octagonal loop. Probably the largest source of resistance is in the capacitor and its connections to the loop. Here a vacuum variable trumps a butterfly which trumps a split stator which trumps a capacitor with a wiper.

Have you worked out a remote tuning system for your loop(s)?

Dave WA6YSO

--- In loopantennas@yahoogroups.com, "capntripps2000" <capntripps2000@...> wrote:
>
> Dave,
>
> I will need to check the SWR again this weekend. I rotated the
> position of the loop and the SWR did change. On 75M the 3:1 SWR was
> about 45 Khz, the 3:1 was around 20Khz on 40M. There is a wire fence
> less than 15 ft from the antenna as well as a porch 20 feet. I know
> there are losses as can be expected. I am pleased with the overall
> performance.
>
> I am now building another 2 loops, a 6 ft diameter octagon to cover
> 40/30M and a 36 inch square to cover 20-10M.
>
> I am finding the gamma match much easier to work with than the Faraday
> loop. I suspect I will need to make loops bigger and smaller than the
> calculations show and do trial and error to find the best size.
>
> Andrew N3LCW
>
> --- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@> wrote:
> >
> > --- In loopantennas@yahoogroups.com, "capntripps2000"
> > <capntripps2000@> wrote:
> >

> >
> > Hi Andrew,
> >
> > What is the 2:1 SWR bandwidth on your loop?
> >
> > Dave WA6YSO
> >
>

4671. Re: [loopantennas] Re: AEA Isoloop salvaged, converted to 40/80M transmitting...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-16 15:30:39 UTC
From: toddroberts2001@aol.com
Topic: 4671 Message: 4671

In a message dated 1/16/2008 10:10:25 AM Eastern Standard Time,
dldorrance@... writes:
The tough part of building small loops (my opinion) is keeping the
loop Q as high as possible by controlling resistive losses in the
system. The more solder joints the higher the loss
resistance, so a circular loop (using soft copper tubing) with only
capacitor connections trumps a square which trumps an octagonal loop.
Probably the largest source of resistance is in the capacitor and its
connections to the loop. Here a vacuum variable trumps a butterfly
which trumps a split stator which trumps a capacitor with a wiper.

Have you worked out a remote tuning system for your loop(s)?

Dave WA6YSO

Hi Dave,
It has been my experience that a vacuum variable capacitor is NOT the ideal
capacitor for a transmitting loop. Not because it is lossy, but because you
cannot solder or weld connections to the vacuum variable. I was told you cannot
heat a vacuum variable cap hot enough to solder to it or weld/braze to it
without destroying the cap. With the prices of vacuum variable caps these days I
would not want to experiment with one this way.

So you are back to square one with a vacuum variable - you will have to use
clamp-on or bolt-on connections which will start to deteriorate as soon as they
are made. I know this from experience.

From what I can gather a homemade trombone-style variable capacitor made out
of pieces of copper tubing is about the lowest-loss variable cap one can make
in a home workshop for a transmitting loop.

73 Todd WD4NGG

**********Start the year off right. Easy ways to stay in shape.
http://body.aol.com/fitness/winter-exercise?NCID=aolcmp00300000002489

4672. Re: AEA Isoloop salvaged, converted to 40/80M transmitting...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-17 14:42:00 UTC
From: dldorrance
Topic: 4671 Message: 4672

--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:
>
>
> Hi Dave,
> It has been my experience that a vacuum variable capacitor is NOT
the ideal
> capacitor for a transmitting loop. Not because it is lossy, but
because you
> cannot solder or weld connections to the vacuum variable. I was told
you cannot
> heat a vacuum variable cap hot enough to solder to it or weld/braze
to it
> without destroying the cap. With the prices of vacuum variable caps
these days I
> would not want to experiment with one this way.
>
> So you are back to square one with a vacuum variable - you will have
to use
> clamp-on or bolt-on connections which will start to deteriorate as
soon as they
> are made. I know this from experience.
>
> From what I can gather a homemade trombone-style variable capacitor
made out
> of pieces of copper tubing is about the lowest-loss variable cap one
can make
> in a home workshop for a transmitting loop.
>
> 73 Todd WD4NGG
>
Hi Todd,

I have often wondered about the clamp-on losses with a vacuum variable
and have never used one.

Regarding the trombone. From my reading it appears you have to be
careful about the dielectric between coaxial copper tubing elements,
unless you are talking about air dielectric. The reason being that
apparently not all Teflon is really Teflon; some builders have
reported high Q values suggesting high losses, presumably in the
dielectric. What has your experience been?

Dave WA6YSO

4673. Re: [loopantennas] Re: AEA Isoloop salvaged, converted to 40/80M transmitting...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-17 15:37:50 UTC
From: toddroberts2001@aol.com
Topic: 4671 Message: 4673

In a message dated 1/17/2008 9:42:29 AM Eastern Standard Time,
dldorrance@... writes:
Hi Todd,

I have often wondered about the clamp-on losses with a vacuum variable
and have never used one.

Regarding the trombone. From my reading it appears you have to be
careful about the dielectric between coaxial copper tubing elements,
unless you are talking about air dielectric. The reason being that
apparently not all Teflon is really Teflon; some builders have
reported high Q values suggesting high losses, presumably in the
dielectric. What has your experience been?

Dave WA6YSO

Hi Dave,

The best article I have found on building a low-loss capacitor for a
transmitting loop was the article " A Home Brew Loop Tuning Capacitor " in the Nov.
1994 QST by Bill Jones, KD7S.

He describes how to build a trombone-style variable capacitor with motor
drive for remote tuning using easy-to-find parts. He recommends using .005" Teflon
or Polyethylene Sheet wrapped around the inner copper tubes for the
dielectric. The .005" Teflon Sheet is available from Small Parts Inc or there is a
seller on eBay that has it cut to length.

I haven't heard about any builders having problems with Teflon sheet not
really being Teflon? You can trust Small Parts Inc. High Q values mean low losses,
not high losses. Where did you read about this?

I haven't built a trombone-style cap yet but I did build a fixed capacitor
using the Teflon Sheet from Small Parts Inc and it worked beautifully with High
Q.

If anyone is interested in the article and is not a member of ARRL I can
email a .pdf copy of the article. Otherwise someone can look it up in the ARRL
website for download.

73 Todd WD4NGG

**********Start the year off right. Easy ways to stay in shape.
http://body.aol.com/fitness/winter-exercise?NCID=aolcmp00300000002489

4674. Re: AEA Isoloop salvaged, converted to 40/80M transmitting...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-17 17:08:58 UTC
From: capntripps2000
Topic: 4671 Message: 4674

Are actual losses something significantly measureable or just academic? If we're talking dB of loss I would be concerned but in practice if the loss is insignificant why not just strive for minimal loss?

I like W2BRI's site, http://standpipe.com/w2bri/

His results echo what many are reporting, that losses can be present and the loop antenna will still work very effectively.

Re; Capacitors, I thought buttefly and vacuum variable would be equal at the worst, considering a butterfly cap has all welded parts. In fact, shouldn't a butterfly cap be superior to the vac var since the latter has to be clamped?

Andrew

--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:
>
> In a message dated 1/16/2008 10:10:25 AM Eastern Standard Time,
> dldorrance@... writes:
> The tough part of building small loops (my opinion) is keeping the
> loop Q as high as possible by controlling resistive losses in the
> system. The more solder joints the higher the loss
> resistance, so a circular loop (using soft copper tubing) with only
> capacitor connections trumps a square which trumps an octagonal loop.
> Probably the largest source of resistance is in the capacitor and its
> connections to the loop. Here a vacuum variable trumps a butterfly
> which trumps a split stator which trumps a capacitor with a wiper.
>
>

4675. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-17 17:40:43 UTC
From: capntripps2000
Topic: 4658 Message: 4675

The 40/80M loop using the salvaged AEA Isoloop remote var. cap works
well enough to leave alone. I did what W2BRI did with his loop and
mounted the cap at the bottom of the loop and fed the loop at the top.

One other loop tuner in progress use a butterfly cap and 12vDC 2RPM
planetary geared motor using a universal coupler to the cap shaft.
This gets mounted in a 4" drain pipe light duty PVC (not schedule 40
PVC, that thickness is overkill).

I also have a cordless screwdriver motor used to move the 'rotor'
plate of a copper clad PCB variable cap I made for an indoor loop.
This setup is similar to that found on W2BRI's website.

Although the AEA Isoloop uses a stepper motor I am not convinced a
stepper is the only way to achieve fine control. The 2RPM geared
motor is doing well enough.

I am always open to other ideas.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> ...
> Have you worked out a remote tuning system for your loop(s)?
>
> Dave WA6YSO
>
>

4676. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-17 20:47:09 UTC
From: dldorrance
Topic: 4658 Message: 4676

--- In loopantennas@yahoogroups.com, "capntripps2000"
>
> One other loop tuner in progress use a butterfly cap and 12vDC 2RPM
> planetary geared motor using a universal coupler to the cap shaft.
> This gets mounted in a 4" drain pipe light duty PVC (not schedule 40
> PVC, that thickness is overkill).

We use 24 volt DC gear head motors(available on eBay). They turn very slowly at 2 to 4 volts for direct drive fine tuning of variable capacitor with plenty of torque. Switch polarity to reverse. Raise the voltage to speed between bands. We use a bias-T arrangement to actuate the motor via the coaxial cable, so no extra motor control lines needed. Agree stepper motors are not needed and require more control wires plus a stepper controller.

Dave WA6YSO

4677. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-18 00:05:08 UTC
From: tenorman1952
Topic: 4658 Message: 4677

> We use 24 volt DC gear head motors(available on eBay). They turn
> very slowly at 2 to 4 volts for direct drive fine tuning of variable
> capacitor with plenty of torque. Switch polarity to reverse.

This is easily done with a DPDT-Center Off toggle switch. I'll post a sketch of the wiring in tenorman1952 folder.

Paul C.

4678. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-18 00:15:44 UTC
From: tenorman1952
Topic: 4658 Message: 4678

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...>
wrote:
>
> > We use 24 volt DC gear head motors(available on eBay). They turn
> > very slowly at 2 to 4 volts for direct drive fine tuning of variable
> > capacitor with plenty of torque. Switch polarity to reverse.
>
> This is easily done with a DPDT-Center Off toggle switch. I'll post
a
> sketch of the wiring in tenorman1952 folder.
>
> Paul C.

Excuse me, the folder is labeled "Loop Kits". This could be used for
reversing and off to tuning capacitor, or an antenna rotator.

I have done this for wiring "blocks" on model railroad layouts.

Paul C.

4679. Re: AEA Isoloop salvaged, converted to 40/80M transmitting...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-18 00:44:16 UTC
From: dldorrance
Topic: 4671 Message: 4679

--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:

> Hi Dave,
>
> The best article I have found on building a low-loss capacitor for a
> transmitting loop was the article " A Home Brew Loop Tuning
Capacitor " in the Nov.
> 1994 QST by Bill Jones, KD7S.
>

> I haven't heard about any builders having problems with Teflon sheet
not
> really being Teflon? You can trust Small Parts Inc. High Q values
mean low losses,
> not high losses. Where did you read about this?
>
> I haven't built a trombone-style cap yet but I did build a fixed
capacitor
> using the Teflon Sheet from Small Parts Inc and it worked
beautifully with High
> Q.
>
> If anyone is interested in the article and is not a member of ARRL I
can
> email a .pdf copy of the article. Otherwise someone can look it up
in the ARRL
> website for download.
>
> 73 Todd WD4NGG

Hi Todd,

If you could email me the pdf file I would be grateful. I finally threw out all my old QSTs going back to 1974, which won me points with my XYL. I could not find the reference on the ARRL website. Not all of their articles are online.

Where did my info come from re Teflon? I found one article on the internet probably searching trombone capacitor on Google several years ago. Don't have a link now. Regarding not all Teflon is Teflon...this comes from some posts last year (I think) on the AntenneX Reflector, and put together with the lousy Q of trombone cap from the internet article this all began to make sense.

There is a website which demonstrates how to make a butterfly capacitor from scratch. Again no link.

Dave WA6YSO

4680. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-19 02:46:16 UTC
From: capntripps2000
Topic: 4658 Message: 4680

Dave,

On 75M,

3:1 b/w is 30 khz

2:1 b/w is 4 khz

Better than I remembered, better than I hoped for. Calculations showed me 3.8Khz 2:1 b/w, not bad at all.

I'd have to remove the 150pF doorknob cap from the antenna to measure 40M but it's freezing outside and my fingers get numb fast so I'll leave that for another day.

Very happy with results as they are at least on 80M.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, "capntripps2000" <capntripps2000@...> wrote:
>
> Dave,
>
> I will need to check the SWR again this weekend. I rotated the
> position of the loop and the SWR did change. On 75M the 3:1 SWR was
> about 45 Khz, the 3:1 was around 20Khz on 40M. There is a wire fence
>

4681. Re: AEA Isoloop salvaged, converted to 40/80M transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-19 15:13:51 UTC
From: dldorrance
Topic: 4658 Message: 4681

Excellent, Andrew!

Dave WA6YSO

--- In loopantennas@yahoogroups.com, "capntripps2000"
<capntripps2000@...> wrote:
>
> Dave,
>
> On 75M,
>
> 3:1 b/w is 30 khz
>
> 2:1 b/w is 4 khz
>
> Better than I remembered, better than I hoped for. Calculations
> showed me 3.8Khz 2:1 b/w, not bad at all.
>
> I'd have to remove the 150pF doorknob cap from the antenna to measure
> 40M but it's freezing outside and my fingers get numb fast so I'll
> leave that for another day.
>
> Very happy with results as they are at least on 80M.
>
> Andrew N3LCW
>
>
>
> --- In loopantennas@yahoogroups.com, "capntripps2000"
> <capntripps2000@> wrote:
> >
> > Dave,
> >
> > I will need to check the SWR again this weekend. I rotated the
> > position of the loop and the SWR did change. On 75M the 3:1 SWR was
> > about 45 Khz, the 3:1 was around 20Khz on 40M. There is a wire fence
> >
>

4682. Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-19 22:46:54 UTC
From: capntripps2000
Topic: 4682 Message: 4682

I've been using gamma matching to feed my transmitting loops with good results. I could not get a good match on a 40M attic mounted loop antenna using a Faraday loop. Next I tried using a toroid with the loop passing through once as the primary and a 2 turn loop of #14 hookup wire as the secondary connected to the coax feed. My match is now 1.2:1 across the entire 40M band. In fact the MFJ 259 analyzer shows less than 1.5:1 from 6 to 9.9 Mhz when tuning across with the variable capacitor.

Question: I've seen others using toroids to feed the loops with good results. Is there a benefit or loss of using a toroid vs. Faraday or gamma type feeds with these transmitting loops.

4683. Re: [loopantennas] Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-19 23:14:32 UTC
From: Jim Dunstan
Topic: 4682 Message: 4683

At 10:46 PM 1/19/2008 +0000, you wrote:

>I've been using gamma matching to feed my transmitting loops with good
>results. I could not get a good match on a 40M attic mounted loop
>antenna using a Faraday loop. Next I tried using a toroid with the
>loop passing through once as the primary and a 2 turn loop of #14
>hookup wire as the secondary connected to the coax feed. My match is
>now 1.2:1 across the entire 40M band. In fact the MFJ 259 analyzer
>shows less than 1.5:1 from 6 to 9.9 Mhz when tuning across with the
>variable capacitor.
>
>Question: I've seen others using toroids to feed the loops with good
>results. Is there a benefit or loss of using a toroid vs. Faraday or
>gamma type feeds with these transmitting loops.

Hi,

I have never tried this method of feeding a tuned loop. I find your results very interesting. What diameter is your loop and what kind of material is it constructed ? Do you know what kind of toroid you are using?

In relation to your question .... I would assume (obviously I have not experimented with it) that the 'efficiency' of the toroid vs. loop vs. gamma match would to a great extent depend on the power level being fed to the antenna and the nature of the toroid transformer. On a low level basis ... eg feeding the output of the analyzer to the input you are experiencing excellent coupling. However once you start increasing the injected RF power to QRP level and then higher ... I would expect the efficiency of the 'transformer' would be tested. Certainly once the Toroid reached it's saturation point the match would change and SWR would increase. How far you can go I would think would depend on the nature of the toroid and how it is coupled to the loop.

I would be very interested in the results of such experimentation .... maybe next summer I will pick up some toroids and experiment out on the deck hi hi.

Jim, VE3CI

4684. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 00:34:55 UTC
From: dldorrance
Topic: 4682 Message: 4684

Something seems amiss here. I would think that a broad bandwidth in what should be a hi Q parallel resonant circuit suggest very high losses; perhaps your toroid is soaking up most of the energy from your antenna analyzer much like placing a resistor across the analyzer.

I have no personal experience with toroid matching, but may look into it when the weather warms up a bit.

Dave WA6YSO

--- In loopantennas@yahoogroups.com, "capntripps2000" <capntripps2000@...> wrote:
>
> I've been using gamma matching to feed my transmitting loops with good
> results. I could not get a good match on a 40M attic mounted loop
> antenna using a Faraday loop. Next I tried using a toroid with the
> loop passing through once as the primary and a 2 turn loop of #14
> hookup wire as the secondary connected to the coax feed. My match is
> now 1.2:1 across the entire 40M band. In fact the MFJ 259 analyzer
> shows less than 1.5:1 from 6 to 9.9 Mhz when tuning across with the
> variable capacitor.
>
> Question: I've seen others using toroids to feed the loops with good
> results. Is there a benefit or loss of using a toroid vs. Faraday or
> gamma type feeds with these transmitting loops.
>

4685. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 03:29:56 UTC
From: capntripps2000
Topic: 4682 Message: 4685

The toroid is from one of my unbuilt balun kits, it's about 2 inches diameter, and the kit directions claim 300 watts capability. I don't plan to run more than 20-50 watts through it and most likely 20w max for digital modes.

The loop diameter is 8ft and the loop material is 1/2 inch heliax.

I don't think it is broad band in the sense of low SWR w/out retuning, the tuning cap needs to be retuned for the desired center frequency. The toroid seems to match to 50 ohms much better than the Faraday loop did. It may be the Faraday loop should have been cut larger than the 1/5 diameter of the main loop but it was easier to slip on the toroid transformer. The toroid originally had 1 turn on the secondary but the SWR was still > 3:1 and adding the second turn got that down to under 1.2:1 in the 40M band. It rises slightly in the 60M and 30M bands but never exceeds 1.5:1 once the variable cap. is retuned.

The capacitor is a butterfly type but the stator plates are not welded together and I am afraid there are losses in the spacers between the stator plates. It is a typical butterfly cap found in high power antenna tuners. The final tuning cap will be remotely tuned and will be made using copper clad boards in split stator fashion.

I suspect the 60/40/30M attic loop is being affected by surrounding metal and wires but I felt like experimenting with both a ground mounted and higher loop for side by side comparison.

I think it worth experimenting with these toroids. I will search and post an inquiry on antennex.com as well as run this past some of my previous broadcast engineering associates.

In the meantime it's worth perusing:

http://www.dxzone.com/catalog/Antennas/Loop/

Some of the loop links there used toroids for feeding loops and they claimed success.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
>
> Hi,
>
> I have never tried this method of feeding a tuned loop. I find your
> results very interesting. What diameter is your loop and what kind of

> material is it constructed ? Do you know what kind of toroid you
are using?
>
> In relation to your question .... I would assume (obviously I have not
> experimented with it) that the 'efficiency' of the toroid vs. loop vs.
> gamma match would to a great extent depend on the power level being
fed to
> the antenna and the nature of the toroid transformer. On a low
level basis
> ... eg feeding the output of the analyzer to the input you are
experiencing
> excellent coupling. However once you start increasing the injected RF
> power to QRP level and then higher ... I would expect the efficiency
of the
> 'transformer' would be tested. Certainly once the Toroid reached it's
> saturation point the match would change and SWR would increase. How
far
> you can go I would think would depend on the nature of the toroid
and how
> it is coupled to the loop.
>
> I would be very interested in the results of such experimentation ....
> maybe next summer I will pick up some toroids and experiment out on the
> deck hi hi.
>
> Jim, VE3CI
>

4686. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 03:34:00 UTC
From: capntripps2000
Topic: 4682 Message: 4686

My first thought when I saw the rock bottom SWR was 'there has to be a catch'. I'm still not convinced there isn't. As long as I don't saturate the toroid I imagine it has to be effective.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> Something seems amiss here. I would think that a broad bandwidth in
> what should be a hi Q parallel resonant circuit suggest very high
> losses; perhaps your toroid is soaking up most of the energy from your
> antenna analyzer much like placing a resistor across the analyzer.
>
> I have no personal experience with toroid matching, but may look into
> it when the weather warms up a bit.
>
> Dave WA6YSO
>
>

4687. Re: [loopantennas] Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 04:05:36 UTC
From: Ken Javor
Topic: 4682 Message: 4687

You should also find that the toroid makes the antenna more sensitive for reception. The toroid couples much more efficiently to the loop than does another small loop. The only (possible) downside is the impedance inserted into the loop via the toroid. That could reduce the loop ³Q², but it should still be an overall better antenna even with the reduced ³Q². You can make a simple measurement to calculate the inserted impedance. Put a wire through the toroid with a known current at the frequency of interest. Measure the output potential of the toroid windings into your receiver. The ratio of that potential to the current is called the transfer impedance, it has units of Ohms. Divide that transfer impedance by the turns ratio of toroid secondary windings to primary, and you have the impedance inserted in the loop. So for instance if you get 10 mV out of the toroid when passing 100 mA through it, the transfer impedance is 0.1 Ohm. If you have two turns wound around the toroid, your turns ratio is 2:1, because the wire going through the toroid represents a single turn. So in this case the inserted impedance would be 0.05 Ohm, which would be negligible relative to disturbing the Q.

Ken Javor

Phone: (256) 650-5261

From: capntripps2000 <capntripps2000@...>
Reply-To: <loopantennas@yahoogroups.com>
Date: Sun, 20 Jan 2008 03:34:00 -0000
To: <loopantennas@yahoogroups.com>
Subject: [loopantennas] Re: Feeding transmitting loops with toroids...

My first thought when I saw the rock bottom SWR was 'there has to be a catch'. I'm still not convinced there isn't. As long as I don't saturate the toroid I imagine it has to be effective.

Andrew N3LCW

--- In loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
, "dldorrance" <dldorrance@...> wrote:
>
> Something seems amiss here. I would think that a broad bandwidth in
> what should be a hi Q parallel resonant circuit suggest very high
> losses; perhaps your toroid is soaking up most of the energy from your
> antenna analyzer much like placing a resistor across the analyzer.
>
> I have no personal experience with toroid matching, but may look into
> it when the weather warms up a bit.
>
> Dave WA6YSO

>
>

[Non-text portions of this message have been removed]

4688. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 14:09:45 UTC
From: airchecklover
Topic: 4682 Message: 4688

--- In loopantennas@yahoogroups.com, "capntripps2000"
<capntripps2000@...> wrote:
>
> My first thought when I saw the rock bottom SWR was 'there has to be a
> catch'. I'm still not convinced there isn't. As long as I don't
> saturate the toroid I imagine it has to be effective.

Andrew; I'm a student of loops, but only from reading at this point.
You are not the only one on the planet with a 1.2:1 loop. Perhaps the
only on on this board though! Seems making a workable transmitting
loop is a bit of art and science. I am interested in the toroidal
coupling method too. Efficient coupling & low SWR - the illusive
combo. Would you take pictures?

-Mark

4689. MW Loop help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 14:53:08 UTC
From: metrobase201
Topic: 4689 Message: 4689

Can someone give me somemeasurement for a X frame edge wind loop that they have tryed and work. Also the number of turns and space in between turns. I've order a couple of turning capacitors range of 10 to 365 pf from Xtal Set Society and should be getting them this coming week. In the meantime I can start construction on the frame.

MetroBase

4690. Re: [loopantennas] Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 17:26:49 UTC
From: Paul V Birke PEng
Topic: 4682 Message: 4690

me too (although not a ham I am studying my 1.5" of canadian paper to prepare)

the balun trick could be most useful for us to know

best
Paul

----- Original Message ----
From: aircheckIover <mdh@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, January 20, 2008 9:09:45 AM
Subject: [loopantennas] Re: Feeding transmitting loops with toroids...

--- In loopantennas@ yahoogroups. com, "capntripps2000"

<capntripps2000@ ...> wrote:

>

> My first thought when I saw the rock bottom SWR was 'there has to be a

> catch'. I'm still not convinced there isn't. As long as I don't

> saturate the toroid I imagine it has to be effective.

Andrew; I'm a student of loops, but only from reading at this point.

You are not the only one on the planet with a 1.2:1 loop. Perhaps the

only on on this board though! Seems making a workable transmitting

loop is a bit of art and science. I am interested in the toroidal

coupling method too. Efficient coupling & low SWR - the illusive

combo. Would you take pictures?

-Mark

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}

```
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
```

```
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

[Non-text portions of this message have been removed]

4691. Re: MW Loop help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 17:51:48 UTC
From: tenorman1952
Topic: 4689 Message: 4691

--- In loopantennas@yahoogroups.com, "metrobase201" <metrobase201@...>
wrote:
>
> Can someone give me somemeasurement for a X frame edge wind loop
that
> they have tryed and work. Also the number of turns and space in
between
> turns. I've order a couple of turning capacitors range of 10 to 365
pf
> from Xtal Set Society and should be getting them them this coming week.
In
> the meantime I can start construction on the frame.
>
> MetroBase

For the AM Broadcast band, aka MW, the crosspieces of the X can be made 24" long, which would be the form for a square loop that measures 17" on each side. Make it 2" wide. 15 turns at 1/8" coil spacing. I used 22 gauge magnet wire, and 10-365 pf tuning cap.

You may also add a one turn pickup loop in the middle or just inside of the main loop to feed an AM/FM stereo tuner that lacks a built in ferrite core antenna.

Paul C.

4692. Re: [loopantennas] Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 18:41:07 UTC
From: Jim Dunstan
Topic: 4682 Message: 4692

At 03:29 AM 1/20/2008 +0000, you wrote:

>The toroid is from one of my unbuilt balun kits, it's about 2 inches
>diameter, and the kit directions claim 300 watts capability. I don't
>plan to run more than 20-50 watts through it and most likely 20w max
>for digital modes.
>
>The loop diameter is 8ft and the loop material is 1/2 inch heliax.
>
>I don't think it is broad band in the sense of low SWR w/out retuning,
>the tuning cap needs to be retuned for the desired center frequency.
>The toroid seems to match to 50 ohms much better than the Faraday loop
>did. It may be the Faraday loop should have been cut larger than the
>1/5 diameter of the main loop but it was easier to slip on the toroid
>transformer. The toroid originally had 1 turn on the secondary but
>the SWR was still > 3:1 and adding the second turn got that down to
>under 1.2:1 in the 40M band. It rises slightly in the 60M and 30M
>bands but never exceeds 1.5:1 once the variable cap. is retuned.
>
>The capacitor is a butterfly type but the stator plates are not welded
>together and I am afraid there are losses in the spacers between the
>stator plates. It is a typical butterfly cap found in high power
>antenna tuners. The final tuning cap will be remotely tuned and will
>be made using copper clad boards in split stator fashion.
>
>I suspect the 60/40/30M attic loop is being affected by surrounding
>metal and wires but I felt like experimenting with both a ground
>mounted and higher loop for side by side comparison.
>
>I think it worth experimenting with these toroids. I will search and
>post an inquiry on antennex.com as well as run this past some of my
>previous broadcast engineering associates.
>
>In the meantime it's worth perusing:
>
><http://www.dxzone.com/catalog/Antennas/Loop/>http://www.dxzone.com/catalog/Antennas/Loop
/
>
>Some of the loop links there used toroids for feeding loops and they
>claimed success.
>
>Andrew N3LCW

Hi Andrew,

It is a good size small loop .... just under .25 wavelength and should be quite efficient. Working such a loop on the deck should be easy ... putting it up and out of the way of surrounding objects makes remote tuning a necessity and introduces a whole different demands on one's skills hi hi. I admire those home brew adjustable capacitors I see on various web pages. From what I have read of these experiments the distance from ground (ground effect) seems to have minimal effect on radiation efficiency of small loops .... as the loop gets larger I would assume the ground effect increases.

I understand what you said the first posting vis-a-vis reasonably low SWR across 60/40/30 .... e.g. reasonable SWR when the loop is tuned to resonance. I would be very interested in the results you achieve when you start feeding power to the arrangment .... especially when you get up past 10w.

Thanks for the info.

Jim, VE3CI

[Non-text portions of this message have been removed]

4693. Re: [loopantennas] MW Loop help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-20 19:31:38 UTC
From: Jim Dunstan
Topic: 4689 Message: 4693

At 02:53 PM 1/20/2008 +0000, you wrote:

>Can someone give me somemeasurement for a X frame edge wind loop that
>they have tryed and work. Also the number of turns and space in between
>turns. I've order a couple of turning capacitors range of 10 to 365 pf
>from Xtal Set Society and should be getting them this coming week. In
>the meantime I can start construction on the frame.
>
>MetroBase

Hi,

I have a small rectangular (11"x 14") edge wound loop tuned with a 10 to 365 pf capacitor that I use to 'soup-up' my portable AM receiver. It sits on a wood base that also holds a small receiver that couples by induction ..... when I move the loop on the table for best reception the radio moves with it as a single unit.

The edge wound loop consists of 16 turns of insulated hook-up wire close spaced, supported at the 4 corners of the rectangle. After winding the coil I formed a basket weave by inserting short pencil size dowels at about 3" intervals. This basket weave achieves 2 things .... first it tightens up the loop turns and second it reduces the inter-turn capacity of the loop. After putting in the dowels to form the basket weave I varnished everything in place.

It tunes from a below 540 khz to about 1300 khz. My capacitor has 3 gangs ... although I only use 1. I am sure that if I trimmed a bit off the loop and used a switch to bring in an extra capacitor I could make it tune the whole range 540-1700 ... however it works fine and I never really use it past 1000 khz.

I use the loop for daytime DXing .... heh ... at night the band goes wild anyway hi hi. I am blessed with NO local AM broadcast stations (everything local is FM)... the nearest AM station is over 100 miles away. The small loop in conjunction with a small receiver gives me 6 stations at comfortable listening level and at least a dozen more I can identify. Without the loop there are only 6 I can even identify .... and only if I use my best AM receiver ... and non that are comfortable listening level.

Just as an add-on. I can use the small loop as an antenna tuner for coupling a long wire. When I am out in the garden ... I can clip a random wire ... e.g. 40' long to one side of the loop and another piece of wire or ground to the other side. This has the effect of adding substantially to reception. If I clip the same wires directly to my SRIII (which has an antenna/ground connection) there is little benefit.

So depending on the size of your rectangular loop the number of turns and spacing will be a matter of experimentation ... my loop will give you an idea ... or starting point. Don't make it permanent until you are comfortable with the arrangement.

Jim

4694. Re: MW Loop help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 02:44:38 UTC
From: tenorman1952
Topic: 4689 Message: 4694

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
> At 02:53 PM 1/20/2008 +0000, you wrote:
>
> >Can someone give me somemeasurement for a X frame edge wind loop

Edge wound... sorry, I missed that. My loop is in the Loop Kits photo folder. It is not edge wound.

Paul C.
tenorman1952

4695. Re: MW Loop help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 04:10:13 UTC
From: metrobase201
Topic: 4689 Message: 4695

--- In loopantennas@yahoogroups.com, "tenorman1952"
<tenorman1952@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "metrobase201" <metrobase201@>
> wrote:
> >
> > Can someone give me somemeasurement for a X frame edge wind loop
> that
> > they have tryed and work. Also the number of turns and space in
> between
> > turns. I've order a couple of turning capacitors range of 10 to
365
> pf
> > from Xtal Set Society and should be getting them this coming
week.
> In
> > the meantime I can start construction on the frame.
> >
> > MetroBase
>
>
> For the AM Broadcast band, aka MW, the crosspieces of the X can be
> made 24" long, which would be the form for a square loop that
measures
> 17" on each side. Make it 2" wide. 15 turns at 1/8" coil
spacing. I
> used 22 gauge magnet wire, and 10-365 pf tuning cap.
>
> You may also add a one turn pickup loop in the middle or just
inside
> of the main loop to feed an AM/FM stereo tuner that lacks a built
in
> ferrite core antenna.
>
> Paul C.
>

Paul,
Thanks so much for this info, I'll try this and get back.
-MetroBase

4696. Re: MW Loop help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 04:12:59 UTC
From: metrobase201
Topic: 4689 Message: 4696

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
> At 02:53 PM 1/20/2008 +0000, you wrote:
>
> >Can someone give me somemeasurement for a X frame edge wind loop
that
> >they have tryed and work. Also the number of turns and space in
between
> >turns. I've order a couple of turning capacitors range of 10 to
365 pf
> >from Xtal Set Society and should be getting them this coming week.
In
> >the meantime I can start construction on the frame.
> >
> >MetroBase
>
>
> Hi,
>
> I have a small rectangular (11"x 14") edge wound loop tuned with a
10 to
> 365 pf capacitor that I use to 'soup-up' my portable AM receiver.
It sits
> on a wood base that also holds a small receiver that couples by
induction
> ..... when I move the loop on the table for best reception the
radio moves
> with it as a single unit.
>
> The edge wound loop consists of 16 turns of insulated hook-up wire
close
> spaced, supported at the 4 corners of the rectangle. After winding
the
> coil I formed a basket weave by inserting short pencil size dowels
at about
> 3" intervals. This basket weave achieves 2 things .... first it
tightens
> up the loop turns and second it reduces the inter-turn capacity of
the
> loop. After putting in the dowels to form the basket weave I
varnished
> everything in place.
>
> It tunes from a below 540 khz to about 1300 khz. My capacitor has
3 gangs

> ... although I only use 1. I am sure that if I trimmed a bit off
the loop
> and used a switch to bring in an extra capacitor I could make it
tune the
> whole range 540-1700 ... however it works fine and I never really
use it
> past 1000 khz.
>
> I use the loop for daytime DXing .... heh ... at night the band
goes wild
> anyway hi hi. I am blessed with NO local AM broadcast stations
(everything
> local is FM)... the nearest AM station is over 100 miles away. The
small
> loop in conjunction with a small receiver gives me 6 stations at
> comfortable listening level and at least a dozen more I can
> identify. Without the loop there are only 6 I can even
identify .... and
> only if I use my best AM receiver ... and non that are comfortable
> listening level.
>
> Just as an add-on. I can use the small loop as an antenna tuner
for
> coupling a long wire. When I am out in the garden ... I can clip a
random
> wire ... e.g. 40' long to one side of the loop and another piece of
wire or
> ground to the other side. This has the effect of adding
substantially to
> reception. If I clip the same wires directly to my SRIII (which
has an
> antenna/ground connection) there is little benefit.
>
> So depending on the size of your rectangular loop the number of
turns and
> spacing will be a matter of experimentation ... my loop will give
you an
> idea ... or starting point. Don't make it permanent until you are
> comfortable with the arrangement.
>
> Jim
>

jim,
Thank you kindly. I will experiment and get back to you.
-MetroBase

4697. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 18:20:23 UTC
From: capntripps2000
Topic: 4682 Message: 4697

Yes, this is consistent with what I am experiencing.

Andrew

--- In loopantennas@yahoogroups.com, Ken Javor <ken.javor@...> wrote:
>
> You should also find that the toroid makes the antenna more
sensitive for
> reception. The toroid couples much more efficiently to the loop
than does
> another small loop......

4698. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 18:27:16 UTC
From: capntripps2000
Topic: 4682 Message: 4698

I moved the loop to the far side of the attic where there was much
less metal. The SWR went to 1.4:1 but most important the 2:1 SWR
bandwidth is now at 40Khz which is what the calculations say it should
be for an 8ft diameter loop made of 1/2 inch heliax. It was much
wider at the other side of the attic where wiring and A/C ductwork
must have affected the loop.

I took pictures and will post them in the photo section under Toroid
Fed Transmit Loop.

Andrew

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:

>
> Andrew; I'm a student of loops, but only from reading at this point.
> You are not the only one on the planet with a 1.2:1 loop. Perhaps the
> only on on this board though! Seems making a workable transmitting
> loop is a bit of art and science. I am interested in the toroidal
> coupling method too. Efficient coupling & low SWR - the illusive
> combo. Would you take pictures?
>
> -Mark
>

4699. Hi there

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 19:37:48 UTC
From: Tom
Topic: 4699 Message: 4699

Hi Loop Group,

I've just joined the Loop Antenna Group.

When I wanted an improved antenna for DX,
local transmitting and ease of tuning, I chose
to modify my inverted V into a loop.

Some would say it's a folded dipole, but I call
it a loop.

The best DX contacts in the 6 months that I've
had it up are New Zealand and Japan. See a diagram
of my loop at http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=15454.

Has anyone out there put up a large, > 20 feet, square, multi turn loop?

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

4700. High power 40/80M loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 17:28:55 UTC
From: Rick Meyer KI6LQL
Topic: 4700 Message: 4700

All:

I've built a 40/80M transmitting magnetic loop from 3/4" copper pipe. I've home brewed a motor driven capacitor using alumina dielectric that is rated to withstand 40 kK. Actual voltages up to 30 kV can occur if this loop were driven with 1.5 kilowatts and Q is high enough. I haven't tried this yet because I am worried about corona discharges leaking power and causing harmonics, etc. Do any of you have experience corona-proofing at very high RF? I have some special RTV formulations I could use to pot parts with sharp edges.

Rick Meyer
KI6LQL

4701. New Member With Loop Antenna Design Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 20:51:43 UTC
From: kugellagers
Topic: 4701 Message: 4701

Hello,

I am new to this group and have a main interest in vintage SW communication receivers.

I recently discovered the area of LF and VLF and want to get into listenting to those bands. I use a Hammarlund SP-600 JX-37 SW receiver which has a 95 ohm antenna input impedance and therefore will use RG62 coax for antenna connections. I am in the process of designing a box-type loop antenna using the AM Loop Antenna Calculator by Bruce Carter (http://www.mindspring.com/~loop_antenna/amloop_calc4.htm) and other information I have read. I intend to use Palomar Engineering's VLF upconverter to enable me to listen to LF/VLF frequencies on my SP-600.

I have placed a schematic of my project in the 'Photos' section here: http://ph.groups.yahoo.com/group/loopantennas/photos/view/ad87?b=1

I have several questions regarding my design. Is it a viable design given the components I have selected? I have selected the components based on parts I have or have ordered.

I would like to place my antenna in the attic on an antenna rotator (noise source?) and the tuner circuit in a box next to my SP-600 (about 25ft/8m away. Is this something that can be done if I routed the connections between the primary windings and the tuner via RG62 coax and a second RG62 coax from the antenna secondary to the VLF upconverter? (I realise RG62 has a capacitance of about 13.5 pf per foot and that I will have to adjust my capcitor values of the tuner circuit to compensate.) Is there another cable option? Or do I really have to put the tuner circuit with the antenna as most people suggest?

I realize this is a bit of a way-out first post for a noob on this forum. I also realize that my design might just be wishful thinking. I don't know a lot about electrical engineering but I know a little. You guys know far more than me on loop antennas and electronic so I want to pick your brains.

Thanks,

John
];')

4702. Re: MW Loop help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 21:39:58 UTC
From: airchecklover
Topic: 4689 Message: 4702

--- In loopantennas@yahoogroups.com, "metrobase201" <metrobase201@...>
wrote:
>
> Can someone give me somemeasurement for a X frame edge wind loop that
> they have tryed and work. Also the number of turns and space in between
> turns. I've order a couple of turning capacitors range of 10 to 365 pf
> from Xtal Set Society and should be getting them this coming week. In
> the meantime I can start construction on the frame.
>
> MetroBase
>

Metro;

My 2ft X frame has 15 turns of #22 solid copper with 1/8" spacing. It
tunes the broadcast band with a little to spare. Lots of gain. Nulls
are good. Q is good. It's fun.

Mark

4703. Re: [loopantennas] High power 40/80M loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 21:45:44 UTC
From: Jim Dunstan
Topic: 4700 Message: 4703

At 05:28 PM 1/21/2008 +0000, you wrote:

>All:
>
>I've built a 40/80M transmitting magnetic loop from 3/4" copper pipe.
>I've home brewed a motor driven capacitor using alumina dielectric
>that is rated to withstand 40 kK. Actual voltages up to 30 kV can
>occur if this loop were driven with 1.5 kilowatts and Q is high
>enough. I haven't tried this yet because I am worried about corona
>discharges leaking power and causing harmonics, etc. Do any of you
>have experience corona-proofing at very high RF? I have some special
>RTV formulations I could use to pot parts with sharp edges.
>
>Rick Meyer
>KI6LQL

Hi Rick,

A really interesting question ... one I have never considered .... e.g. corona effect with power. First off I never though of corona since generally speaking a loop antenna is the least likely to create this effect ... e.g. compared to a dipole or mono pole antenna. But then a tuned loop does expose that portion of the loop to very high voltages by virtue of breaking the loop and inserting a tuning capacitor of some description. Second, I never considered driving a small tuned loop with the kind of power you are suggesting ... e.g. a killowatt or more.

I would assume that 'corona proofing' the loop would entail inserting a capacitor with the ability to withstand the high voltages and at the same time provide surfaces as seamless as possible ... as you say, no sharp edges. When running power there are tremendous force fields within the loop ... I recall once many years ago when working on the tuning unit of a 8 kw VLF transmitter site a summer student who threw a rabbit (dead carcass) into the large loop/coil which immediately set the carcass on fire and blew the transmitter off the air !!

No, I don't have related experience .... but I would certainly recommend standing well back when you pour the power to it !!!

Jim, VE3CI

4704. Re: [loopantennas] Hi there

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 21:50:35 UTC
From: Jim Dunstan
Topic: 4699 Message: 4704

At 11:37 AM 1/21/2008 -0800, you wrote:

>Hi Loop Group,
>
>I've just joined the Loop Antenna Group.
>
>When I wanted an improved antenna for DX,
>local transmitting and ease of tuning, I chose
>to modify my inverted V into a loop.
>
>Some would say it's a folded dipole, but I call
>it a loop.

Hi Tom ... those others are incorrect, a folded dipole is still a
dipole. What you describe is definitely a loop. Behavior of RF voltages
and currents are very different between the two.

Jim, VE3CI

>The best DX contacts in the 6 months that I've
>had it up are New Zealand and Japan. See a diagram
>of my loop at
><http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=15454.>http://www.dxzone.com/cgi-bin/dir/
jump2.cgi?ID=15454.
>
>Has anyone out there put up a large, > 20 feet, square, multi turn loop?
>
>Cheers.
>
>Tom
>KE6YNH, 73
>San Diego, CA

[Non-text portions of this message have been removed]

4705. Re: High power 40/80M loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 23:07:17 UTC
From: dldorrance
Topic: 4700 Message: 4705

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>

>
> No, I don't have related experience .... but I would certainly
recommend
> standing well back when you pour the power to it !!!
>
> Jim, VE3CI
>

It is also wise to keep in mind that very strong oscillating magnetic fields exist in the near field of the loop, and that the near field on the 80 meter band is up to 80 meters distance from the loop. My license comes up for renewal soon and with the renewal packet from the ARRL is included FCC rules regarding maximum power levels vs frequency.

Oscillating magnetic fields cause brain cell death in rats.

Dave, WA6YSO

4706. Re: [loopantennas] Re: High power 40/80M loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-21 23:23:41 UTC
From: Jim Dunstan
Topic: 4700 Message: 4706

At 11:07 PM 1/21/2008 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
>Dunstan <dunstan@...> wrote:
> >
>
> >
> > No, I don't have related experience .... but I would certainly
>recommend
> > standing well back when you pour the power to it !!!
> >
> > Jim, VE3CI
> >
>
>It is also wise to keep in mind that very strong oscillating magnetic
>fields exist in the near field of the loop, and that the near field on
>the 80 meter band is up to 80 meters distance from the loop. My
>license comes up for renewal soon and with the renewal packet from the
>ARRL is included FCC rules regarding maximum power levels vs frequency.
>
>Oscillating magnetic fields cause brain cell death in rats.
>
>Dave, WA6YSO

And cook rabbits !! Hi Hi

Jim, VE3CI

[Non-text portions of this message have been removed]

4707. Inverted V to Loop Conversion.....URL correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 00:59:19 UTC
From: Tom
Topic: 4707 Message: 4707

Hi Loop Group,

The correct URL for my loop antenna diagram
is: http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=1.

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

4708. Re: [loopantennas] Inverted V to Loop Conversion.....URL correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 01:16:21 UTC
From: Jim Dunstan
Topic: 4707 Message: 4708

At 04:59 PM 1/21/2008 -0800, you wrote:

>Hi Loop Group,
>
>The correct URL for my loop antenna diagram
>is:
><http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=1.>http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=1.
>
>Cheers.
>
>Tom
>KE6YNH, 73
>San Diego, CA

Hi Tom,

That is an interesting loop .... the natural resonance would seem to be in the 75m band. I am looking forward to your performance observations after you have had some time to use it.

Jim, VE3CI

[Non-text portions of this message have been removed]

4709. Re: [loopantennas] Inverted V to Loop Conversion.....URL correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 02:15:33 UTC
From: Paul V Birke PEng
Topic: 4707 Message: 4709

very nice

p

----- Original Message ----
From: Tom <tgleeman@...>
To: loopantennas@yahoogroups.com
Sent: Monday, January 21, 2008 7:59:19 PM
Subject: [loopantennas] Inverted V to Loop Conversion.......URL correction

Hi Loop Group,

The correct URL for my loop antenna diagram

is: http://ph.groups. yahoo.com/ group/loopantenn as/photos/ view/199f? b=1.

Cheers.

Tom

KE6YNH, 73

San Diego, CA

[Non-text portions of this message have been removed]

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}

```
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
```

```
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

[Non-text portions of this message have been removed]

4710. Mega Loop.....A multi-turn transmitting loop for 160 meters and above

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 03:24:27 UTC
From: Tom
Topic: 4710 Message: 4710

Hi Loop Group,

See my new loop doodling at
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2.

But will it work????

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

4711. Re: [loopantennas] Inverted V to Loop Conversion.....URL correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 04:13:14 UTC
From: Tom
Topic: 4711 Message: 4711

Hi Jim, VE3CI and the Group,

My loop is in fact a little small for
the center of the 75 meter ham band.
It's fundamental is 4.000 MHz, but the
MFJ-998 autotuner adds enough inductance
and capacitance to make a good match
for my amp at 3.6 MHz. I can tune all bands from
80 to 10 meters with the loop/tuner combination.

What really impressed me about the loop
was that it has resonant peaks(harmonics) about every 2 to 3
MHz from 80 to 6 meters.....making it extremely easy to tune.
However, I can't tune the loop for 160. That's why I'm thinking
of building Mega Loop. See:

http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2

I'm on 75 meters with my loop every night at 9:00 PST.
Listen on 3.840 or 3.841 depending on QRM.

The power of the loop!

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Monday, January 21, 2008 5:16 PM
Subject: Re: [loopantennas] Inverted V to Loop Conversion.......URL correction

At 04:59 PM 1/21/2008 -0800, you wrote:

>Hi Loop Group,
>
>The correct URL for my loop antenna diagram
>is:
><http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=1.>http://ph.groups.yah
oo.com/group/loopantennas/photos/view/199f?b=1.
>
>Cheers.
>
>Tom
>KE6YNH, 73
>San Diego, CA

Hi Tom,

That is an interesting loop .... the natural resonance would seem to be in the 75m band. I am looking forward to your performance observations after you have had some time to use it.

Jim, VE3CI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

4712. Re: Inverted V to Loop Conversion.....URL correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 04:53:52 UTC
From: capntripps2000
Topic: 4711 Message: 4712

I'm confused on the dimensions: 47 x 4 x 3

I get the 47 feet and 1 foot spacing.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, "Tom" <tgleeman@...> wrote:
>
> That's why I'm thinking
> of building Mega Loop. See:
>
> http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2
>
>

4713. Re: [loopantennas] Re: Inverted V to Loop Conversion.....URL correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 05:07:08 UTC
From: Tom
Topic: 4711 Message: 4713

Hi Andrew, N3LCW and the Group,

Sorry for the confusion. Each side is 47 feet times 4 sides which gives 188 feet per turn and then there are 3 turns to make 564 feet of wire.

Cheers.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: capntripps2000
To: loopantennas@yahoogroups.com
Sent: Monday, January 21, 2008 8:53 PM
Subject: [loopantennas] Re: Inverted V to Loop Conversion.....URL correction

I'm confused on the dimensions: 47 x 4 x 3

I get the 47 feet and 1 foot spacing.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, "Tom" <tgleeman@...> wrote:
>
> That's why I'm thinking
> of building Mega Loop. See:
>
> http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2
>
>

[Non-text portions of this message have been removed]

4714. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 12:28:17 UTC
From: capntripps2000
Topic: 4682 Message: 4714

I applied 100 watts to it and there was no heating of the toroid nor arcing in the butterfly variable capacitor. I fixed the tuning on 7.04Mhz for digital mode use and will run 20-30W through it max in normal use. I'm working on the remote tuning motor now to finish this project.

So far it is performing very well, MUCH better than the low dipole I have hidden in small trees 10 feet above the ground. Much better on receive (better S/R ratio) as well as better on-the-air reports switching between the two. I am very satisfied with its performance considering it is in the attic.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
> I would be very interested in the results you achieve when you
> start feeding power to the arrangment .... especially when you get up past 10w.
>
> Thanks for the info.
>
> Jim, VE3CI
>
> [Non-text portions of this message have been removed]
>

4715. Re: [loopantennas] Mega Loop.....A multi-turn transmitting loop for 160 meters and above

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-22 17:38:42 UTC
From: Jim Dunstan
Topic: 4710 Message: 4715

At 07:24 PM 1/21/2008 -0800, you wrote:

>Hi Loop Group,
>
>See my new loop doodling at
><http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2.>http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2.
>
>But will it work????
>
>Cheers.
>
>Tom
>KE6YNH, 73
>San Diego, CA

Hi Tom,

I am not sure what you want the multi-turn loop to do ... so it is difficult to make a comment re your question.

The circumference of the loop is basically a full wave on 60m. and will work well 60m - 10m. Adding additional turns will of course lower the natural resonance and affect the tuning/matching to the open wire feed line but antenna performance will be virtually the same as a similarly dimensioned single turn loop. The efficiency will be affected to a small degree ... e.g. same outside dimension and height (eg same capture area and ground effect) ... but four times as much wire.

Adding turns will not make the antenna any more efficient on 160m than a single turn.

The amount of work it will take to construct and maintain such a loop will be increased at least 4 fold ... hi hi.

Jim, VE3CI

[Non-text portions of this message have been removed]

4716. Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 01:48:48 UTC
From: metrobase201
Topic: 4716 Message: 4716

Magnet wire, can it be used on a MW loop????

I have a 18"x18" edge wound loop and a 9-365 pf capacitor. I wanted to replace the speaker wire with magnet wire 26 gauge. After doing so the loop does not responde at all when turning via the capacitor. I took it all apart and put back the speaker junk wire and it works properly. I'm Baffled, can anybody explain this? Thank you so much if you can.

73's

-MetroBase
Bronx NY

4717. RE: [loopantennas] Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 02:00:29 UTC
From: Chris Fleming
Topic: 4716 Message: 4717

Magnet wire has an insulted coating on it which is very hard (and hard to see). Did you use some medium grit emery paper or a sharp knife to remove this first. Just asking.

Cheers
Chris, Samoa
-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]On Behalf Of metrobase201
Sent: Tuesday, January 22, 2008 2:49 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Magnet wire, can it be used on a MW loop????

Magnet wire, can it be used on a MW loop????

I have a 18"x18" edge wound loop and a 9-365 pf capacitor. I wanted to replace the speaker wire with magnet wire 26 gauge. After doing so the loop does not responde at all when turning via the capacitor. I took it all apart and put back the speaker junk wire and it works properly. I'm Baffled, can anybody explain this? Thank you so much if you can.

73's

-MetroBase
Bronx NY

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.19.9/1237 - Release Date: 1/22/2008 11:04 AM

[Non-text portions of this message have been removed]

4718. RE: [loopantennas] Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 02:34:26 UTC
From: Chris Fleming
Topic: 4716 Message: 4718

Opps... Insulated i.e enamel
-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]On Behalf Of Chris Fleming
Sent: Tuesday, January 22, 2008 3:00 PM
To: loopantennas@yahoogroups.com
Subject: RE: [loopantennas] Magnet wire, can it be used on a MW loop????

Magnet wire has an insulted coating on it which is very hard (and hard to see). Did you use some medium grit emery paper or a sharp knife to remove this first. Just asking.

Cheers
Chris, Samoa
-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]On Behalf Of metrobase201
Sent: Tuesday, January 22, 2008 2:49 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Magnet wire, can it be used on a MW loop????

Magnet wire, can it be used on a MW loop????

I have a 18"x18" edge wound loop and a 9-365 pf capacitor. I wanted to replace the speaker wire with magnet wire 26 gauge. After doing so the loop does not responde at all when turning via the capacitor. I took it all apart and put back the speaker junk wire and it works properly. I'm Baffled, can anybody explain this? Thank you so much if you can.

73's

-MetroBase
Bronx NY

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.19.9/1237 - Release Date: 1/22/2008 11:04 AM

[Non-text portions of this message have been removed]

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.19.9/1237 - Release Date: 1/22/2008 11:04 AM

[Non-text portions of this message have been removed]

4719. RE: [loopantennas] Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 02:35:58 UTC
From: Joshua Everett
Topic: 4716 Message: 4719

Hell use a lighter and burn it off! LOL

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
Behalf Of Chris Fleming
Sent: Tuesday, January 22, 2008 9:34 PM
To: loopantennas@yahoogroups.com
Subject: RE: [loopantennas] Magnet wire, can it be used on a MW loop????

Opps... Insulated i.e enamel
-----Original Message-----
From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
[mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
]On
Behalf Of Chris Fleming
Sent: Tuesday, January 22, 2008 3:00 PM
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Subject: RE: [loopantennas] Magnet wire, can it be used on a MW loop????

Magnet wire has an insulted coating on it which is very hard (and hard to
see). Did you use some medium grit emery paper or a sharp knife to remove
this first. Just asking.

Cheers
Chris, Samoa
-----Original Message-----
From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
[mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
]On
Behalf Of metrobase201
Sent: Tuesday, January 22, 2008 2:49 PM
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Subject: [loopantennas] Magnet wire, can it be used on a MW loop????

Magnet wire, can it be used on a MW loop????

I have a 18"x18" edge wound loop and a 9-365 pf capacitor. I wanted to
replace the speaker wire with magnet wire 26 gauge. After doing so the
loop does not responde at all when turning via the capacitor. I took it
all apart and put back the speaker junk wire and it works properly. I'm
Baffled, can anybody explain this? Thank you so much if you can.

73's

-MetroBase
Bronx NY

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.19.9/1237 - Release Date: 1/22/2008
11:04 AM

[Non-text portions of this message have been removed]

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.19.9/1237 - Release Date: 1/22/2008
11:04 AM

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

4720. Re: [loopantennas] Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 02:54:11 UTC
From: Paul V Birke PEng
Topic: 4716 Message: 4720

a barbeque lighter is good since you can hold it well

then use scotchbrite to remove residue

p

[Non-text portions of this message have been removed]

4721. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 04:54:29 UTC
From: metrobase201
Topic: 4716 Message: 4721

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...>
wrote:
>
> a barbeque lighter is good since you can hold it well
>
> then use scotchbrite to remove residue
>
> p
>
>
>
>
> [Non-text portions of this message have been removed]
>
OK guys you mean to say that it has an insulation altough not visible
to the eye? If so is it removed only at the ends where the contacts
will be made? Thank you all, you guys are a great help.
-MetroBase
P.S. when I'm done I'll post some pics. I also have an interesting
shortwave magnetic loop to show the group.

4722. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 06:03:45 UTC
From: Jay Heyl
Topic: 4716 Message: 4722

On Jan 22, 2008 11:54 PM, metrobase201 <metrobase201@...> wrote:

> OK guys you mean to say that it has an insulation altough not visible
> to the eye? If so is it removed only at the ends where the contacts
> will be made? Thank you all, you guys are a great help.

Yes, it has a thin coat of insulation, usually enamel, though other insulation materials are used for special applications. If not for this insulation, when used for motor windings it would short out.

As others have suggested, you can use emery cloth to abrade away the insulation. Enamel insulation can be burned off with a lighter. It takes just a second or two. Just be sure to wipe off the carbon afterwards. (And don't burn yourself on the hot wire.)

You want to remove the insulation just at the ends where the contacts will be made.

For comparatively short runs like you'll have in your loop magnet wire should work fine. If you ever want to go a lot longer you need to be concerned about the resistance of the wire. It's usually not a concern unless you're using hundreds of feet. Google "magnet wire" and you should find several online resources that will have full tables of specs for every available type.

-- Jay

[Non-text portions of this message have been removed]

4723. New and improved Mega Loop doodling

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 06:34:14 UTC
From: Tom
Topic: 4723 Message: 4723

Hi Loop Group,

I cleared up the ambiguous dimensions
of Mega Loop. See:

http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

4724. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 06:40:23 UTC
From: Paul V Birke PEng
Topic: 4716 Message: 4724

yes and sounds good to see a new loop

best
Paul

OK guys you mean to say that it has an insulation altough not visible

to the eye? If so is it removed only at the ends where the contacts

will be made? Thank you all, you guys are a great help.

-MetroBase

P.S. when I'm done I'll post some pics. I also have an interesting

shortwave magnetic loop to show the group.

__._._._.__

[Non-text portions of this message have been removed]

4725. Re: [loopantennas] New and improved Mega Loop doodling

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 06:52:51 UTC
From: Paul V Birke PEng
Topic: 4723 Message: 4725

can you get subs with that LOL

Paul

very impressive btw

[Non-text portions of this message have been removed]

4726. new-design active antenna for SWL - group announcement

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 08:25:54 UTC
From: C. Beijersbergen
Topic: 4726 Message: 4726

Interested in new SWL antenna designs? A Yahoo group has formed to support the of building active monopole & dipole antennas based on the latest Dallas Lankford circuit. Doesn't matter if you like to spectate or have input - on design, building, whatever - you are welcome to join.

http://groups.yahoo.com/group/2N5160-Antenna

Regards,
the 2N5160-Antenna group

[Non-text portions of this message have been removed]

4727. Re: [loopantennas] New and improved Mega Loop doodling

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 08:58:42 UTC
From: Tom
Topic: 4723 Message: 4727

Hi Paul,

I was thinking it might be good on 160 meters
and higher bands. I need an antenna on 160 that
has low noise.

Cheers.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 22, 2008 10:52 PM
Subject: Re: [loopantennas] New and improved Mega Loop doodling

can you get subs with that LOL

Paul

very impressive btw

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

4728. Re: [loopantennas] Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 12:02:47 UTC
From: Jim Dunstan
Topic: 4716 Message: 4728

At 01:48 AM 1/23/2008 +0000, you wrote:

>Magnet wire, can it be used on a MW loop????
>
>I have a 18"x18" edge wound loop and a 9-365 pf capacitor. I wanted to
>replace the speaker wire with magnet wire 26 gauge. After doing so the
>loop does not responde at all when turning via the capacitor. I took it
>all apart and put back the speaker junk wire and it works properly. I'm
>Baffled, can anybody explain this? Thank you so much if you can.
>
>73's
>
>-MetroBase
>Bronx NY

Hi,

There is only one explanation ... you didn't form a loop e.g. the magnet wire was not making contact with the capacitor at one point. If it was forming a loop you would be able resonate the loop ... whether the performance was better or worse than before ... it would still perform ... or respond as you say.

Magnet wire has an insulating coating which must be removed to form solder joints or make contact ... emery cloth or sandpaper can be used to remove it.

Jim

4729. Re: [loopantennas] New and improved Mega Loop doodling

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 12:31:11 UTC
From: Jim Dunstan
Topic: 4723 Message: 4729

At 10:34 PM 1/22/2008 -0800, you wrote:

>Hi Loop Group,
>
>I cleared up the ambiguous dimensions
>of Mega Loop. See:
>
><http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2>http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2
>
>Cheers.
>
>Tom
>KE6YNH, 73
>San Diego

Hi Tom,

Nice illustration .... however same conclusion. Adding turns to the loop making it a 'mega' loop will not change its fundamental performance as an antenna. How the antenna performs e.g. its radiation pattern will essentially remain the same. How it performs in terms of efficiency ... eg the amount of energy radiated vs the amount of power fed to the antenna might be affected ....my guess would be a decrease. On 160m.

Another way of looking at it .... if you take the same amount of wire (564ft) and made a single turn loop with 141ft to a side you would have very different 160m performance than a loop with only 47ft on a side. Now take the same amount of wire and form it into a 3 turn loop with only 47ft per side and the performance will become more or less identical to the single turn loop with 47ft on a side. The difference would be added inductance, capacitance, and resistance compared to the 1 turn loop. This would change how it matches the feed line and little else.

Any other opinions?

Jim, VE3CI

[Non-text portions of this message have been removed]

4731. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 15:29:48 UTC
From: tenorman1952
Topic: 4716 Message: 4731

> OK guys you mean to say that it has an insulation altough not visible
> to the eye? If so is it removed only at the ends where the contacts
> will be made? Thank you all, you guys are a great help.
> -MetroBase

Yes, it is a type of varnish. It may be clear, tinted green, red, or a golden brown. But that is how you can wind an inductor, motor armature, etc, without the wire shorting out.

Look at the larger tuned loop (MTM Scientific) in my Loop Kits photo folder. 22 ga magnet wire.

Paul

4732. Help!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 18:59:30 UTC
From: Ernie
Topic: 4732 Message: 4732

I am looking for plans to build an A M loop antenna! Plans must be easy to understand as i am NOT an expert! I would even buy one if the price is right!

Thanks
Ernie

4733. Re: Help!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 19:22:38 UTC
From: tenorman1952
Topic: 4732 Message: 4733

--- In loopantennas@yahoogroups.com, "Ernie" <radio_tech_750@...> wrote:
>
> I am looking for plans to build an A M loop antenna! Plans must be
> easy to understand as i am NOT an expert! I would even buy one if the
> price is right!
>
> Thanks
> Ernie
>

Hi, Ernie. In the Links folder you will find links I placed for the Carver style "Ultimate" AM Loop. In the Photos in the Loop Kits subfolder you will find a photo. This loop is available as a kit from ebay seller jburns1987. All wood is cut, all parts included, but you need to finish the wood. I used a Minwax stain and sprayed on some Minwax polyacrylic water based clear finish from a spray can. The photo is my loop.

This is an untuned loop, no capacitor. It does not have the very hi Q of a tuned loop, but it works very well with most stereo tuners. It will not work well with tuners or radios that already have built-in ferrite bar loop antennas. With my Onkyo tuners and receivers and this "Ultimate Loop", from my home on the Louisiana Gulf Coast most nights I can receive clearly WSB in Atlanta to the east, WOAI San Antonio to the west, WBAP in DallasFortWorth, KMOX in St. Louis, MO, WLW Cincinnati, WLS and WGN Chicago.

I also have a MTM Scientific Loop built from the plans. The plans include plans and the tuning capacitor. I had to supply the wood, knob, wire, etc. See the link in the Links folder for prices of the plans kit, the full kit, and the fully assembled loops. I have photos of mine in the same Loop Kits folder in Photos.

My MTM Loop is modified by adding a "pickup loop" in order to directly feed my stereo receivers or tuners. With my Grundig S350DL I can simply place it beside the radio and it will work via induction.

If you just don't want to build a kit, consider the Terk AM loop and the Select-a-tenna from C. Crane, Universal Radio, and others. The Terk and one model of the Select-a-tennas have a socket to use a cable for direct connection to a stereo tuner/receiver.

Paul C.
tenorman1952

4734. Re: [loopantennas] New and improved Mega Loop doodling

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-23 19:26:18 UTC
From: Tom
Topic: 4723 Message: 4734

Hi Jim, VE3CI and the Group,

In case one of the Loop members just tuned in, we're
writing about a doodle(never been built) at:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2

Your absolutely right, Jim. I wouldn't expect a loop on 160, with
a small aperture, to perform as well as a large one. It may be OK
on 80 through 10 with a tuner.

It's a possible solution for those who want a loop
on 160, but don't have the space for a large loop.....
like me. There's very little experience out there on medium
sized, multiple turn loops.

There is some experience out there on small, < 4 feet,
multiple turn, square loops. Somebody needs to build a larger one.
And this is.....after all.....the Loop Group.....So why don't
I build one?

Thanks for the feedback!

Cheers.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 23, 2008 4:31 AM
Subject: Re: [loopantennas] New and improved Mega Loop doodling

At 10:34 PM 1/22/2008 -0800, you wrote:

>Hi Loop Group,
>
>I cleared up the ambiguous dimensions
>of Mega Loop. See:
>
><http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2>http://ph.groups.yaho
o.com/group/loopantennas/photos/view/199f?b=2
>
>Cheers.
>
>Tom

>KE6YNH, 73
>San Diego

Hi Tom,

Nice illustration .... however same conclusion. Adding turns to the loop making it a 'mega' loop will not change its fundamental performance as an antenna. How the antenna performs e.g. its radiation pattern will essentially remain the same. How it performs in terms of efficiency ... eg the amount of energy radiated vs the amount of power fed to the antenna might be affected ....my guess would be a decrease. On 160m.

Another way of looking at it .... if you take the same amount of wire (564ft) and made a single turn loop with 141ft to a side you would have very different 160m performance than a loop with only 47ft on a side. Now take the same amount of wire and form it into a 3 turn loop with only 47ft per side and the performance will become more or less identical to the single turn loop with 47ft on a side. The difference would be added inductance, capacitance, and resistance compared to the 1 turn loop. This would change how it matches the feed line and little else.

Any other opinions?

Jim, VE3CI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

4735. 4ft multi-turn BCB-SW loop project - feedback?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-24 02:16:24 UTC
From: airchecklover
Topic: 4735 Message: 4735

Hi everyone;

I am embarking on an open air multi-turn loop project.
I've done my reading here and elsewhere and I've got my saw and soldering iron ready. Along the way, I'll take pictures and make notes and post them here.

The loop will be made from PVC. It will be free-standing so it will have T's & pipe on the ends. It will be 3.5 to 4ft diameter, will have 6 or 8 legs and will be slightly oval - or not. The criteria is two of the legs must span 19" so it can be strapped/unstrapped to a Lazy Susan. Cor B. is lending his mechanical design chops but I need input on L-C end of it.

I've read there is little difference between spiral and solenoid windings. I'm leaning toward solenoid. Good/bad thinking?

My 2ft loop uses 20ga solid copper. It keeps stretching - a royal pain to tighten. How does 18ga stranded sound? 16ga?

I want to tap the coil at one or two points to shorten the loop. I'm hoping to extend the frequency range upward. I've seen a few schematics suggesting this is possible but have not seen pictures. Anyone actually ever do this?

When sizing is completed, I'll do the calculations for # of turns and spacing and run them past the group.

OK - now for the crazy question of the day :) Anyone ever think about winding a spiral and solenoid on the same frame, tuning them separately w/ two caps? Would you get gain over using one loop?

Trying to stay warm in Wisconsin,

Mark

4736. Re: [loopantennas] 4ft multi-turn BCB-SW loop project - feedback?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-24 02:41:35 UTC
From: Richards
Topic: 4735 Message: 4736

I also have a lazy Susan... and any time I try to strap anything on
her, she bucks, and threatens me with divorce...

OH... Ah... er... um...

Sorry... thought this was the personal problem help line...
Good luck with the antenna project.

////////////// Richards //////////
==========

aircheckIover wrote:

> the legs must span 19" so it can be strapped/unstrapped to a Lazy
> Susan.

==========

4737. Re: [loopantennas] 4ft multi-turn BCB-SW loop project - feedback?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-24 05:03:16 UTC
From: Marc
Topic: 4735 Message: 4737

aircheckIover schreef:
>
>
> OK - now for the crazy question of the day :) Anyone ever think about
> winding a spiral and solenoid on the same frame, tuning them
> separately w/ two caps? Would you get gain over using one loop?
>

I'm into crazy questions too.
I think you'll have problems: 2 loops put together will interfere, the Q
gets lower....
Even if you disconnect the var cap ...

Marc
--

--
Shortwave transmissions in English, Francais, Nederlands, Deutsch, Suid-Afrikaans,
Chinese, Dansk, Urdu, Cantonese, Greek, Spanish, Portuguese, ...
http://shortwave.blogsite.org/ Updated every month or so ...

4738. Re: 4ft multi-turn BCB-SW loop project - feedback?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-24 13:38:41 UTC
From: aircheckIover
Topic: 4735 Message: 4738

--- In loopantennas@yahoogroups.com, Richards <jruing@...> wrote:
>
> I also have a lazy Susan... and any time I try to strap anything on
> her, she bucks, and threatens me with divorce...
>
> OH... Ah... er... um...
>
> Sorry... thought this was the personal problem help line...
> Good luck with the antenna project.
>
> /////////// Richards //////////

Richards - Ha, good one.
Give her an apple and speak to her using soft overtones. She'll get
used to the straps.

Dr. Mark

4739. Re: [loopantennas] 4ft multi-turn BCB-SW loop project - feedback?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-24 18:28:07 UTC
From: aimo ruoho
Topic: 4735 Message: 4739

Hi, Mark & others!

I made for test purposes a tripple-loop for some time ago. It consists of a spiral-loop, a coaxial-loop and a copper-tube-loop. I tested it and found out, that it really wasn't a bad idea at all! Because I have been home-brewing more aerials from month to month afterwards, this forementioned one has been hanging since at my window. Only occasionally have I been retesting it, and found out, that if I add an antenna-amplifier after an Antenna Tuning Unit to it, it will give my RX240 as strong a signal as any one of the other (7!) antennas on my roof of the 4th level on my house!!!

schematics suggesting this is possible but have not seen pictures.
Anyone actually ever do this?

When sizing is completed, I'll do the calculations for # of turns and
spacing and run them past the group.

OK - now for the crazy question of the day :) Anyone ever think about
winding a spiral and solenoid on the same frame, tuning them
separately w/ two caps? Would you get gain over using one loop?

Trying to stay warm in Wisconsin,

Mark

Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping

[Non-text portions of this message have been removed]

4740. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-24 22:02:47 UTC
From: metrobase201
Topic: 4716 Message: 4740

--- In loopantennas@yahoogroups.com, "Jay Heyl" <yahoogroups@...> wrote:
>
> On Jan 22, 2008 11:54 PM, metrobase201 <metrobase201@...> wrote:
>
> > OK guys you mean to say that it has an insulation altough not visible
> > to the eye? If so is it removed only at the ends where the contacts
> > will be made? Thank you all, you guys are a great help.
>
>
> Yes, it has a thin coat of insulation, usually enamel, though other
> insulation materials are used for special applications. If not for this
> insulation, when used for motor windings it would short out.
>
> As others have suggested, you can use emery cloth to abrade away the
> insulation. Enamel insulation can be burned off with a lighter. It takes
> just a second or two. Just be sure to wipe off the carbon afterwards. (And
> don't burn yourself on the hot wire.)
>
> You want to remove the insulation just at the ends where the contacts will
> be made.
>
> For comparatively short runs like you'll have in your loop magnet wire
> should work fine. If you ever want to go a lot longer you need to be
> concerned about the resistance of the wire. It's usually not a concern
> unless you're using hundreds of feet. Google "magnet wire" and you should
> find several online resources that will have full tables of specs for every
> available type.
>
> -- Jay
>
>
> [Non-text portions of this message have been removed]
>

Jay thank you and all in the group so much. As you said the trouble all along was that (and your gonna laugh) I fail to remove the enamal coating at the contact points for the magnet wire I used to make the coil. So once removed and contact made w/ capacitor all works great. Will post pics soon.

-MetroBase
Bronx NY

4741. Re: [loopantennas] Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-25 05:03:17 UTC
From: Andy
Topic: 4716 Message: 4741

> Magnet wire, can it be used on a MW loop????

I agree with all the previous replies ... but wanted to suggest one other possibility, though unlikely:

Could it be something other than magnet wire, with no coating?

If it looks shiny metallic, it might be a tinned wire without insulation, in which case the turns could be shorting to one another.

But I'd put my money on the enamel coating being the problem. Easy to tell by getting a meter and measuring for continuity.

After burning/scraping off the insulation, use a soldering iron and tin the ends, to keep them from corroding. If the solder won't flow and stick, then you've still got some junk on the wire.

Compared to speaker wire, magnet wire would have (a) more resistance, and (b) more self capacitance turn-to-turn, so it might not resonate the same.

Andy

4742. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-25 13:45:19 UTC
From: dldorrance
Topic: 4682 Message: 4742

--- In loopantennas@yahoogroups.com, "capntripps2000"
<capntripps2000@...> wrote:

A little more info on the toroid if possible.

I have seen 2 types of balun kits; one uses ferrite toroids and the
other used type 6 powdered iron toroids, which are red. Which do you
have?

Dave WA6YSO
>
> The toroid is from one of my unbuilt balun kits, it's about 2 inches
> diameter, and the kit directions claim 300 watts capability. I don't
> plan to run more than 20-50 watts through it and most likely 20w max
> for digital modes.
>

4743. MFJ-1788 loop antenna (subject line added by moderator)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-25 10:00:17 UTC
From: mwtomcat
Topic: 4743 Message: 4743

Hi Guys
I Have played with large transmitting antennas for many years for SWL and HAM, we are now moving in to a retirement village so no more outside antennas and I would like to know if any of you guys have had experience with a MFJ-1788 loop antenna using it outside of its designed transmitting Freq. for SWL.
I am malty skilled but will not be able to home brew and do not know of any other good hobby loop antenna that I can use for RX and TX.
Before I lay out my money, any suggestions would be appreciated.
I now live in West Sussex UK
Regards
Tom
M0ZSA / ZS6SWL

[Non-text portions of this message have been removed]

4744. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-26 14:15:17 UTC
From: Steve
Topic: 4716 Message: 4744

Actually, if it's stranded speaker wire, the speaker wire may have more resistance at frequency. Stranded wire is not a good choice for RF because of the skin effect. With the strands in electrical contact, it acts like a single wire with grooves cut in it. The skin effect causes the current to be limited to only the highest outer portions, since it acts like a grooved wire it therefore has a smaller equivalent surface area, so the resistance at frequency is higher.

So lower Q for a given wire gauge. Therefore litz wire has separately insulated multiple strands.

Of course, it depends on the relative gauges. A large diameter stranded wire may out perform a very small single strand magnet wire.

I recall (I may be incorrect) some here testing several types of wire and several different Q for BCB receiving loops and I thought the end result was that it did not make much difference. Please correct me.

And self capacitance will depend on spacing. It is usually not a good idea to simply wind the turns as close as they will go, better to space them to limit self capacitance. In which case, if you compare, say, 0.1 inch spacing (center to center) then a larger stranded wire will have a higher self capacitance than a smaller magnet wire, simply because there is a larger surface area for the larger wire.

Steve Greenfield

--- In loopantennas@yahoogroups.com, Andy <Andy.groups@...> wrote:
...
> Compared to speaker wire, magnet wire would have (a) more resistance, and
> (b) more self capacitance turn-to-turn, so it might not resonate the same.

4745. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-27 04:42:17 UTC
From: Hiram
Topic: 4716 Message: 4745

Check out some of these other links from folks who have built these
for HF.

http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=9042

http://standpipe.com/w2bri/

Some simple programs for loop calculation here:
http://standpipe.com/w2bri/software.htm

The loop calculator shows that antenna efficiency is directly related
to the diameter of the wire used. 3/4" copper pipe seems to work well
for HF loops.

Here's some AM loop antenna stuff:

http://www.mindspring.com/~loop_antenna/

Pappy Hiram

--- In loopantennas@yahoogroups.com, "Steve" <alienrelics@...> wrote:
>
> Actually, if it's stranded speaker wire, the speaker wire may have
> more resistance at frequency. Stranded wire is not a good choice for
> RF because of the skin effect. With the strands in electrical contact,
> it acts like a single wire with grooves cut in it. The skin effect
> causes the current to be limited to only the highest outer portions,
> since it acts like a grooved wire it therefore has a smaller
> equivalent surface area, so the resistance at frequency is higher.
>
> So lower Q for a given wire gauge. Therefore litz wire has separately
> insulated multiple strands.
>
> Of course, it depends on the relative gauges. A large diameter
> stranded wire may out perform a very small single strand magnet wire.
>
> I recall (I may be incorrect) some here testing several types of wire
> and several different Q for BCB receiving loops and I thought the end
> result was that it did not make much difference. Please correct me.
>
> And self capacitance will depend on spacing. It is usually not a good
> idea to simply wind the turns as close as they will go, better to
> space them to limit self capacitance. In which case, if you compare,
> say, 0.1 inch spacing (center to center) then a larger stranded wire
> will have a higher self capacitance than a smaller magnet wire, simply
> because there is a larger surface area for the larger wire.
>

> Steve Greenfield
>
> --- In loopantennas@yahoogroups.com, Andy <Andy.groups@> wrote:
> ...
> > Compared to speaker wire, magnet wire would have (a) more
> resistance, and
> > (b) more self capacitance turn-to-turn, so it might not resonate the
> same.
>

4746. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-28 04:49:23 UTC
From: gplynas
Topic: 4716 Message: 4746

Braided wire, including coax shield that is not silver-plated, can
also become a very poor low-Q inductor as it ages and should be
avoided. I learned this while making Q measurements on coils. I was
using copper braid for connections to the Q meter, and the coils were
showing very poor Q. After replacing the short section of braid with
a flat copper strap of the same width, the Q measurements of the coils
improved dramatically. Magnet wire with a varnish coat would be much
less subject to oxidation and Q deterioration with time and might be a
good loop material. It is available in almost any size desired.
Regards,
Paul

--- In loopantennas@yahoogroups.com, "Steve" <alienrelics@...> wrote:
>
> Actually, if it's stranded speaker wire, the speaker wire may have
> more resistance at frequency. Stranded wire is not a good choice for
> RF because of the skin effect. With the strands in electrical contact,
> it acts like a single wire with grooves cut in it. The skin effect
> causes the current to be limited to only the highest outer portions,
> since it acts like a grooved wire it therefore has a smaller
> equivalent surface area, so the resistance at frequency is higher.
>
> So lower Q for a given wire gauge. Therefore litz wire has separately
> insulated multiple strands.
>
> Of course, it depends on the relative gauges. A large diameter
> stranded wire may out perform a very small single strand magnet wire.
>
> I recall (I may be incorrect) some here testing several types of wire
> and several different Q for BCB receiving loops and I thought the end
> result was that it did not make much difference. Please correct me.
>
> And self capacitance will depend on spacing. It is usually not a good
> idea to simply wind the turns as close as they will go, better to
> space them to limit self capacitance. In which case, if you compare,
> say, 0.1 inch spacing (center to center) then a larger stranded wire
> will have a higher self capacitance than a smaller magnet wire, simply
> because there is a larger surface area for the larger wire.
>
> Steve Greenfield
>
> --- In loopantennas@yahoogroups.com, Andy <Andy.groups@> wrote:
> ...
> > Compared to speaker wire, magnet wire would have (a) more
> resistance, and

> > (b) more self capacitance turn-to-turn, so it might not resonate the
> same.
>

4747. Re: MFJ-1788 loop antenna (subject line added by moderator)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-28 15:39:14 UTC
From: dldorrance
Topic: 4743 Message: 4747

Hi Tom,

The MFJ-1788 small loop is designed to operate between 40 and 15 meters. Above or below these bands signals will be very significantly attenuated on receive, and the SWR on transmit will become too high to be useful.

Dave

--- In loopantennas@yahoogroups.com, "mwtomcat" <mwtomcat@...> wrote:
>
> Hi Guys
> I Have played with large transmitting antennas for many years for SWL and HAM, we are now moving in to a retirement village so no more outside antennas and I would like to know if any of you guys have had experience with a MFJ-1788 loop antenna using it outside of its designed transmitting Freq. for SWL.
> I am malty skilled but will not be able to home brew and do not know of any other good hobby loop antenna that I can use for RX and TX.
> Before I lay out my money, any suggestions would be appreciated.
> I now live in West Sussex UK
> Regards
> Tom
> M0ZSA / ZS6SWL
>
>
>
> [Non-text portions of this message have been removed]
>

4748. Re: [loopantennas] Re: MFJ-1788 loop antenna (subject line added by moderator)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-28 18:11:57 UTC
From: Tom
Topic: 4743 Message: 4748

Hello Tom and the loop Group,

If you can get up to the upper corner of your ceiling and tape a white wire with white tape, then you can install an apartment loop as big as the entire apartment or largest room. I would use a 4:1 balun and a tuner in the mix as well.

Yes, it won't have any angular adjustment, but it will be easier to tune for all bands.

Careful on the ladder or let a fellow ham install it for you. As we know: "H. A. M." means "Helping All Mankind".

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

4749. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-28 18:43:15 UTC
From: Jim Dunstan
Topic: 4716 Message: 4749

At 04:49 AM 1/28/2008 +0000, you wrote:

>Braided wire, including coax shield that is not silver-plated, can
>also become a very poor low-Q inductor as it ages and should be
>avoided. I learned this while making Q measurements on coils. I was
>using copper braid for connections to the Q meter, and the coils were
>showing very poor Q. After replacing the short section of braid with
>a flat copper strap of the same width, the Q measurements of the coils
>improved dramatically. Magnet wire with a varnish coat would be much
>less subject to oxidation and Q deterioration with time and might be a
>good loop material. It is available in almost any size desired.
>Regards,
>Paul

Hi,

With magnet wire you basically get what you see. When winding small coils, like front-end inductors for a home brew receiver, I often use ordinary solid hook-up wire. The advantage is that the plastic insulation provides some separation of turns by virtue of the thickness of the insulation. In addition the wire is ready for soldering. If you need a heavier gauge wire then hook-wire is out of the question.

With braided wire ... eg shield removed from RG-8 cable for example is deceptive. I know I at first thought it would be a great conductor in RF circuits ... eg. connecting a feed point to a feed line etc. I have since discovered this is not true .... once it is stripped from its underlying cable .... eg looses its circular shape .... it is greatly deteriorates as an RF conductor. If you take a piece of intact RG-8 and simply use the whole thing as a conductor it is pretty good (eg you can make a loop from whole cable) although not as good as the same size solid copper. However when you strip the shield from the cable and use it alone it is not any better than solid #14 copper wire .... or I suspect ... worse.

For construction of low frequency receiver inductors you can't beat Litz wire. It is possible to build small inductors with much higher Q than is possible with magnet wire. If you want to see examples of these kinds of inductors you can google one of the 'crystal radio' web sites. These MW crystal receivers require very high Q circuits in a relatively small size in order to squeeze the last drop of energy out of the antenna (usually a random wire). These circuits are not antennas in themselves. If you want to build a MW loop antenna (when does a tuned circuit become an antenna hi hi) then the size of the inductor (capture area) becomes as significant as Q .... although Q is still very important.

Jim

4750. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 00:05:26 UTC
From: aimo ruoho
Topic: 4750 Message: 4750

Hi! THNX.
For a newcomer it would always, every time, be good to tell, what for instance "Q" means...
Q= QUALITY, but what kind of quality?
Best Regards from Aimo.

----- Original Message ----
From: Jim Dunstan <dunstan@...>
To: loopantennas@yahoogroups.com
Sent: Monday, January 28, 2008 7:43:15 PM
Subject: Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

At 04:49 AM 1/28/2008 +0000, you wrote:

>Braided wire, including coax shield that is not silver-plated, can
>also become a very poor low-Q inductor as it ages and should be
>avoided. I learned this while making Q measurements on coils. I was
>using copper braid for connections to the Q meter, and the coils were
>showing very poor Q. After replacing the short section of braid with
>a flat copper strap of the same width, the Q measurements of the coils
>improved dramatically. Magnet wire with a varnish coat would be much
>less subject to oxidation and Q deterioration with time and might be a
>good loop material. It is available in almost any size desired.
>Regards,
>Paul

Hi,

With magnet wire you basically get what you see. When winding small
coils, like front-end inductors for a home brew receiver, I often use
ordinary solid hook-up wire. The advantage is that the plastic insulation
provides some separation of turns by virtue of the thickness of the
insulation. In addition the wire is ready for soldering. If you need a
heavier gauge wire then hook-wire is out of the question.

With braided wire ... eg shield removed from RG-8 cable for example is
deceptive. I know I at first thought it would be a great conductor in RF
circuits ... eg. connecting a feed point to a feed line etc. I have since
discovered this is not true .... once it is stripped from its underlying
cable .... eg looses its circular shape .... it is greatly deteriorates as
an RF conductor. If you take a piece of intact RG-8 and simply use the
whole thing as a conductor it is pretty good (eg you can make a loop from
whole cable) although not as good as the same size solid copper. However
when you strip the shield from the cable and use it alone it is not any
better than solid #14 copper wire .... or I suspect ... worse.

For construction of low frequency receiver inductors you can't beat Litz
wire. It is possible to build small inductors with much higher Q than is

possible with magnet wire. If you want to see examples of these kinds of inductors you can google one of the 'crystal radio' web sites. These MW crystal receivers require very high Q circuits in a relatively small size in order to squeeze the last drop of energy out of the antenna (usually a random wire). These circuits are not antennas in themselves. If you want to build a MW loop antenna (when does a tuned circuit become an antenna hi hi) then the size of the inductor (capture area) becomes as significant as Q .... although Q is still very important.

Jim

Be a better friend, newshound, and
know-it-all with Yahoo! Mobile. Try it now.
http://mobile.yahoo.com/;_ylt=Ahu06i62sR8HDtDypao8Wcj9tAcJ

[Non-text portions of this message have been removed]

4751. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 00:19:57 UTC
From: John Popelish
Topic: 4750 Message: 4751

aimo ruoho wrote:
> Hi! THNX.
> For a newcomer it would always, every time, be good to tell, what for instance "Q" means...
> Q= QUALITY, but what kind of quality?

Energy storage quality. The ratio of energy stored to
energy consumed in the process of storage and retrieval.

--
Regards,

John Popelish

4752. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 00:58:49 UTC
From: aimo ruoho
Topic: 4750 Message: 4752

Thank you for your prompt reaction, John!
I hope, that all newcomers now understand, what Q means in electricity.
B.R. de Ami
Mis mejores recuerdos para todos.

----- Original Message ----
From: John Popelish <jpopelish@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 29, 2008 1:19:57 AM
Subject: Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

aimo ruoho wrote:
> Hi! THNX.
> For a newcomer it would always, every time, be good to tell, what for instance "Q" means...
> Q= QUALITY, but what kind of quality?

Energy storage quality. The ratio of energy stored to
energy consumed in the process of storage and retrieval.

--
Regards,

John Popelish

_____
Be a better friend, newshound, and
know-it-all with Yahoo! Mobile. Try it now.
http://mobile.yahoo.com/;_ylt=Ahu06i62sR8HDtDypao8Wcj9tAcJ

[Non-text portions of this message have been removed]

4753. telescoping ant

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 03:23:57 UTC
From: dean_0_way
Topic: 4753 Message: 4753

I posted about this a while back and was told to look at radio shack ...which i did ,at two different places and no help , so i'll try again ?

I have several radio's with broken or shortend antennas ...not wanting to throw them away i'm looking for replacment telescoping mast's for them

Surely there is somplace to order these type of whip's ...like for portable and boom box type radio's ?

Maybe someone has a link that they have found along the way during that restoration ? THANKS

Dean_0

4754. RE: [loopantennas] telescoping ant

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 03:49:20 UTC
From: Joshua Everett
Topic: 4753 Message: 4754

Try this
http://cgi.ebay.com/WHIP-ANTENNA-FOR-DE1103-DE1104-DE1107-DE1121-E5-RADIO_W0QQitemZ140138645834QQihZ004QQcategoryZ15051QQtcZphotoQQcmdZViewItem

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of dean_0_way
Sent: Monday, January 28, 2008 10:24 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] telescoping ant

I posted about this a while back and was told to look at radio shack ...which i did ,at two different places and no help , so i'll try again ?

I have several radio's with broken or shortend antennas ...not wanting to throw them away i'm looking for replacment telescoping mast's for them

Surely there is somplace to order these type of whip's ...like for portable and boom box type radio's ?

Maybe someone has a link that they have found along the way during that restoration ? THANKS

Dean_0

[Non-text portions of this message have been removed]

4755. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 04:09:56 UTC
From: Andy
Topic: 4750 Message: 4755

> > For a newcomer it would always, every time, be good to tell, what for
> instance "Q" means...
> > Q= QUALITY, but what kind of quality?
>
> Energy storage quality. The ratio of energy stored to
> energy consumed in the process of storage and retrieval.

For a simple electrical circuit, Q also (unless I am mistaken) works out to equal the ratio of reactance to resistance, of a series equivalent circuit.

For example, a coil has so much inductance and so much resistance.
Inductive reactance (XL) equals inductance times frequency times 2 times Pi.
Q = XL / R. The less effective series resistance, the higher the Q.

Energy is stored in the reactance part. Energy is consumed (dissipated) in the resistance part.

Andy

4756. Re: telescoping ant

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 15:47:44 UTC
From: aircheckIover
Topic: 4753 Message: 4756

> Maybe someone has a link that they have found along the way during that
> restoration ? THANKS
>
> Dean_0

Dean: I picked up a box (maybe 15) of used whips from a guy on eBay.
Under $10. Keeping checking eBay using terms like 'whip antenna'.
These things come up every once in a while. Or if you live anywhere
near a ham radio swapfest (google around to check), go! You'll
probably find not only find whips but just about every other part
known to mankind :)

Mark

==========

4757. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 15:50:25 UTC
From: airchecklover
Topic: 4750 Message: 4757

--- In loopantennas@yahoogroups.com, Andy <Andy.groups@...> wrote:
>
> > > For a newcomer it would always, every time, be good to tell, what for
> > > instance "Q" means...
> > > Q= QUALITY, but what kind of quality?

Aimo; In practical terms, the Q of a circuit refers to bandwidth of that circuit. If the Q is low, the circuit will have a wide bandwidth. If the Q is high, a narrow bandwidth. OK, now you know the math and where to use it, and what it means :)

Mark

==========

4758. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 14:37:35 UTC
From: Jim Dunstan
Topic: 4750 Message: 4758

At 04:05 PM 1/28/2008 -0800, you wrote:

>Hi! THNX.
>For a newcomer it would always, every time, be good to tell, what for
>instance "Q" means...
>Q= QUALITY, but what kind of quality?
>Best Regards from Aimo.

Hi Aimo,

There are some good definitions of Circuit Q. The performance of different circuits with different levels of Q is roughly like this:

A low Q circuit when tuned will have a low level of voltage (signal increase) as it approaches resonance with a poorly defined peak. In terms of frequency selectivity it will be broad. Comparatively speaking a High Q tuned circuit will attain a much higher level of voltage (signal increase) as it approaches resonance with a well defined peak. In terms of selectivity it will be sharp. When building circuits in various devices how selective the tuned circuits should be is a matter of design ... as they can range from very low (broad) to very high (sharp/narrow).

If you are designing a loop or tuned circuit to pick up faint signals or you are building circuits such as crystal set receiver where you have no amplification and need all the natural gain you can get then you go for the highest Q. Such a receiving loop or circuit is very sharp with a very defined peak and will maximize the RF signal voltage that goes to the receiver/detector.

Some others in the group have pointed out the different aspects or components in a circuit that contribute to circuit Q.

I hope that helps Aimo

Jim

4759. Re: telescoping ant

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 20:29:38 UTC
From: tenorman1952
Topic: 4753 Message: 4759

--- In loopantennas@yahoogroups.com, "airchecklover" <mdh@...> wrote:
>
>
> > Maybe someone has a link that they have found along the way during
that
> > restoration ? THANKS

MCM Electronics has a wide assortment of telescoping whips.

http://www.mcminone.com/

Paul
tenorman1952

4760. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 20:56:30 UTC
From: aimo ruoho
Topic: 4750 Message: 4760

Thanks!

By the way, did I call myself a newcomer? I've been in this group since 2004 reading almost daily members' email and taking part in many other groups also rather keenly.

The 2004 ARRL Handbook, chapter 6.1 Glossary: "Q (quality factor) --- The ratio of energy stored in a reactive component (capacitor or inductor) to the energy dissipated, equal to the reactance divided by the resistance."

The Handbook tells more about Q on many pages, that above was only a general definition of the term...
The more I use that book, the less I think, that it was written only for mathematicians and other theorists, not to be read by a common man. It really contains beneficial information for us radiohobbyists. It only was not meant to be read from row to row, page to page, but using the index words as key words. It is just and only a HANDBOOK! -- NOT a novel.

I just wanted to tell people writing at this group to tell the beginners something, that they probably are not acquainted with. To use general terminology or explain the terms not known by everybody, especially the newcomers.
By this I by no means am looking for to hurt any ones feelings, just to express solicitude for those, who are ignorant.

Thank you for doing just the above, Mark!

Most friendly,
Aimo

----- Original Message ----
From: aircheckIover <mdh@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 29, 2008 4:50:25 PM
Subject: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

--- In loopantennas@ yahoogroups. com, Andy <Andy.groups@ ...> wrote:

>

> > > For a newcomer it would always, every time, be good to tell,

what for

> > instance "Q" means...

> > > Q= QUALITY, but what kind of quality?

Aimo; In practical terms, the Q of a circuit refers to bandwidth of

that circuit. If the Q is low, the circuit will have a wide bandwidth.

If the Q is high, a narrow bandwidth. OK, now you know the math and

where to use it, and what it means :)

Mark

========== ========= ========

```
<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
```

```
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
```

```
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```


_____
Never miss a thing. Make Yahoo your home page.
http://www.yahoo.com/r/hs

[Non-text portions of this message have been removed]

4761. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 23:03:22 UTC
From: John Popelish
Topic: 4750 Message: 4761

aimo ruoho wrote:
(snip)

> I just wanted to tell people writing at this group to
tell the beginners something, that they probably are not
acquainted with. To use general terminology or explain the
terms not known by everybody, especially the newcomers.
> By this I by no means am looking for to hurt any ones
feelings, just to express solicitude for those, who are
ignorant.

Successful communication always involves holding in one's
mind, a model of the other's mind. Since we start out with
a very poor model of your mind, when anyone says something
that does not communicate, effectively with your mind, you
can help us by telling us what you understand and what you
do not, so we can improve out models of your mind.

--
Regards,

John Popelish

4762. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 23:46:47 UTC
From: Jim Dunstan
Topic: 4750 Message: 4762

At 12:56 PM 1/29/2008 -0800, you wrote:

>Thanks!
>
>By the way, did I call myself a newcomer? I've been in this group since
>2004 reading almost daily members' email and taking part in many other
>groups also rather keenly.
>
>The 2004 ARRL Handbook, chapter 6.1 Glossary: "Q (quality factor) --- The
>ratio of energy stored in a reactive component (capacitor or inductor) to
>the energy dissipated, equal to the reactance divided by the resistance."
>
>The Handbook tells more about Q on many pages, that above was only a
>general definition of the term...
>The more I use that book, the less I think, that it was written only for
>mathematicians and other theorists, not to be read by a common man. It
>really contains beneficial information for us radiohobbyists. It only was
>not meant to be read from row to row, page to page, but using the index
>words as key words. It is just and only a HANDBOOK! -- NOT a novel.
>
>I just wanted to tell people writing at this group to tell the beginners
>something, that they probably are not acquainted with. To use general
>terminology or explain the terms not known by everybody, especially the
>newcomers.
>By this I by no means am looking for to hurt any ones feelings, just to
>express solicitude for those, who are ignorant.
>
>Thank you for doing just the above, Mark!
>
>Most friendly,
>Aimo

Hi Aimo,

It's nice to hear there are others who read the Handbook ... I have about a dozen issues of the Handbook on the shelf with many other related books ... they are my excellent reference library hi hi.

Jim, VE3CI

4763. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 19:29:01 UTC
From: juan.m0wwa
Topic: 4750 Message: 4763

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Hi! THNX.
> For a newcomer it would always, every time, be good to tell, what
for instance "Q" means...
> Q= QUALITY, but what kind of quality?
> Best Regards from Aimo.

Hi Aimo,
Please look at Photos section, PCB Fractal Loop Antenna Album; I
uploaded a picture of a plot for you. The plot depicts the response
of a Band Pass Filter centered at 7MHz with strong attenuation on
3.5MHz and 14 MHz adjacent amateur bands. On the left side, 3.5MHz,
you can see a strong notch of attenuation, that coil has a Q of more
than 200. On the right hand, 14MHz, the notch is almost
imperceptible. That is because the Q of that coil is poor, less than
100 or so. This is a practical definition of that Q means and its
effects.
I hope that this definition can help you.
73s

Juan, M0WWA

4764. Fractal Loop Anrenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-29 12:23:02 UTC
From: juan.m0wwa
Topic: 4764 Message: 4764

Hi Adam,
Just I uploaded the 10m PCB Fractal Loop Antenna photo, look at Photos section. According to the theory impedance must be around 50 Ohms that means direct match, but I am not sure until finish measurements.
73s

Juan, M0WWA

4765. Re: Fractal Loop Anrenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 03:40:31 UTC
From: Steve
Topic: 4764 Message: 4765

Interesting. I'm anxious to hear how it works.

To those interested, it's in the PCB Fractal Loop Antenna folder in
Photos.
<http://ph.groups.yahoo.com/group/loopantennas/photos/browse/dfac>

So this is an untuned loop? Or self tuned?

What is the size?

Steve Greenfield

--- In loopantennas@yahoogroups.com, "juan.m0wwa" <jjdeonate@...> wrote:
>
> Hi Adam,
> Just I uploaded the 10m PCB Fractal Loop Antenna photo, look at Photos
> section. According to the theory impedance must be around 50 Ohms that
> means direct match, but I am not sure until finish measurements.
> 73s
>
> Juan, M0WWA
>

4766. Re: [loopantennas] Fractal Loop Anrenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 05:05:43 UTC
From: John Popelish
Topic: 4764 Message: 4766

juan.m0wwa wrote:
> Hi Adam,
> Just I uploaded the 10m PCB Fractal Loop Antenna photo, look at Photos
> section. According to the theory impedance must be around 50 Ohms that
> means direct match, but I am not sure until finish measurements.

Very interesting. Have you ever tried to turn the dragon
curve into an antenna?

http://en.wikipedia.org/wiki/Dragon_curve

I once tried to make an inductor this way to eliminate any
self resonance peaks. Can't remember exactly how well that
worked.

--
Regards,

John Popelish
--
Regards,

John Popelish

4767. Re: [loopantennas] Fractal Loop Anrenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 05:15:48 UTC
From: Paul V Birke PEng
Topic: 4764 Message: 4767

Dear John et al

what would one expect from these extended perimeter loops

it is a way of vastly increasing the length but how does the E or H field react to it

I mean does it react locally without interference or reduced interference from nearby portions of the loop

is it some optimal geometrical arrangement that maximizes capture of E or H signal

in the end it must be something like this

best wishes

Paul Victor Birke PEng
Guelph ON Canada

www.nonlinearsynergetics.com

----- Original Message ----
From: John Popelish <jpopelish@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 30, 2008 12:05:43 AM
Subject: Re: [loopantennas] Fractal Loop Anrenna

juan.m0wwa wrote:

> Hi Adam,

> Just I uploaded the 10m PCB Fractal Loop Antenna photo, look at Photos

> section. According to the theory impedance must be around 50 Ohms that

> means direct match, but I am not sure until finish measurements.

Very interesting. Have you ever tried to turn the dragon

curve into an antenna?

http://en.wikipedia .org/wiki/ Dragon_curve

I once tried to make an inductor this way to eliminate any

self resonance peaks. Can't remember exactly how well that

worked.

--

Regards,

John Popelish

--

Regards,

John Popelish

```
<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
```

```
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
```

```
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

[Non-text portions of this message have been removed]

4768. Re: Feeding transmitting loops with toroids...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 05:23:41 UTC
From: capntripps2000
Topic: 4682 Message: 4768

Type T-240-61

Andrew

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "capntripps2000"
> <capntripps2000@> wrote:
>
> A little more info on the toroid if possible.
>
> I have seen 2 types of balun kits; one uses ferrite toroids and the
> other used type 6 powdered iron toroids, which are red. Which do you
> have?
>
> Dave WA6YSO
> >
> > The toroid is from one of my unbuilt balun kits, it's about 2 inches
> > diameter, and the kit directions claim 300 watts capability. I don't
> > plan to run more than 20-50 watts through it and most likely 20w max
> > for digital modes.
> >
>

4769. Re: [loopantennas] Fractal Loop Anrenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 05:27:45 UTC
From: John Popelish
Topic: 4764 Message: 4769

Paul V Birke PEng wrote:
> Dear John et al
>
> what would one expect from these extended perimeter loops
>
> it is a way of vastly increasing the length but how does
the E or H field react to it
>
> I mean does it react locally without interference or
reduced interference from nearby portions of the loop
>
> is it some optimal geometrical arrangement that maximizes
capture of E or H signal
>
> in the end it must be something like this
>
> best wishes

I think the fractal properties come into play only when the perimeter of the loop is on the order of the wavelength in perimeter. The fractal pattern is supposed to damp sharp resonance and broaden the frequency response or the radiation pattern, or something like that. Very small loops just have a blurred, average effect based on inductance, resistance and area, I think. But I am no expert on the effect.

--
Regards,

John Popelish

4770. Question Re Single Turn Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 15:08:31 UTC
From: msznh
Topic: 4770 Message: 4770

If I build a single turn loop antenna, circular in shape and measuring about one yard in diameter, would that be seen by a wide band amp or receiver input as a High or Low impedance?

I'm not talking about a electrically closed loop. The loop would have a break where you would connect the 2 output leads. This will be for indoor use so the lead line between to loop and the WA-50 would be next to nothing. The frequency I'm interested in is the standard 3-30 Mhz SW.

I'm thinking about building one and feeding it to a RF Systems WA-50 wide band amp which has a 50 ohm input. I want to know if I can feed it direct or am I going to have to buy/consruct some sort of matching circuit.

Would appreciate any comments or input.

Tom

4771. Re: [loopantennas] Question Re Single Turn Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 15:46:49 UTC
From: Chris Trask
Topic: 4770 Message: 4771

>
>If I build a single turn loop antenna, circular in shape and
>measuring about one yard in diameter, would that be seen by a wide
>band amp or receiver input as a High or Low impedance?
>
>I'm not talking about a electrically closed loop. The loop would have
>a break where you would connect the 2 output leads. This will be for
>indoor use so the lead line between to loop and the WA-50 would be
>next to nothing. The frequency I'm interested in is the standard 3-30
>Mhz SW.
>
>I'm thinking about building one and feeding it to a RF Systems WA-50
>wide band amp which has a 50 ohm input. I want to know if I can feed
>it direct or am I going to have to buy/consruct some sort of matching
>circuit.
>
>Would appreciate any comments or input.
>

Tom,
I wrote a 2-part series of articles on active loop antennas in the Jul/Aug and Sep/Oct 2003 issues of QEX that should answer the questions that you have. I can send them to you if you're interested.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4772. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 20:56:01 UTC
From: Len Warner
Topic: 4750 Message: 4772

At 12:56 pm ((PST)) Tue Jan 29, 2008, in Digest 1034 aimo ruoho wrote:
>[By the way, did I call myself a newcomer? I've been in this group since
>2004 reading almost daily members' email and taking part in many other
>groups also rather keenly.
>
>The 2004 ARRL Handbook, chapter 6.1 Glossary:[snip]

There's lot's of online information for beginners,
I recommend them to read it for themselves
we shouldn't need to wean them all personally.

Even the ARRL HANDBOOK 2001 is (or was)
online, though it probably shouldn't be (and
RSGB Handbook 8th edition was, though that
has now definitely gone.)

Indeed, in a previous post I recommended the
Google searches for the ARRL Handbook and
Antenna Book - but nobody reads the archives,
(considering what goes into them, I don't blame
them), which is why we are now training
everybody every time from first principles.

And in this case, giving three out of four definitions
of Q, two of which are abstract ratios and the third
of which would be of more obvious relevance stated
in another form than bandwidth.

>I just wanted to tell people writing at this group to tell the beginners
>something, that they probably are not acquainted with.

Like, for example:-

* keep line length to 65 characters or less
to allow for tidy, legible quoting;

* NOT to top post without trimming your
quote savagely; (since it is then too late
to be claimed as necessary context ;-)

Rather than quote it all - double spaced
and with unintelligible nesting, like this:-

> > > > For a newcomer it would always, every time, be good to tell,
>
>what for
>

> > > instance "Q" means...
>
> > > > Q= QUALITY, but what kind of quality?

...and then...

* NOT to follow up with about 100 lines of
this kind of garbage, (which I believe is some
part of the Yahoo web page formatting and
doesn't belong in a reply at all):-

>#ygrp-mkp{
>border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
>#ygrp-mkp hr{
>border:1px solid #d8d8d8;}

(In case readers don't see that in your copy,
it was enclosed in HTML comment tags,
so it probably isn't visible in HTML email.)

Regards, LenW
--
From Yahoo! Groups Help: ... trim all the irrelevant quoted text
out of your message (as a courtesy to the other members of
the group to make the digest easier to read).

4773. Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 21:26:55 UTC
From: aircheckIover
Topic: 4750 Message: 4773

> Like, for example:-
>
> * keep line length to 65 characters or less
> to allow for tidy, legible quoting;
>
> * NOT to top post without trimming your
> quote savagely; (since it is then too late
> to be claimed as necessary context ;-)
>
> Rather than quote it all - double spaced
> and with unintelligible nesting, like this:-
>
> > > > > For a newcomer it would always, every time, be good to tell,
> >
> >what for
> >
> > > > > instance "Q" means...
> >
> > > > > > Q= QUALITY, but what kind of quality?
>
> ...and then...
>
> * NOT to follow up with about 100 lines of
> this kind of garbage, (which I believe is some
> part of the Yahoo web page formatting and
> doesn't belong in a reply at all):-
>
> >#ygrp-mkp{
> >border:1px solid #d8d8d8;font-family:Arial;margin:14px
0px;padding:0px 14px;}
> >#ygrp-mkp hr{
> >border:1px solid #d8d8d8;}

Len: All good points. However, I believe the hash and trimming is
being caused by software problems, not user negligence. I believe
using the "reply to sender" link at the bottom of a Yahoo Group digest
email generates double spacing and hash. The best way around the
unwanted hash & text is to use the "reply via web browser" link.

Mark

4774. Fw: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 23:15:38 UTC
From: aimo ruoho
Topic: 4774 Message: 4774

----- Forwarded Message ----
From: aimo ruoho <aimounto@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 29, 2008 9:56:30 PM
Subject: Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Thanks!

By the way, did I call myself a newcomer? I've been in this group since 2004 reading almost daily members' email and taking part in many other groups also rather keenly.

The 2004 ARRL Handbook, chapter 6.1 Glossary: "Q (quality factor) --- The ratio of energy stored in a reactive component (capacitor or inductor) to the energy dissipated, equal to the reactance divided by the resistance."

The Handbook tells more about Q on many pages, that above was only a general definition of the term...

The more I use that book, the less I think, that it was written only for mathematicians and other theorists, not to be read by a common man. It really contains beneficial information for us radiohobbyists. It only was not meant to be read from row to row, page to page, but using the index words as key words. It is just and only a HANDBOOK! -- NOT a novel.

I just wanted to tell people writing at this group to tell the beginners something, that they probably are not acquainted with. To use general terminology or explain the terms not known by everybody, especially the newcomers.

By this I by no means am looking for to hurt any ones feelings, just to express solicitude for those, who are ignorant.

Thank you for doing just the above, Mark!

Most friendly,

Aimo

----- Original Message ----

From: aircheckIover <mdh@ear-mark. com>

To: loopantennas@ yahoogroups. com

Sent: Tuesday, January 29, 2008 4:50:25 PM

Subject: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

--- In loopantennas@ yahoogroups. com, Andy <Andy.groups@ ...> wrote:

>

> > > For a newcomer it would always, every time, be good to tell,

what for

> > instance "Q" means...

> > > Q= QUALITY, but what kind of quality?

Aimo; In practical terms, the Q of a circuit refers to bandwidth of

that circuit. If the Q is low, the circuit will have a wide bandwidth.

If the Q is high, a narrow bandwidth. OK, now you know the math and

where to use it, and what it means :)

Mark

========== ========= ========

<!--

#ygrp-mkp{

border:1px solid #d8d8d8;font- family:Arial; margin:14px 0px;padding: 0px 14px;}

#ygrp-mkp hr{

border:1px solid #d8d8d8;}

#ygrp-mkp #hd{

color:#628c2a; font-size: 85%;font- weight:bold; line-height: 122%;margin: 10px 0px;}

#ygrp-mkp #ads{

margin-bottom: 10px;}

#ygrp-mkp .ad{

padding:0 0;}

#ygrp-mkp .ad a{

color:#0000ff; text-decoration: none;}

-->

<!--

#ygrp-sponsor #ygrp-lc{

font-family: Arial;}

#ygrp-sponsor #ygrp-lc #hd{

margin:10px 0px;font-weight: bold;font- size:78%; line-height: 122%;}

```
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom: 10px;padding: 0 0;}
-->
<!--
#ygrp-mlmsg {font-size:13px; font-family: arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit; font:100% ;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height: 1.22em;}
#ygrp-text{
font-family: Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family: Arial;
clear:both;}
#ygrp-vitnav{
padding-top: 10px;font- family:Verdana; font-size: 77%;margin: 0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin: 25px 0;white-space: nowrap;color: #666;text- align:right; }
#ygrp-actbar .left{
float:left;white- space:nowrap; }
.bld{font-weight: bold;}
#ygrp-grft{
font-family: Verdana;font- size:77%; padding:15px 0;}
#ygrp-ft{
```

```
font-family: verdana;font- size:77%; border-top: 1px solid #666;

padding:5px 0;

}

#ygrp-mlmsg #logo{

padding-bottom: 10px;}

#ygrp-vital{

background-color: #e0ecee;margin- bottom:20px; padding:2px 0 8px 8px;}

#ygrp-vital #vithd{

font-size:77% ;font-family: Verdana;font- weight:bold; color:#333; text-transform:
uppercase; }

#ygrp-vital ul{

padding:0;margin: 2px 0;}

#ygrp-vital ul li{

list-style-type: none;clear: both;border: 1px solid #e0ecee;

}

#ygrp-vital ul li .ct{

font-weight: bold;color: #ff7900;float: right;width: 2em;text- align:right; padding-right:
.5em;}

#ygrp-vital ul li .cat{

font-weight: bold;}

#ygrp-vital a{

text-decoration: none;}

#ygrp-vital a:hover{

text-decoration: underline; }

#ygrp-sponsor #hd{

color:#999;font- size:77%; }

#ygrp-sponsor #ov{

padding:6px 13px;background- color:#e0ecee; margin-bottom: 20px;}

#ygrp-sponsor #ov ul{

padding:0 0 0 8px;margin:0; }
```

```
#ygrp-sponsor #ov li{
list-style-type: square;padding: 6px 0;font-size: 77%;}
#ygrp-sponsor #ov li a{
text-decoration: none;font- size:130% ;}
#ygrp-sponsor #nc{
background-color: #eee;margin- bottom:20px; padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family: Arial;font- weight:bold; color:#628c2a; font-size: 100%;line- height:122% ;}
#ygrp-sponsor .ad a{
text-decoration: none;}
#ygrp-sponsor .ad a:hover{
text-decoration: underline; }
#ygrp-sponsor .ad p{
margin:0;}
o{font-size: 0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120% ;}
blockquote{margin: 0 0 0 4px;}
.replbq{margin: 4;}
-->
```

---------- --------- --------- --------- --------- --------- –

Never miss a thing. Make Yahoo your home page.

http://www.yahoo. com/r/hs

[Non-text portions of this message have been removed]

<!--

```
#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
```

```
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
```

```
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping

[Non-text portions of this message have been removed]

4775. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-30 23:52:50 UTC
From: aimo ruoho
Topic: 4775 Message: 4775

THNX, Jim!
I must admit, that I only have 2, 1977 and 2004 + RADIO Handbook, 16th Edition by William I. Orr, W6SAI.
Most of the information goes far above my ability to understand, but now and then I go back studying them. It would be nice to be able to put into practice the good advice given by so many experts!
I enjoy homebrewing some simple things now and then. There's a lot of fun to manage to "put life" into new things, that you built yourself, isn't it?

Best Regards from Ami to you, Jim!

----- Original Message ----
From: Jim Dunstan <dunstan@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 30, 2008 12:46:47 AM
Subject: Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

At 12:56 PM 1/29/2008 -0800, you wrote:

>Thanks!

>

>By the way, did I call myself a newcomer? I've been in this group since

>2004 reading almost daily members' email and taking part in many other

>groups also rather keenly.

>

>The 2004 ARRL Handbook, chapter 6.1 Glossary: "Q (quality factor) --- The

>ratio of energy stored in a reactive component (capacitor or inductor) to

>the energy dissipated, equal to the reactance divided by the resistance."

>

>The Handbook tells more about Q on many pages, that above was only a

>general definition of the term...

>The more I use that book, the less I think, that it was written only for

>mathematicians and other theorists, not to be read by a common man. It

>really contains beneficial information for us radiohobbyists. It only was

>not meant to be read from row to row, page to page, but using the index

>words as key words. It is just and only a HANDBOOK! -- NOT a novel.

>

>I just wanted to tell people writing at this group to tell the beginners

>something, that they probably are not acquainted with. To use general

>terminology or explain the terms not known by everybody, especially the

>newcomers.

>By this I by no means am looking for to hurt any ones feelings, just to

>express solicitude for those, who are ignorant.

>

>Thank you for doing just the above, Mark!

>

>Most friendly,

>Aimo

Hi Aimo,

It's nice to hear there are others who read the Handbook ... I have about a

dozen issues of the Handbook on the shelf with many other related books ...

they are my excellent reference library hi hi.

Jim, VE3CI

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}

```
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
```

```
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->

_____________________________________________________________________________
Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping

[Non-text portions of this message have been removed]
```

4776. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 00:00:39 UTC
From: aimo ruoho
Topic: 4750 Message: 4776

THNX, John once again.
You are thinking well!
It seems to me, that we are generally too hasty to express our thoughts with enough perseverance, so that others won't get wrong ideas...
Best from Ami to you, John!

----- Original Message ----
From: John Popelish <jpopelish@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 30, 2008 12:03:22 AM
Subject: Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

aimo ruoho wrote:

(snip)

> I just wanted to tell people writing at this group to

tell the beginners something, that they probably are not

acquainted with. To use general terminology or explain the

terms not known by everybody, especially the newcomers.

> By this I by no means am looking for to hurt any ones

feelings, just to express solicitude for those, who are

ignorant.

Successful communication always involves holding in one's

mind, a model of the other's mind. Since we start out with

a very poor model of your mind, when anyone says something

that does not communicate, effectively with your mind, you

can help us by telling us what you understand and what you

do not, so we can improve out models of your mind.

--

Regards,

John Popelish

<!--

```
#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
```

```
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
```

```
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

Be a better friend, newshound, and
know-it-all with Yahoo! Mobile. Try it now.
http://mobile.yahoo.com/;_ylt=Ahu06i62sR8HDtDypao8Wcj9tAcJ

[Non-text portions of this message have been removed]

4777. Re: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 00:17:17 UTC
From: aimo ruoho
Topic: 4750 Message: 4777

THNX, Juan (O: Muchisimas Gracias(?))
It would be really nice to have the same understanding, skills and equipment in my own possession, too, but... Vive la differencia!
Very interesting in deed!
Thank you for taking the task to give this information, Juan!
Best Regards,
de tu amigo Ami

----- Original Message ----
From: juan.m0wwa <jjdeonate@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 29, 2008 8:29:01 PM
Subject: [loopantennas] Re: Magnet wire, can it be used on a MW loop????

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:

>

> Hi! THNX.

> For a newcomer it would always, every time, be good to tell, what

for instance "Q" means...

> Q= QUALITY, but what kind of quality?

> Best Regards from Aimo.

Hi Aimo,

Please look at Photos section, PCB Fractal Loop Antenna Album; I

uploaded a picture of a plot for you. The plot depicts the response

of a Band Pass Filter centered at 7MHz with strong attenuation on

3.5MHz and 14 MHz adjacent amateur bands. On the left side, 3.5MHz,

you can see a strong notch of attenuation, that coil has a Q of more

than 200. On the right hand, 14MHz, the notch is almost

imperceptible. That is because the Q of that coil is poor, less than

100 or so. This is a practical definition of that Q means and its

effects.

I hope that this definition can help you.

73s

Juan, M0WWA

```
<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
```

```
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
```

```
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

Be a better friend, newshound, and
know-it-all with Yahoo! Mobile. Try it now.
http://mobile.yahoo.com/;_ylt=Ahu06i62sR8HDtDypao8Wcj9tAcJ

[Non-text portions of this message have been removed]

4778. Re: Fractal Loop Anrenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 01:55:30 UTC
From: juan.m0wwa
Topic: 4764 Message: 4778

--- In loopantennas@yahoogroups.com, "Steve" <alienrelics@...> wrote:
>
> Interesting. I'm anxious to hear how it works.
>
> To those interested, it's in the PCB Fractal Loop Antenna folder in
> Photos.
> <http://ph.groups.yahoo.com/group/loopantennas/photos/browse/dfac>
>
> So this is an untuned loop? Or self tuned?
>
> What is the size?
>
> Steve Greenfield

Hi Steve,
The aim of the project is put into practice some of the scarce literature that I found related to built fractal antennas. The fractal loop was calculated for 28.5MHz, ¼ wavelength, three iterations and 0.8 indentation to fit in a DIN A4 sheet, printer size.
Papers explain that must be self tuned with Z between 30 to 100 Ohms approximately, can be matched directly into 50 Ohms and with 3 iterations its behavior became narrow band.
I am preparing my rigs to test all that, I will tell you results.
73s

Juan, M0WWA

4779. Re: Fractal Loop Anrenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 14:19:42 UTC
From: airchecklover
Topic: 4764 Message: 4779

> I am preparing my rigs to test all that, I will tell you results.
> 73s
>
> Juan, M0WWA

Juan; Inquiring minds want to know!
(keep us posted :)

Mark

4780. Re: Fractal Loop Anrenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 14:39:53 UTC
From: juan.m0wwa
Topic: 4764 Message: 4780

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
> > I am preparing my rigs to test all that, I will tell you results.
> > 73s
> >
> > Juan, M0WWA
>
>
> Juan; Inquiring minds want to know!
> (keep us posted :)
>
> Mark
>

Roger that.

Juan,M0WWA

4781. Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 18:01:18 UTC
From: Chris Trask
Topic: 4781 Message: 4781

I just finished redesigning Lankford's complementary push-pull amplifier
so as to delete the 2N5160 transistor that a lot of people were complaining
about:

http://tinyurl.com/2k63ok

Now, I think it's time to take a close look at active ferrite rod
antennas. I have quite a bit of information available about these, but not
necessarily everything, and I'd like to avoid reinventing the wheel, even
though I have a particular design in mind. What has been floating around
lately about this form of antenna?

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4783. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 21:52:19 UTC
From: aimo ruoho
Topic: 4781 Message: 4783

Thank you so much Chris!

You really were very fast to make your plan!
I had to make a print-out of those 7 pages to be sure,
that all of it would be handy to read through as many
times as needed.

You set a nice example to be followed in the future:
NEVER, EVER, TAKE ANYTHING GRANTED!
Never stop thinking about other possibilities!
There will always be an alternative...

What I am waiting for eagerly, is a constructure-drawing
of your plan. Perhaps someone else will have the time
and interest to make one, so that we-not-so-skilled-ones
might be able to build "A High Dynamic Range Amplifier
for Active Short Monopole Antennas"?

One more question: Could it be a bad idea to test it with
a small loop of 30/40" or so? Still a "Monopole Antenna"
would be a short vertical?

Thanks again and Best Regards from Aimo.

----- Original Message ----
From: Chris Trask <christrask@...>
To: Loop Antennas <loopantennas@yahoogroups.com>
Sent: Thursday, January 31, 2008 7:01:18 PM
Subject: [loopantennas] Active Ferrite Rod Antennas

I just finished redesigning Lankford's complementary push-pull amplifier
so as to delete the 2N5160 transistor that a lot of people were complaining
about:

http://tinyurl. com/2k63ok

Now, I think it's time to take a close look at active ferrite rod
antennas. I have quite a bit of information available about these, but not
necessarily everything, and I'd like to avoid reinventing the wheel, even
though I have a particular design in mind. What has been floating around
lately about this form of antenna?

Chris

,---------- --------- --. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,---- --------- -' Chris Trask / N7ZWY

_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlin k.net
| | | | \ '. http://www.home. earthlink. net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

_____
Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping

[Non-text portions of this message have been removed]

4784. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 22:02:33 UTC
From: Chris Trask
Topic: 4781 Message: 4784

For a loop antenna, you might be better off looking at the low input impedance amplifier I designed with remote tuning that appeared in the Sep/Oct 2003 issue of QEX.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "aimo ruoho" <aimounto@...>
To: <loopantennas@yahoogroups.com>
Sent: Thursday, January 31, 2008 2:52 PM
Subject: Re: [loopantennas] Active Ferrite Rod Antennas

> Thank you so much Chris!
>
> You really were very fast to make your plan!
> I had to make a print-out of those 7 pages to be sure,
> that all of it would be handy to read through as many
> times as needed.
>
> You set a nice example to be followed in the future:
> NEVER, EVER, TAKE ANYTHING GRANTED!
> Never stop thinking about other possibilities!
> There will always be an alternative...
>
> What I am waiting for eagerly, is a constructure-drawing
> of your plan. Perhaps someone else will have the time
> and interest to make one, so that we-not-so-skilled-ones
> might be able to build "A High Dynamic Range Amplifier
> for Active Short Monopole Antennas"?

>
> One more question: Could it be a bad idea to test it with
> a small loop of 30/40" or so? Still a "Monopole Antenna"
> would be a short vertical?
>
> Thanks again and Best Regards from Aimo.
>
>
> ----- Original Message ----
> From: Chris Trask <christrask@...>
> To: Loop Antennas <loopantennas@yahoogroups.com>
> Sent: Thursday, January 31, 2008 7:01:18 PM
> Subject: [loopantennas] Active Ferrite Rod Antennas
>
> I just finished redesigning Lankford's complementary push-pull amplifier
> so as to delete the 2N5160 transistor that a lot of people were
complaining
> about:
>
> http://tinyurl. com/2k63ok
>
> Now, I think it's time to take a close look at active ferrite rod
> antennas. I have quite a bit of information available about these, but not
> necessarily everything, and I'd like to avoid reinventing the wheel, even
> though I have a particular design in mind. What has been floating around
> lately about this form of antenna?
>
> Chris
>
> ,---------- --------- --. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,---- --------- -' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@earthlin k.net
> | | | | \ '. http://www.home. earthlink. net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>
>
>
>

>

> Looking for last minute shopping deals?
> Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping
>
> [Non-text portions of this message have been removed]
>
>

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.19.17/1253 - Release Date: 1/31/08
9:09 AM

4785. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 22:10:49 UTC
From: Chris Trask
Topic: 4781 Message: 4785

```
>
> What I am waiting for eagerly, is a constructure-drawing
> of your plan. Perhaps someone else will have the time
> and interest to make one, so that we-not-so-skilled-ones
> might be able to build "A High Dynamic Range Amplifier
> for Active Short Monopole Antennas"?
>
```

This is something that would best be done on a formal PCB. I have the software to do it, but having them made is a bit costly even for a 2-sided board. FAR Circuits doesn't do plated-though holes.

Chris

```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```

Graphics by Loek Frederiks

4786. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 22:58:54 UTC
From: aimo ruoho
Topic: 4781 Message: 4786

Understood.
We have to wait for someone to build the Amp
first and then send a photo to the corresponding
department down on this screen. A clear enough
drawing, made by free hand even, would help us
to localise the parts in a sensible way...
How about the "Manhattan style"?

Thank you, Chris!

----- Original Message ----
From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, January 31, 2008 11:10:49 PM
Subject: Re: [loopantennas] Active Ferrite Rod Antennas

>
> What I am waiting for eagerly, is a constructure- drawing
> of your plan. Perhaps someone else will have the time
> and interest to make one, so that we-not-so-skilled- ones
> might be able to build "A High Dynamic Range Amplifier
> for Active Short Monopole Antennas"?
>

This is something that would best be done on a formal PCB. I have the
software to do it, but having them made is a bit costly even for a 2-sided
board. FAR Circuits doesn't do plated-though holes.

Chris

,---------- --------- --. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,---- --------- -' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlin k.net
| | | | \ '. http://www.home. earthlink. net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

Never miss a thing. Make Yahoo your home page.
http://www.yahoo.com/r/hs

[Non-text portions of this message have been removed]

4787. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 23:01:45 UTC
From: aimo ruoho
Topic: 4781 Message: 4787

QEX?
I am sorry, but here in Spain, I never see such magazines...
Thank you anyway.

ami

----- Original Message ----
From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, January 31, 2008 11:02:33 PM
Subject: Re: [loopantennas] Active Ferrite Rod Antennas

For a loop antenna, you might be better off looking at the low input
impedance amplifier I designed with remote tuning that appeared in the
Sep/Oct 2003 issue of QEX.

Chris

,---------- --------- --. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,---- --------- -' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlin k.net
| | | | \ '. http://www.home. earthlink. net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "aimo ruoho" <aimounto@yahoo. com>
To: <loopantennas@ yahoogroups. com>
Sent: Thursday, January 31, 2008 2:52 PM
Subject: Re: [loopantennas] Active Ferrite Rod Antennas

> Thank you so much Chris!
>
> You really were very fast to make your plan!
> I had to make a print-out of those 7 pages to be sure,
> that all of it would be handy to read through as many
> times as needed.

>
> You set a nice example to be followed in the future:
> NEVER, EVER, TAKE ANYTHING GRANTED!
> Never stop thinking about other possibilities!
> There will always be an alternative. ..
>
> What I am waiting for eagerly, is a constructure- drawing
> of your plan. Perhaps someone else will have the time
> and interest to make one, so that we-not-so-skilled- ones
> might be able to build "A High Dynamic Range Amplifier
> for Active Short Monopole Antennas"?
>
> One more question: Could it be a bad idea to test it with
> a small loop of 30/40" or so? Still a "Monopole Antenna"
> would be a short vertical?
>
> Thanks again and Best Regards from Aimo.
>
>
> ----- Original Message ----
> From: Chris Trask <christrask@earthlin k.net>
> To: Loop Antennas <loopantennas@ yahoogroups. com>
> Sent: Thursday, January 31, 2008 7:01:18 PM
> Subject: [loopantennas] Active Ferrite Rod Antennas
>
> I just finished redesigning Lankford's complementary push-pull amplifier
> so as to delete the 2N5160 transistor that a lot of people were
complaining
> about:
>
> http://tinyurl. com/2k63ok
>
> Now, I think it's time to take a close look at active ferrite rod
> antennas. I have quite a bit of information available about these, but not
> necessarily everything, and I'd like to avoid reinventing the wheel, even
> though I have a particular design in mind. What has been floating around
> lately about this form of antenna?
>
> Chris
>
> ,---------- --------- --. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,---- --------- -' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515

> . ( ) \
> '-|)__| :. \ Email: christrask@earthlin k.net
> | | | | \ '. http://www.home. earthlink. net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>
>
>
>
>

---------- --------- --------- --------- --------- --------- -
----
> Looking for last minute shopping deals?
> Find them fast with Yahoo! Search.
http://tools. search.yahoo. com/newsearch/ category. php?category= shopping
>
> [Non-text portions of this message have been removed]
>
>

---------- --------- --------- --------- --------- --------- -
----

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.19.17/1253 - Release Date: 1/31/08
9:09 AM

Never miss a thing. Make Yahoo your home page.
http://www.yahoo.com/r/hs

[Non-text portions of this message have been removed]

4788. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 23:05:53 UTC
From: Chris Trask
Topic: 4781 Message: 4788

```
>
> We have to wait for someone to build the Amp
> first and then send a photo to the corresponding
> department down on this screen. A clear enough
> drawing, made by free hand even, would help us
> to localise the parts in a sensible way...
> How about the "Manhattan style"?
>
```

I could come up with a sort of sketch for a layout. I'm doing a schematic capture for this, and I need to do one so as to sort out the best parts locations.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4789. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 23:09:58 UTC
From: aimo ruoho
Topic: 4781 Message: 4789

So nice from your part, Chris!
Ami

----- Original Message ----
From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com
Sent: Friday, February 1, 2008 12:05:53 AM
Subject: Re: [loopantennas] Active Ferrite Rod Antennas

>

> We have to wait for someone to build the Amp

> first and then send a photo to the corresponding

> department down on this screen. A clear enough

> drawing, made by free hand even, would help us

> to localise the parts in a sensible way...

> How about the "Manhattan style"?

>

I could come up with a sort of sketch for a layout. I'm doing a

schematic capture for this, and I need to do one so as to sort out the best

parts locations.

Chris

,---------- --------- --. High Performance Mixers and

/ What's all this \ Amplifiers for RF Communications

/ extinct stuff, anyhow? /

\ _______,---- --------- -' Chris Trask / N7ZWY

_ |/ Principal Engineer

oo\ Sonoran Radio Research

(__)\ _ P.O. Box 25240

\ \ .' `. Tempe, Arizona 85285-5240

\ \ / \

\ '" \ IEEE Senior Member #40274515

. ( ) \

'-|)__| :. \ Email: christrask@earthlin k.net

| | | | \ '. http://www.home. earthlink. net/~christrask

c__; c__; '-..'>.__

Graphics by Loek Frederiks

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{

```
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
```

font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->

_____
Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping

[Non-text portions of this message have been removed]

4790. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-01-31 23:29:02 UTC
From: Chris Trask
Topic: 4781 Message: 4790

```
>
> QEX?
> I am sorry, but here in Spain, I never see such magazines...
> Thank you anyway.
>
```

Oh, I didn't understand where you were. I'll send it to you.

Chris

```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```

Graphics by Loek Frederiks

4791. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 00:11:58 UTC
From: Chris Trask
Topic: 4781 Message: 4791

```
>
> > We have to wait for someone to build the Amp
> > first and then send a photo to the corresponding
> > department down on this screen. A clear enough
> > drawing, made by free hand even, would help us
> > to localise the parts in a sensible way...
> > How about the "Manhattan style"?
>
> I could come up with a sort of sketch for a layout. I'm doing a
> schematic capture for this, and I need to do one so as to sort out the
best
> parts locations.
>
> So nice from your part, Chris!
> Ami
>

It will be easier for me to send you the silkscreen layer when I'm done
with the layout.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

4792. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 02:29:56 UTC
From: crabtreejr@aol.com
Topic: 4781 Message: 4792

In a message dated 1/31/08 12:03:04 PM Central Standard Time,
christrask@... writes:
> I just finished redesigning Lankford's complementary push-pull amplifier
> so as to delete the 2N5160 transistor that a lot of people were complaining
> about:
>
> http://tinyurl.com/2k63ok
>
> Now, I think it's time to take a close look at active ferrite rod
> antennas. I have quite a bit of information available about these, but not
> necessarily everything, and I'd like to avoid reinventing the wheel, even
> though I have a particular design in mind. What has been floating around
> lately about this form of antenna?
>
> Chris

On the design of ferrite rod inductors themselves, there is a very
interesting web page at:
http://www.bentongue.com/xtalset/29MxQFL/29MxQFL.html
Otherwise I am not aware of anything particularly new.

Two fairly obvious questions probably should be asked:
1. Do you need an amplifier?
2. If so, how much gain do you need?

IIRC, possibly from one or more of the articles by Dallas, then the
performance of a ferrite rod antanna is approximately equal to that of an air core loop
of the same basic dimension, ie a 6" rod has the same performance as a 6" by
6" loop. Take a look at the Dallas files and see what he had to say about 1'
and 2' loops and the amplification they need.

HTH and 73

John KC0G

****
Start the year off right. Easy ways to stay in shape.

http://body.aol.com/fitness/winter-exercise?NCID=aolcmp00300000002489

[Non-text portions of this message have been removed]

4793. Re: Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 03:58:02 UTC
From: Mark
Topic: 4781 Message: 4793

Chris,

Thanks for bringing up this topic. Regarding the input impedance for a tuned ferrite rod antenna preamp -- Don't you want fairly high impedance to not kill the tuning Q? If so, what would be considered "high enough" input impedance?

I recently assembled a large multi-rod antenna with contra-wound litz-wire windings for NDB listening -- so your thread really comes at a good time for me! Right now, I use varactors to tune it and I put together a little preamp from an OPA656 wideband op amp (Av=6, non-inverting config). Even with the Hi-Z preamp input, I get the feeling my Q isn't so high -- at least not as high as my 1m air loop.

I'll see if I can get ahold of your QEX article (though i'm not a ham).

Mark

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> For a loop antenna, you might be better off looking at the low input
> impedance amplifier I designed with remote tuning that appeared in the
> Sep/Oct 2003 issue of QEX.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '.
http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>

> Graphics by Loek Frederiks
>

4794. Shielded multi turn loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 11:08:57 UTC
From: dxnature
Topic: 4794 Message: 4794

Hi all,

I like to construct a multi turn shielded loop with RG6 coax. I have already a cross section frame with sides of 1.5 meters or 6 meters per turn. I have a coil of 100 meter RG6 standing aside to use.

My frequency range will be from 150 to 500 khz. Can I make a direct coupling with the transmission line or do I have to make a single turn coupler link. I like to use varicaps to remotely tune the loop.

How can I proceede?

Greetings,
Ron
ON3RON, DXA64

4795. Re: [loopantennas] Re: Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 14:47:32 UTC
From: Chris Trask
Topic: 4781 Message: 4795

```
>
> Thanks for bringing up this topic. Regarding the input impedance for
> a tuned ferrite rod antenna preamp -- Don't you want fairly high
> impedance to not kill the tuning Q? If so, what would be
> considered "high enough" input impedance?
>
```

The original question was for a loop antenna, not a ferrite rod.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4796. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 22:20:35 UTC
From: Chris Trask
Topic: 4781 Message: 4796

>
> On the design of ferrite rod inductors themselves, there is a very
> interesting web page at:
>
> http://www.bentongue.com/xtalset/29MxQFL/29MxQFL.html
>
> Otherwise I am not aware of anything particularly new.
>

That's a very interesting web page, especially his remarks towards the ed of part 5 concerning the spacing of the wires increasing the Q of the inductor. I knew this to be so with air-wound solenoids and multi-turn loop antennas, but until now had not seen anything definitive about inductor wound on any sort of magnetic core.

>
> Two fairly obvious questions probably should be asked:
> 1. Do you need an amplifier?
>

Yes.

>
> 2. If so, how much gain do you need?
>

At least enough to overcome the loss of signal due to the small size of the antenna (antenna aperature). The trouble I see, though, is very similar to all of the problems I have encountered looking at amplifiers for other types of small antennas, which is that the designers are mainly interested in maximizing the signal gain and giving little attention to the NF of IMD performance of the overall design.

>
> IIRC, possibly from one or more of the articles by Dallas, then the
> performance of a ferrite rod antanna is approximately equal to that of an
air core loop
> of the same basic dimension, ie a 6" rod has the same performance as a 6"
by
> 6" loop. Take a look at the Dallas files and see what he had to say about
1'
> and 2' loops and the amplification they need.
>

I've already published my own work in the area of loop antennas, with more to come.

Looking at the various patents concerning small active antennas,
especially ferrite rod antennas, it appears that there is more than just a
little room for improvement. I've seen a couple that are fairly good
approaches, but they are potentially unstable.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4797. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 22:45:24 UTC
From: crabtreejr@aol.com
Topic: 4781 Message: 4797

In a message dated 2/1/08 4:22:02 PM Central Standard Time,
christrask@... writes:

> >
> > On the design of ferrite rod inductors themselves, there is a very
> > interesting web page at:
> >
> > http://www.bentongue.com/xtalset/29MxQFL/29MxQFL.html
> >
> > Otherwise I am not aware of anything particularly new.
> >
>
> That's a very interesting web page, especially his remarks towards the
> ed of part 5 concerning the spacing of the wires increasing the Q of the
> inductor. I knew this to be so with air-wound solenoids and multi-turn loop
> antennas, but until now had not seen anything definitive about inductor
> wound on any sort of magnetic core.
>

I did note that the material at the end of part 5 was based on simulations.

Somwehere I recall reading that the Q of a coil on a ferrite rod was improved if the spacing between turns equalled the diameter of the wire. Looking at the figures in Table 7 shows that this situation gives most of the possible improvement, ie from 130 to 388, with the maximum obtained being 432. Getting a spacing equal to the wire width can be relatively easily done by winding two interleaved coils along the rod, and then removing one. As demonstrated, the appropriate gauge of Litz wire is far superior.

Most of the important references on ferrite loops date back to the 1950's. I will look at what I have.

73 John KC0G

****
Biggest Grammy Award surprises of all time on AOL
Music.

(http://music.aol.com/grammys/pictures/never-won-a-grammy?NCID=aolcmp00300000002548)

[Non-text portions of this message have been removed]

4798. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 22:59:07 UTC
From: Chris Trask
Topic: 4781 Message: 4798

>
> Most of the important references on ferrite loops date back to the 1950's.
I
> will look at what I have.
>

Let me know if you have anything that's not listed here:

http://www.home.earthlink.net/~christrask/magloop.html

I haven't kept track of this subject for quite some time.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4799. Re: Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 23:42:12 UTC
From: Mark
Topic: 4781 Message: 4799

Here's a paper I came across a while back:

http://www.bbc.co.uk/rd/pubs/whp/whp091.shtml

Mark

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...>
wrote:
>
> >
> > Most of the important references on ferrite loops date back to
the 1950's.
> I
> > will look at what I have.
> >
>
> Let me know if you have anything that's not listed here:
>
> http://www.home.earthlink.net/~christrask/magloop.html
>
> I haven't kept track of this subject for quite some time.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '.
http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

4800. Re: [loopantennas] Re: Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-01 23:56:32 UTC
From: Chris Trask
Topic: 4781 Message: 4800

```
>
> Here's a paper I came across a while back:
>
> http://www.bbc.co.uk/rd/pubs/whp/whp091.shtml
>
```

Mark,
I had forgotten all about those, as well as the BBC Engineering Reports.
There were five interesting ones in the index, and I'll have to download
them tomorrow when I have a LAN connection.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4801. Toroid cores

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-03 14:33:36 UTC
From: juan.m0wwa
Topic: 4801 Message: 4801

Hi all,
I have unlimited stock of Toroid cores and other parts.
Anyone interested please visit
http://www.m0wwa.co.uk/page/retailstore.html
Regards.

Juan M0WWA

4802. Re: [loopantennas] Toroid cores

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-03 16:56:16 UTC
From: Paul V Birke PEng
Topic: 4801 Message: 4802

Dear Juan

very nice site thanks for posting this

Paul

----- Original Message ----
From: juan.m0wwa <jjdeonate@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, February 3, 2008 9:33:36 AM
Subject: [loopantennas] Toroid cores

Hi all,

I have unlimited stock of Toroid cores and other parts.

Anyone interested please visit

http://www.m0wwa. co.uk/page/ retailstore. html

Regards.

Juan M0WWA

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}

```
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}
```

```
#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

[Non-text portions of this message have been removed]

4803. Re: [loopantennas] Toroid cores

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-03 17:02:44 UTC
From: aimo ruoho
Topic: 4801 Message: 4803

I agree with Paul & 1000s of others!
Ami

Paul V Birke PEng <nonlinear@...> wrote:
Dear Juan

very nice site thanks for posting this

Paul

----- Original Message ----
From: juan.m0wwa <jjdeonate@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, February 3, 2008 9:33:36 AM
Subject: [loopantennas] Toroid cores

Hi all,

I have unlimited stock of Toroid cores and other parts.

Anyone interested please visit

http://www.m0wwa. co.uk/page/ retailstore. html

Regards.

Juan M0WWA

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}

```
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
```

```
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->

[Non-text portions of this message have been removed]

---------------------------------
Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]
```

4804. PCB Fractal Loop model 1 test report

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 02:59:40 UTC
From: juan.m0wwa
Topic: 4804 Message: 4804

Hi all,
This is my report about PCB fractal loop antenna, model 1.
Calculations were done for 28.5MHz, ¼ wavelength, three iterations and 0.8 indentation given a total size of 210mm x 180mm, 8.26inch x 7.0inch with 1mm wide pcb tracks on glass fiber FR4 standard.
According with the scarce literature that I found related to built fractal antennas, fractal loops geometry have the characteristic that its perimeter tends to increase to infinity but maintaining the volume fill, this enlargement in length reduce the volume occupied for the antenna then its size must be smaller and impedance will higher than a classic loop, therefore easier to match to 50 Ohms, in addition with three iterations in shape its behavior became narrow band.
First test was measurements of the antenna as is without tuning components, impedance and RS-Xs, equivalent parallel resistance and reactance, with my version of N2PK Vector Network Analyzer and inductance and Q factor with L/C Meter IIB and HP 4342A Inductance/Q meter.
The measurement gave 1.78uH of inductance and Q of 50. Z and Rs-Xs are show in pictures 1 and 2, on PCB Fractal Loop model 1 test report, Photos section, no resonances were observed.
All indicates that the antenna is high reactive and so a compensating capacitive reactance must be place in circuit, picture 3, capacitor C2 only.
We can see in picture 4 that the resonant frequency is now 43.250MHz and the return loss is -39dB equivalent to a SWR of 1.02.
Because it is resonating out of the band of interest thanks to the stray capacitance, a second capacitor was introduced in circuit, C1 picture 3.
The result is show in picture 5, -50dB Return loss at 28.4MHz equivalent to a SWR less that 1.05.
I don't have experience working with loop antennas but its behavior in the shack show few interference with surrounding objects, that probably means that the magnetic field predominates.
Although first tests are promising, for field test purposes I am designing the next antenna, model 2, with more wide PCB tracks but keeping the same size.
Any comments will welcome.
Regards.

Juan, M0WWA

4805. PCB Fractal Loop model 1 test report Errata

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 03:09:10 UTC
From: juan.m0wwa
Topic: 4805 Message: 4805

Sorry my mistake, Rs-Xs means Equivalent series resistance and reactance.
Than you

Juan M0WWA

4806. Re: [loopantennas] PCB Fractal Loop model 1 test report

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 03:19:30 UTC
From: John Popelish
Topic: 4804 Message: 4806

juan.m0wwa wrote:
> Hi all,
> This is my report about PCB fractal loop antenna, model 1.
(snip)

Reading this with great interest. But don't you think it might be informative to have a simple control loop, made of the same material and trace width, with either the same enclosed area or calculated inductance?

--
Regards,

John Popelish

4807. Re: [loopantennas] PCB Fractal Loop model 1 test report

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 04:08:11 UTC
From: Paul V Birke PEng
Topic: 4804 Message: 4807

an excellent idea John
gain and bandwidth for sure

best
Paul

juan.m0wwa wrote:

> Hi all,

> This is my report about PCB fractal loop antenna, model 1.

(snip)

Reading this with great interest. But don't you think it

might be informative to have a simple control loop, made of

the same material and trace width, with either the same

enclosed area or calculated inductance?

--

Regards,

John Popelish

__._,

[Non-text portions of this message have been removed]

4808. Make my own antenna selector ..

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 07:36:18 UTC
From: Marc
Topic: 4808 Message: 4808

Hi,

Here,
http://www.rein-hoeren.de/inhalt/496.shtml
you can see a anetnna tuner by Charly Hardt
(for sale on
http://www.charly-hardt.de/eigen.html
I think Charly ships worldwide)

I guess that with my knowledge of making loops I should be able to make
such a tuner.

But my question is: what kind of spool/ var Cap should the preselector
contain??

How large should the spool be ??

I think you can connect the mass with the power unit (the -) too,
instead of the headphone out.

Marc

--
--
Shortwave transmissions in English, Francais, Nederlands, Deutsch, Suid-Afrikaans,
Chinese, Dansk, Urdu, Cantonese, Greek, Spanish, Portuguese, ...
http://users.fulladsl.be/spb13810/swlist/ Updated every month or so ....

4809. Re: PCB Fractal Loop model 1 test report

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 10:06:36 UTC
From: juan.m0wwa
Topic: 4804 Message: 4809

--- In loopantennas@yahoogroups.com, John Popelish <jpopelish@...>
wrote:
>
> juan.m0wwa wrote:
> > Hi all,
> > This is my report about PCB fractal loop antenna, model 1.
> (snip)
>
> Reading this with great interest. But don't you think it
> might be informative to have a simple control loop, made of
> the same material and trace width, with either the same
> enclosed area or calculated inductance?
>
> --
> Regards,
>
> John Popelish

Hi John,
Related to loops and even more fractal loops I am moving in unknown territory. I agree with you that simplicity is the key on designs. The main reason of improve tracks is strengthen the antenna and improve its response according with technical papers. At this early stage of the project my purpose is test if 1/4 wavelength fractal loops can work on HF frequencies, afterward if it works simplify in some way the design.
Regards.

Juan M0WWA

4810. Re: Toroid cores

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 14:11:05 UTC
From: Len Warner
Topic: 4801 Message: 4810

At 9:02 am ((PST)) Sun Feb 3, 2008, in Digest 1038 aimo ruoho wrote:
>1c. Re: Toroid cores
> Posted by: "aimo ruoho" aimounto@... aimounto
> Date: Sun Feb 3, 2008 9:02 am ((PST))
>
>I agree with Paul & 1000s of others!

And you post like him, too: let's hope
1000s of others don't copy you ;-)

>Paul V Birke PEng <nonlinear@...> wrote:
> Dear Juan
>
>very nice site

Nice products and thanks for to Juan for making
them available but the site doesn't score well on
accessibility - we do care about the disabled now,
post-Richards, don't we?

For example, from ../page/lodestone.html:
* product illustrations with no ALTernate text
description for a screen reader to pick up;
* links to pdf-format data sheets that are Adobe icons
but the ALTernate text doesn't say so, it just gives the
part number with no clue of the change in presentation
(and probable long delay waiting for Acrobat Reader to
load) on following that link.

(I notice these things because I usually browse with
image display turned off to save data charges - but I
have the option of viewing link targets in the status
line or - somewhat laboriously - finding text-free-image
URLs in "View Page Source, both of which would be
more difficult for someone using screen reader software.)

>thanks for posting this

Why not thank him directly and individually,
instead of posting a one-liner (or in Aimo's
case, a "me too") to the thousands on the list?

Regards, LenW
--
>[snip]
>
>----- Original Message ----

>From: juan.m0wwa <jjdeonate@...>
>To: loopantennas@yahoogroups.com
>Sent: Sunday, February 3, 2008 9:33:36 AM
>Subject: [loopantennas] Toroid cores
>
>Hi all,
>
>I have unlimited stock of Toroid cores and other parts.
>
>Anyone interested please visit
>
>http://www.m0wwa. co.uk/page/ retailstore. html
>
>Regards.
>
>Juan M0WWA
>
>[snip]
>
>#ygrp-mkp{
>border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
>#ygrp-mkp hr{
>border:1px solid #d8d8d8;}
>#ygrp-mkp #hd{
>color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px
>0px;}
>#ygrp-mkp #ads{
>margin-bottom:10px;}
>#ygrp-mkp .ad{
>padding:0 0;}
>#ygrp-mkp .ad a{
>color:#0000ff;text-decoration:none;}
>[snip]
>
>#ygrp-sponsor #ygrp-lc{
>font-family:Arial;}
>#ygrp-sponsor #ygrp-lc #hd{
>margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
>#ygrp-sponsor #ygrp-lc .ad{
>margin-bottom:10px;padding:0 0;}
>[snip]
>
>#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
>#ygrp-mlmsg table {font-size:inherit;font:100%;}
>#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean,
>sans-serif;}
>#ygrp-mlmsg pre, code {font:115% monospace;}
>#ygrp-mlmsg * {line-height:1.22em;}
>#ygrp-text{
>font-family:Georgia;

```
>}
>#ygrp-text p{
>margin:0 0 1em 0;}
>#ygrp-tpmsgs{
>font-family:Arial;
>clear:both;}
>#ygrp-vitnav{
>padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
>#ygrp-vitnav a{
>padding:0 1px;}
>#ygrp-actbar{
>clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
>#ygrp-actbar .left{
>float:left;white-space:nowrap;}
>.bld{font-weight:bold;}
>#ygrp-grft{
>font-family:Verdana;font-size:77%;padding:15px 0;}
>#ygrp-ft{
>font-family:verdana;font-size:77%;border-top:1px solid #666;
>padding:5px 0;
>}
>#ygrp-mlmsg #logo{
>padding-bottom:10px;}
>
>#ygrp-vital{
>background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
>#ygrp-vital #vithd{
>font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
>#ygrp-vital ul{
>padding:0;margin:2px 0;}
>#ygrp-vital ul li{
>list-style-type:none;clear:both;border:1px solid #e0ecee;
>}
>#ygrp-vital ul li .ct{
>font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;
}
>#ygrp-vital ul li .cat{
>font-weight:bold;}
>#ygrp-vital a{
>text-decoration:none;}
>
>#ygrp-vital a:hover{
>text-decoration:underline;}
>
>#ygrp-sponsor #hd{
>color:#999;font-size:77%;}
>#ygrp-sponsor #ov{
>padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
>#ygrp-sponsor #ov ul{
>padding:0 0 0 8px;margin:0;}
```

```
>#ygrp-sponsor #ov li{
>list-style-type:square;padding:6px 0;font-size:77%;}
>#ygrp-sponsor #ov li a{
>text-decoration:none;font-size:130%;}
>#ygrp-sponsor #nc{
>background-color:#eee;margin-bottom:20px;padding:0 8px;}
>#ygrp-sponsor .ad{
>padding:8px 0;}
>#ygrp-sponsor .ad #hd1{
>font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
>#ygrp-sponsor .ad a{
>text-decoration:none;}
>#ygrp-sponsor .ad a:hover{
>text-decoration:underline;}
>#ygrp-sponsor .ad p{
>margin:0;}
>o{font-size:0;}
>.MsoNormal{
>margin:0 0 0 0;}
>#ygrp-text tt{
>font-size:120%;}
>blockquote{margin:0 0 0 4px;}
>.replbq{margin:4;}
>[snip]
```

4811. Re: Make my own antenna selector ..

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 18:22:07 UTC
From: Len Warner
Topic: 4808 Message: 4811

At 11:36 pm ((PST)) Sun Feb 3, 2008, in Digest 1038 Marc wrote:
>Here, http://www.rein-hoeren.de/inhalt/496.shtml
>you can see a anetnna tuner by Charly Hardt [snip]

This is a tuner for a high-impedance short wire antenna,
as exemplified by a telescopic or whip aerial on a
portable (or tabletop) low-cost receiver.

>I guess that with my knowledge of making loops I should be able to make
>such a tuner.

Perhaps, but the fact that you're posting this in a loop
antenna group, and asking the following questions,
makes me wonder how extensive or relevant your
experience is: this really isn't a loop-antenna project.

>But my question is: what kind of spool/ var Cap should the preselector
>contain??

Assuming 'spool' is 'coil' - lost in translation, then the
coil and capacitor should be calculated to resonate
near** the frequency of interest.

[** The exact resonance will be modified by the capacitive
effect of the short wire and also whatever reactance is
presented by the receiver input circuit.]

This 'antenna tuner' is a parallel resonant tank across the
receiver's high-impedance antenna input.

It works by resonating at the desired reception frequency,
thus boosting the input voltage by the Q of the resonance
and acting as a low-impedance shunt at frequencies away
from the resonance point.

This increases the selectivity of the receiver and helps to
protect it from intermodulation in the input stages -
'preiswerten' radios do not have the 'bullet-proof' front ends
that hams expect in communication receivers.

>How large should the spool be ??

If you mean value, then to resonate, as described above.

I note from the picture that 'something' is switched for
band selection: 3-6, 4-9, 5-12, 8-18 and 12-30 MHz.

Since these are all roughly the same bandwidth ratio,
this makes me think the the inductance is switched,
either as several coils or a tapped inductor, rather than
padding the variable capacitor with fixed capacitors.

If by large you mean size, then as large as you like.
If you make it big enough then this can truly become
a loop antenna project and you can throw away the
short wire aerial or collapse the telescopic aerial ;-)

>I think you can connect the mass with the power unit (the -) too,
>instead of the headphone out.

Use whatever makes the most direct connection with
RF ground in your receiver. Remember that the circuit
through the 'antenna tuner' has to shunt the unwanted
frequencies, so extra impedance is undesired.

Regards, LenW

4812. Re: [loopantennas] Re: Make my own antenna selector ..

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 21:25:37 UTC
From: Marc
Topic: 4808 Message: 4812

Len Warner schreef:
>
>
>
> Perhaps, but the fact that you're posting this in a loop
> antenna group, and asking the following questions,
> makes me wonder how extensive or relevant your
> experience is: this really isn't a loop-antenna project.
>

A loop antenna = LC circuit
This antennatuner seems to be an LC circuit too...

Because I don't want to mess with formula alone, and want to invite
other people to think, I post it here ...

Marc

--
--
Shortwave transmissions in English, Francais, Nederlands, Deutsch, Suid-Afrikaans,
Chinese, Dansk, Urdu, Cantonese, Greek, Spanish, Portuguese, ...
http://users.fulladsl.be/spb13810/swlist/ Updated every month or so ....

4813. Re: [loopantennas] Re: Toroid cores

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-04 23:30:46 UTC
From: aimo ruoho
Topic: 4801 Message: 4813

Sorry, if I did something wrong. again?

Len Warner <novost@...> wrote: At 9:02 am ((PST)) Sun Feb 3, 2008, in Digest 1038 aimo ruoho wrote:
>1c. Re: Toroid cores
> Posted by: "aimo ruoho" aimounto@... aimounto
> Date: Sun Feb 3, 2008 9:02 am ((PST))
>
>I agree with Paul & 1000s of others!

And you post like him, too: let's hope
1000s of others don't copy you ;-)

>Paul V Birke PEng <nonlinear@...> wrote:
> Dear Juan
>
>very nice site

Nice products and thanks for to Juan for making
them available but the site doesn't score well on
accessibility - we do care about the disabled now,
post-Richards, don't we?

For example, from ../page/lodestone.html:
* product illustrations with no ALTernate text
description for a screen reader to pick up;
* links to pdf-format data sheets that are Adobe icons
but the ALTernate text doesn't say so, it just gives the
part number with no clue of the change in presentation
(and probable long delay waiting for Acrobat Reader to
load) on following that link.

(I notice these things because I usually browse with
image display turned off to save data charges - but I
have the option of viewing link targets in the status
line or - somewhat laboriously - finding text-free-image
URLs in "View Page Source, both of which would be
more difficult for someone using screen reader software.)

>thanks for posting this

Why not thank him directly and individually,
instead of posting a one-liner (or in Aimo's
case, a "me too") to the thousands on the list?

Regards, LenW
--

>[snip]
>
>----- Original Message ----
>From: juan.m0wwa <jjdeonate@...>
>To: loopantennas@yahoogroups.com
>Sent: Sunday, February 3, 2008 9:33:36 AM
>Subject: [loopantennas] Toroid cores
>
>Hi all,
>
>I have unlimited stock of Toroid cores and other parts.
>
>Anyone interested please visit
>
>http://www.m0wwa. co.uk/page/ retailstore. html
>
>Regards.
>
>Juan M0WWA
>
>[snip]
>
>#ygrp-mkp{
>border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
>#ygrp-mkp hr{
>border:1px solid #d8d8d8;}
>#ygrp-mkp #hd{
>color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px
>0px;}
>#ygrp-mkp #ads{
>margin-bottom:10px;}
>#ygrp-mkp .ad{
>padding:0 0;}
>#ygrp-mkp .ad a{
>color:#0000ff;text-decoration:none;}
>[snip]
>
>#ygrp-sponsor #ygrp-lc{
>font-family:Arial;}
>#ygrp-sponsor #ygrp-lc #hd{
>margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
>#ygrp-sponsor #ygrp-lc .ad{
>margin-bottom:10px;padding:0 0;}
>[snip]
>
>#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
>#ygrp-mlmsg table {font-size:inherit;font:100%;}
>#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean,
>sans-serif;}
>#ygrp-mlmsg pre, code {font:115% monospace;}

```
>#ygrp-mlmsg * {line-height:1.22em;}
>#ygrp-text{
>font-family:Georgia;
>}
>#ygrp-text p{
>margin:0 0 1em 0;}
>#ygrp-tpmsgs{
>font-family:Arial;
>clear:both;}
>#ygrp-vitnav{
>padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
>#ygrp-vitnav a{
>padding:0 1px;}
>#ygrp-actbar{
>clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
>#ygrp-actbar .left{
>float:left;white-space:nowrap;}
>.bld{font-weight:bold;}
>#ygrp-grft{
>font-family:Verdana;font-size:77%;padding:15px 0;}
>#ygrp-ft{
>font-family:verdana;font-size:77%;border-top:1px solid #666;
>padding:5px 0;
>}
>#ygrp-mlmsg #logo{
>padding-bottom:10px;}
>
>#ygrp-vital{
>background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
>#ygrp-vital #vithd{
>font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
>#ygrp-vital ul{
>padding:0;margin:2px 0;}
>#ygrp-vital ul li{
>list-style-type:none;clear:both;border:1px solid #e0ecee;
>}
>#ygrp-vital ul li .ct{
>font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;
}
>#ygrp-vital ul li .cat{
>font-weight:bold;}
>#ygrp-vital a{
>text-decoration:none;}
>
>#ygrp-vital a:hover{
>text-decoration:underline;}
>
>#ygrp-sponsor #hd{
>color:#999;font-size:77%;}
>#ygrp-sponsor #ov{
```

>padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
>#ygrp-sponsor #ov ul{
>padding:0 0 0 8px;margin:0;}
>#ygrp-sponsor #ov li{
>list-style-type:square;padding:6px 0;font-size:77%;}
>#ygrp-sponsor #ov li a{
>text-decoration:none;font-size:130%;}
>#ygrp-sponsor #nc{
>background-color:#eee;margin-bottom:20px;padding:0 8px;}
>#ygrp-sponsor .ad{
>padding:8px 0;}
>#ygrp-sponsor .ad #hd1{
>font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
>#ygrp-sponsor .ad a{
>text-decoration:none;}
>#ygrp-sponsor .ad a:hover{
>text-decoration:underline;}
>#ygrp-sponsor .ad p{
>margin:0;}
>o{font-size:0;}
>.MsoNormal{
>margin:0 0 0 0;}
>#ygrp-text tt{
>font-size:120%;}
>blockquote{margin:0 0 0 4px;}
>.replbq{margin:4;}
>[snip]

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

4814. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-06 04:31:53 UTC
From: crabtreejr@aol.com
Topic: 4781 Message: 4814

In a message dated 2/1/08 5:01:21 PM Central Standard Time,
christrask@... writes:
> > Most of the important references on ferrite loops date back to the
> 1950's.
> > I will look at what I have.
> >
> Let me know if you have anything that's not listed here:
>
> http://www.home.earthlink.net/~christrask/magloop.html
>
> I haven't kept track of this subject for quite some time.
>
> Chris

IMHO, the important reference is the paper by Van Sutchelen:

van Sutchelen, H, Ferroxcube Aerial Rods, Electronic Application Bulletin,
Vol. 13, No. 6 (1952), pp 88-100.

He wrote at least two further papers:

van Sutchelen, H, Losses in Ferroxcube Rods and Tubes, Electronic Application
Bulletin, Vol. 13, No. 7 (1952), pp 109-114

van Sutchelen, H, Tolerances and Temperature Coefficient of Coils with
Ferroxcube Slugs, Electronic Application Bulletin, Vol. 14, No. 1/2 (1953), pp 27-32

I first came across a reference to the first two of the above papers in an
article by Dallas Lankford: 'Loop Antennas: Theory and Practice', 1981, which
was reprinted in the National Radio Club book 'Loop Antennas: Design and
Theory'. My copy is dated 1995. However the references gave the title as
'Electronics Application Bulletin'. Note the plural of the word "Electronic". I recall
that this further added to my difficulty in locating copies of the papers

Another paper in my files is:

Blok, H., and Rietveld, J.J., Inductive Aerials in Modern Broadcast
Receivers, Philips Technical Review, Vol 16, No. 7, January 1955, pp 181-194.

HTH and 73

John KC0G

****
Biggest Grammy Award surprises of all time on AOL Music.

(http://music.aol.com/grammys/pictures/never-won-a-grammy?NCID=aolcmp00300000002548)

[Non-text portions of this message have been removed]

4815. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-06 13:58:37 UTC
From: Chris Trask
Topic: 4781 Message: 4815

>
> IMHO, the important reference is the paper by Van Sutchelen:
>
> van Sutchelen, H, Ferroxcube Aerial Rods, Electronic
> Application Bulletin, Vol. 13, No. 6 (1952), pp 88-100.
>
> He wrote at least two further papers:
>
> van Sutchelen, H, Losses in Ferroxcube Rods and Tubes,
> Electronic Application Bulletin, Vol. 13, No. 7 (1952),
> pp 109-114
>
> van Sutchelen, H, Tolerances and Temperature Coefficient of
> Coils with Ferroxcube Slugs, Electronic Application Bulletin,
> Vol. 14, No. 1/2 (1953), pp 27-32
>
> I first came across a reference to the first two of the above
> papers in an article by Dallas Lankford: 'Loop Antennas: Theory
> and Practice', 1981, which was reprinted in the National Radio
> Club book 'Loop Antennas: Design and Theory'. My copy is dated
> 1995. However the references gave the title as 'Electronics
> Application Bulletin'. Note the plural of the word "Electronic".
> I recall that this further added to my difficulty in locating
> copies of the papers
>
> Another paper in my files is:
>
> Blok, H., and Rietveld, J.J., Inductive Aerials in Modern
> Broadcast Receivers, Philips Technical Review, Vol 16, No. 7,
> January 1955, pp 181-194.
>

I've run across at least one of those, and I wonder if it's in another
file here? I'll have to look later. If not, I know that they're available
over at the university library.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240

\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4816. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-06 16:11:15 UTC
From: crabtreejr@aol.com
Topic: 4781 Message: 4816

In a message dated 2/5/08 10:32:16 PM Central Standard Time,
crabtreejr@... writes:
> I first came across a reference to the first two of the above papers in an
> article by Dallas Lankford: 'Loop Antennas: Theory and Practice', 1981,
> which
> was reprinted in the National Radio Club book 'Loop Antennas: Design and
> Theory'. My copy is dated 1995. However the references gave the title as
> 'Electronics Application Bulletin'. Note the plural of the word
> "Electronic". I recall
> that this further added to my difficulty in locating copies of the papers
>
> Another paper in my files is:
>
> Blok, H., and Rietveld, J.J., Inductive Aerials in Modern Broadcast
> Receivers, Philips Technical Review, Vol 16, No. 7, January 1955, pp
> 181-194.
>
> HTH and 73
>
> John KC0G
>

Snelling in his book 'Soft Ferites', (1st ed 1969, 2nd ed 1988) has a whole chapter on ferrite antennas. It is well referenced, and includes the first paper by van Sutchelen, and that by Blok. Many of the references have a Philips/Mullard connection, which means that they may be very difficult to track down in the USA. Looking at the preface to the 2nd ed. it appears that Snelling must have worked for some part of Philips.

73 John KC0G

****
Biggest Grammy Award surprises of all time on AOL
Music.

(http://music.aol.com/grammys/pictures/never-won-a-grammy?NCID=aolcmp00300000002548)

[Non-text portions of this message have been removed]

4817. Quantum QX Loop 2.0 Plus+ for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-06 18:51:23 UTC
From: Neil Bell
Topic: 4817 Message: 4817

I FINALLY got permission from my homeowners association to install an outdoor Wellbrook Loop on a 20 foot mast! Therefore I am putting my like-new Quantum QX Loop Version 2.0 plus+ up for sale. It is in perfect condition and costs about $250 new, with AC power supply. If interested contact me off-list. Minimum I will accept is $175 - delivered to anywhere in mainland USA.

Great product (see www.dxtools.com) - so make me an offer.

Neil Bell

4818. Re: [loopantennas] Active Ferrite Rod Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-06 22:49:34 UTC
From: Chris Trask
Topic: 4781 Message: 4818

```
>
> Snelling in his book 'Soft Ferites', (1st ed 1969, 2nd ed 1988) has a
whole
> chapter on ferrite antennas. It is well referenced, and includes the
first
> paper by van Sutchelen, and that by Blok. Many of the references have a
> Philips/Mullard connection, which means that they may be very difficult to
track down
> in the USA. Looking at the preface to the 2nd ed. it appears that
Snelling
> must have worked for some part of Philips.
>

Yes, Snelling was a big honcho at Philips, as was Smit. I have the
first two editions of Snelling's book, plus the one by Smit.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

4819. Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-06 23:12:28 UTC
From: Chris Trask
Topic: 4819 Message: 4819

I went rummaging through my various boxes of ferrites, and found that I don't have a ferrite antenna rod that is to my liking for this project, just smaller ones that I can use for a proof-of-concept. What I would really like is the 7.5"x0.5" Fair-Rite 61 rod that Bytemark sells. Antique Electronic Supply has a similar one that is 7.5"x0.375" of the same material, but I would prefer the larger diameter one from Bytemark.

I've heard various stories about buying parts from Bytemark, and before I do so I'd like to know what other people's experiences have been with them. And if anyone just happens to have one or two of those rods they'd like to part with, I'd like to hear that also.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4820. RE: [loopantennas] Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-07 00:35:45 UTC
From: Bill Cooper
Topic: 4819 Message: 4820

Chris,

I ordered from them about two - three years ago and didn't have any problems. One of the orders to Bytemark replaced an Amidon Assoc. order that was momentarily lost in Amidon's system and was shipped by Amidon two months after I received the Bytemark replacement order!

Bill Cooper

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: Wednesday, February 06, 2008 6:12 PM
To: Loop Antennas
Subject: [loopantennas] Ferrite Antenna Rods

I've heard various stories about buying parts from Bytemark, and before I do so I'd like to know what other people's experiences have been with them. And if anyone just happens to have one or two of those rods they'd like to part with, I'd like to hear that also.

Chris

[Non-text portions of this message have been removed]

4821. Re: [loopantennas] Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-07 01:02:27 UTC
From: Chris Trask
Topic: 4819 Message: 4821

Bill,

>
> > I've heard various stories about buying parts from Bytemark, and before
> > I do so I'd like to know what other people's experiences have been with
> > them. And if anyone just happens to have one or two of those rods they'd
> > like to part with, I'd like to hear that also.
>
> I ordered from them about two - three years ago and didn't have any
> problems. One of the orders to Bytemark replaced an Amidon Assoc. order
> that was momentarily lost in Amidon's system and was shipped by Amidon two
> months after I received the Bytemark replacement order!
>

I've never bought anything from Amidon, reason being that they don't manufacture anything and instead market Micrometals products. I buy all of that material and most of my ferrites from Lodestone Pacific or Eastern Components. I've also bought from Kreger components in cases where he has stock on an item that nobody else has. He's an interesting fellow, and I will probably use him again in the future as he helped me out of a short-term parts problem once.

I had heard of some problems with ByteMark in the past, but nothing recently. I want to buy a pair of those roids for this project, and I'll probably do so after I've put together a protype for the amplifier circuitry using one of the short rods that I have available.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4823. Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-07 01:29:20 UTC
From: tenorman1952
Topic: 4819 Message: 4823

Sorry, I removed my previous post, it contained my sig line.

Ferrite bars

http://www.stormwise.com/page26.htm

Ferrite antennae

http://www.stormwise.com/page28.htm

4824. Who's your moderator? Re: Toroid cores

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-07 01:35:23 UTC
From: Steve
Topic: 4801 Message: 4824

--- In loopantennas@yahoogroups.com, Len Warner <novost@...> wrote:
>
> At 9:02 am ((PST)) Sun Feb 3, 2008, in Digest 1038 aimo ruoho wrote:
> >1c. Re: Toroid cores
> > Posted by: "aimo ruoho" aimounto@... aimounto
> > Date: Sun Feb 3, 2008 9:02 am ((PST))
> >
> >I agree with Paul & 1000s of others!
>
> And you post like him, too: let's hope
> 1000s of others don't copy you ;-)

Nor like you. You left all that extraneous stuff attached.

Len, you aren't the moderator.

I'd rather see people posting and making a few mistakes, than no one posting because they are terrified of making a "mistake" in posting that you'll vilify them for.

Steve Greenfield
owner loopantennas

4825. Re: [loopantennas] Who's your moderator? Re: Toroid cores

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-07 02:08:57 UTC
From: Paul V Birke PEng
Topic: 4801 Message: 4825

I'd rather see people posting and making a few mistakes, than no one

posting because they are terrified of making a "mistake" in posting

that you'll vilify them for.

Steve Greenfield

owner loopantennas

****

thanks for those kinds words Steve

I try to strip that extra stuff off but I sometimes forget

best
Paul

[Non-text portions of this message have been removed]

4826. Re: [loopantennas] Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-07 03:16:36 UTC
From: Chris Trask
Topic: 4819 Message: 4826

Paul,

>
> Ferrite bars
>
> http://www.stormwise.com/page26.htm
>
> Ferrite antennae
>
> http://www.stormwise.com/page28.htm
>

Thank you for posting that.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4827. Re: [loopantennas] Quantum QX Loop 2.0 Plus+ for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-07 07:09:34 UTC
From: Richards
Topic: 4817 Message: 4827

Neil -- DO NOT sell it... YOU WILL BE SORRY someday. Selling this
sort of thing is like selling your little brother to the Gypsies...
after awhile you will miss him and want him back.

Also, you may find that the Wellbrook does not do better at 20 feet
and may work better down at, say, ten feet. Contact Andy at Wellbrook
about this before assuming higher is better in all cases.

Nice of the association to concede. They must be fairly progressive
and you must be fairly persuasive and diplomatic.

I think you will miss using the Quantum on MW in many cases as the
Wellbrook may not be better in all situations - even though it does MW
and SWL bands. It will be better on SW as the Quantum cannot go
there, but I would not trade either of my Quantum or Wellbrook antennas.

//////////// Just MY take... Richards - K8JHR ////////////

==========

Neil Bell wrote:
eowners association to install an
> outdoor Wellbrook Loop on a 20 foot mast! Therefore I am putting my
> like-new Quantum QX Loop Version 2.0 plus+ up for sale.

==========

4828. schematics

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-07 14:15:14 UTC
From: biometuy
Topic: 4828 Message: 4828

Dear fellows:

I looking for the schematics (electronic diagram)for the Ramsey Magnet signal antenna.

I think that will very good idea to shield the ferrite loop to erradicate the EMI and the noises, anyone have tested this antenna?

I see that one colleague of thi forum made some modification on the antenna, can he share with me their impressions?

best regards

Jorge Morales Mello
Montevideo - Uruguay

4829. Re: [loopantennas] schematics

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-08 01:00:18 UTC
From: Don
Topic: 4828 Message: 4829

I had one once and it was very good for MW broadcast. The shield has a narrow slot that runs the length of the rod and faces down. It is also grounded. I tried to make it work on LW but could not find the right combo of components to make it work. Someone else did but they did not share the values - and # of windings.

Don
Upland, CA

biometuy wrote:
> Dear fellows:
>
> I looking for the schematics (electronic diagram)for the Ramsey Magnet
> signal antenna.
>
> I think that will very good idea to shield the ferrite loop to erradicate
> the EMI and the noises, anyone have tested this antenna?
>
> I see that one colleague of thi forum made some modification on the
> antenna, can he share with me their impressions?
>
> best regards
>
> Jorge Morales Mello
> Montevideo - Uruguay
>
>
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!
> Yahoo! Groups Links
>
>
>
>

>
>

4830. Re: Shielded multi turn loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-08 08:32:18 UTC
From: dxnature
Topic: 4794 Message: 4830

--- In loopantennas@yahoogroups.com, "dxnature" <amazingalgo@...> wrote:
>
> Hi all,
>
> I like to construct a multi turn shielded loop with RG6 coax. I have
> already a cross section frame with sides of 1.5 meters or 6 meters per
> turn. I have a coil of 100 meter RG6 standing aside to use.
>
> My frequency range will be from 150 to 500 khz. Can I make a direct
> coupling with the transmission line or do I have to make a single turn
> coupler link. I like to use varicaps to remotely tune the loop.
>
> How can I proceede?
>
> Greetings,
> Ron
> ON3RON, DXA64
>

No ideas?

Ron

4831. Re: Shielded multi turn loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-08 14:25:01 UTC
From: Steve
Topic: 4794 Message: 4831

Unless someone has already worked out a formula, it may be a bit of cut and try. There is at least one Javascript on a website in the Links section (also mentioned recently, search for loop calculator in the archives) that calculates with a fixed spacing. You'll also have to take into account capacitance of the cable, there's where the cut-and-try comes in.

I went and looked it up, here's Bruce Carter's javascript loop calculator. Uses turn spacing rather than loop width. Enter values, guessing at minimum capacitance, then calculate cable capacitance and use that to get a more accurate guess at minimum capacitance, repeat 'til the values don't change.
http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

I would think a single loop coupling would be better than a direct connection. Less affect on loop capacitance, less loading of the tuned loop.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "dxnature" <amazingalgo@...> wrote:
>
> Hi all,
>
> I like to construct a multi turn shielded loop with RG6 coax. I have
> already a cross section frame with sides of 1.5 meters or 6 meters per
> turn. I have a coil of 100 meter RG6 standing aside to use.
>
> My frequency range will be from 150 to 500 khz. Can I make a direct
> coupling with the transmission line or do I have to make a single turn
> coupler link. I like to use varicaps to remotely tune the loop.
>
> How can I proceede?
>
> Greetings,
> Ron
> ON3RON, DXA64
>

4832. Re: schematics

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-08 20:02:57 UTC
From: John Stumm
Topic: 4828 Message: 4832

--- In loopantennas@yahoogroups.com, "biometuy" <biomet@...> wrote:
>
> Dear fellows:
>
> I looking for the schematics (electronic diagram)for the Ramsey
Magnet
> signal antenna.
>
> I think that will very good idea to shield the ferrite loop to
erradicate
> the EMI and the noises, anyone have tested this antenna?
>
> I see that one colleague of thi forum made some modification on the
> antenna, can he share with me their impressions?
>
> best regards
>
> Jorge Morales Mello
> Montevideo - Uruguay
>
Jorge,
I will try to find the schematic that came with the Ramsey and post
it. The stock shielded head performed reasonalbly well. The mod that
I made performs very well, (see posts 655 and 686 for the details).
As I recall, there were some high tension lines in the vicintiy that
it dealt with better than the CCrane Twin Coil. The kit comes with a
wall wort that delivers the necessary supply, 22 volts I think. I
seriesed 3 - 9 volt batteries together for portable use. Speaking of
mods, I also modified a Degen 31 to accept a ferrite loop head with
good results - it was a "custom wound" smaller ferrite loop head as i
was thinking portability and price. For use in the MW band. I posted
a picture of it in another loop group. This link proabably won't work
but you'll get where it is.

http://ph.groups.yahoo.com/group/ferriterodantennaexperimenters/photos
/view/c084?b=12&m=f&o=0

Regards,
John

4833. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 00:16:39 UTC
From: aimo ruoho
Topic: 4819 Message: 4833

OH, NO!
WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!U:S:ORDERS
ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING US!!!!!!!!!!!!!!!!!!!!!
IT STINKS!
Ami

tenorman1952 <tenorman1952@...> wrote:
Sorry, I removed my previous post, it contained my sig line.

Ferrite bars

http://www.stormwise.com/page26.htm

Ferrite antennae

http://www.stormwise.com/page28.htm

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

4834. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 00:24:35 UTC
From: Chris Trask
Topic: 4819 Message: 4834

```
> OH, NO!
> WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!
> U:S:ORDERS ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
> THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING
US!!!!!!!!!!!!!!!!!!!!
> IT STINKS!
> Ami
>

That's what you get for sinking the Maine. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

4835. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 00:38:33 UTC
From: aimo ruoho
Topic: 4819 Message: 4835

"for sinking the Maine"???? Please, explain.
Ami

Chris Trask <christrask@...> wrote:
> OH, NO!
> WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!
> U:S:ORDERS ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
> THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING
US!!!!!!!!!!!!!!!!!!!!
> IT STINKS!
> Ami
>

That's what you get for sinking the Maine. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

4836. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 00:47:31 UTC
From: Chris Trask
Topic: 4819 Message: 4836

```
>
> >
> > > OH, NO!
> > > WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!
> > > U:S:ORDERS ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
> > > THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING
> > > US!!!!!!!!!!!!!!!!!!!!
> > > IT STINKS!
> > > Ami
> > >
> >
> > That's what you get for sinking the Maine. :{b
> >
>
> "for sinking the Maine"???? Please, explain.
> Ami
>
```

The USS Maine in Havana Harbour, back in 15 February 1898:

http://www.history.navy.mil/faqs/faq71-1.htm

I meant it to be a joke.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4837. RE: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 03:12:19 UTC
From: Joshua Everett
Topic: 4819 Message: 4837

hehehehehee

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: Friday, February 08, 2008 7:25 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Ferrite Antenna Rods

> OH, NO!
> WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!
> U:S:ORDERS ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
> THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING US!!!!!!!!!!!!!!!!!!!!
> IT STINKS!
> Ami
>

That's what you get for sinking the Maine. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
<mailto:christrask%40earthlink.net>
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

4838. Re: Shielded multi turn loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 03:19:03 UTC
From: John Stumm
Topic: 4794 Message: 4838

--- In loopantennas@yahoogroups.com, "dxnature" <amazingalgo@...>
wrote:
>
> --- In loopantennas@yahoogroups.com, "dxnature" <amazingalgo@>
wrote:
> >
> > Hi all,
> >
> > I like to construct a multi turn shielded loop with RG6 coax. I
have
> > already a cross section frame with sides of 1.5 meters or 6
meters per
> > turn. I have a coil of 100 meter RG6 standing aside to use.
> >
> > My frequency range will be from 150 to 500 khz. Can I make a
direct
> > coupling with the transmission line or do I have to make a single
turn
> > coupler link. I like to use varicaps to remotely tune the loop.
> >
> > How can I proceede?
> >
> > Greetings,
> > Ron
> > ON3RON, DXA64
> >
>
> No ideas?
>
> Ron
>
Ron,
What you are envisioning sounds challenging and could present some
problems to fuction effectively in a remote application. I have
entertained the thought of using remotely tuned amp such as the
Ramsey signal magnet with a large remote air core. Unless you are in
a truely remote location, it would be more of a noise magnet though.
Shielding the loop using coax would involve breaking the shielding at
the top of each turn. The coax that feeds the loop also supplies the
tuning voltage. The loop can be 100's of ft away. Without knowing
your skill level, employing this or something similar (like the Degen
DE31?) could be easier to realize. If anything, maybe this will
stimulate more discussion...

Regards,
John

4839. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 13:28:26 UTC
From: Richards
Topic: 4819 Message: 4839

Yeah... but Aimo is originally from ... like Sweeden, Finland or Norway or some other place very. very North and very cold... and NOW hides out in much WARMER Spain. I don't think THEY were responsible for the sinking the Maine.

No... those Northerners are more like responsible for Ursula Andres and other fine blond buxom beauties... and Nokia cell phones... The original Miss Universe - 1952 Armi Kuusela of Finland... and again in 1975 - Anne Marie Pohtamo ...it is in the sport of rallying that the Finns truly excel, as rally drivers from Finland have dominated the International rally scene for over four decades.... but I prefer the dames. ;-)

No... it just is not fair. There is no justice. So you cannot lay that on dear old Aimo...

Just MY take. /// Richards - K8JHR ///
==========

Chris Trask wrote:

>>> That's what you get for sinking the Maine. :{b
>> "for sinking the Maine"???? Please, explain.
>
> I meant it to be a joke.

==========

4840. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 13:41:19 UTC
From: Chris Trask
Topic: 4819 Message: 4840

```
>
> >
> > >
> > > > That's what you get for sinking the Maine. :{b
> > >
> > > "for sinking the Maine"???? Please, explain.
> >
> > I meant it to be a joke.
>
> Yeah... but Aimo is originally from ... like Sweeden, Finland or
> Norway or some other place very. very North and very cold... and NOW
> hides out in much WARMER Spain. I don't think THEY were responsible
> for the sinking the Maine.
>
> No... those Northerners are more like responsible for Ursula Andres
> and other fine blond buxom beauties... and Nokia cell phones... The
> original Miss Universe - 1952 Armi Kuusela of Finland... and again in
> 1975 - Anne Marie Pohtamo ...it is in the sport of rallying that the
> Finns truly excel, as rally drivers from Finland have dominated the
> International rally scene for over four decades.... but I prefer the
> dames. ;-)
>
> No... it just is not fair. There is no justice. So you cannot lay
> that on dear old Aimo...
>

Okay, but didn't they give us lutefisk? That's just as bad. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

4841. RE: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 13:50:39 UTC
From: aimo ruoho
Topic: 4819 Message: 4841

Joke?
O.K., but I really hope, that there were none of my ancient Finnish countrymen or my forefathers there on any side of that case?
Sorry for not being an expert in the history either of America or Spain.

But about that discrimination of possible foreign customers.
I think, that it doesn't show commercial wisdom at all, because Internationalism and Globalism are the words of to-day and to-morrow, aren't they?
The more open-eyed you are, the more you sell and the more profits you will gain.....
Isn't that the TRUE AMERICANISM also?
Best wishes!
Aimo, a pure Finn living his retired days in South-Western Europe.
Joshua Everett <jbe123@...> wrote:
heheheheee

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: Friday, February 08, 2008 7:25 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Ferrite Antenna Rods

> OH, NO!
> WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!
> U:S:ORDERS ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
> THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING US!!!!!!!!!!!!!!!!!!!!
> IT STINKS!
> Ami
>

That's what you get for sinking the Maine. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...

<mailto:christrask%40earthlink.net>
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

4842. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 14:28:47 UTC
From: Ken Javor
Topic: 4819 Message: 4842

It¹s not discrimination in a bad sense, it¹s just a recognition on the part of many that regardless of the current state of globalism and internationalism, that it is simply easier for someone in the US to do business within the US, because of shipping and also if something goes wrong and there is a dispute. It is exactly the same thing as what drove Europe to become the EU Europe was trying to be more like the US in that regards. If you have a large customer base that is easy to service and meets your business needs, why go out and try to get a few more customers, each of which costs more to service and brings along potentially more risks/costs?

Ken Javor

Phone: (256) 650-5261

From: aimo ruoho <aimounto@...>
Reply-To: <loopantennas@yahoogroups.com>
Date: Sat, 9 Feb 2008 05:50:39 -0800 (PST)
To: <loopantennas@yahoogroups.com>
Subject: RE: [loopantennas] Re: Ferrite Antenna Rods

Joke?
O.K., but I really hope, that there were none of my ancient Finnish countrymen or my forefathers there on any side of that case?
Sorry for not being an expert in the history either of America or Spain.

But about that discrimination of possible foreign customers.
I think, that it doesn't show commercial wisdom at all, because Internationalism and Globalism are the words of to-day and to-morrow, aren't they?
The more open-eyed you are, the more you sell and the more profits you will gain.....
Isn't that the TRUE AMERICANISM also?
Best wishes!
Aimo, a pure Finn living his retired days in South-Western Europe.
Joshua Everett <jbe123@charter.net <mailto:jbe123%40charter.net> > wrote:
hehehehеee

From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com> [mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>] On
Behalf Of Chris Trask
Sent: Friday, February 08, 2008 7:25 PM
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Subject: Re: [loopantennas] Re: Ferrite Antenna Rods

> OH, NO!
> WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!

> U:S:ORDERS ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
> THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING
US!!!!!!!!!!!!!!!!!!!!
> IT STINKS!
> Ami
>

That's what you get for sinking the Maine. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
<mailto:christrask%40earthlink.net>
<mailto:christrask%40earthlink.net>
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

4843. Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 14:35:49 UTC
From: kugellagers
Topic: 4819 Message: 4843

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...>
wrote:
>
> >
> > >
> > > >
> > > > > That's what you get for sinking the Maine. :{b
> > > > >
> > > > > "for sinking the Maine"???? Please, explain.
> > > >
> > > > I meant it to be a joke.
> > >
> > > Yeah... but Aimo is originally from ... like Sweeden, Finland or
> > > Norway or some other place very. very North and very cold... and
NOW
> > > hides out in much WARMER Spain. I don't think THEY were
responsible
> > > for the sinking the Maine.
> > >
> > > No... those Northerners are more like responsible for Ursula
Andres
> > > and other fine blond buxom beauties... and Nokia cell phones...
The
> > > original Miss Universe - 1952 Armi Kuusela of Finland... and
again in
> > > 1975 - Anne Marie Pohtamo ...it is in the sport of rallying that
the
> > > Finns truly excel, as rally drivers from Finland have dominated
the
> > > International rally scene for over four decades.... but I prefer
the
> > > dames. ;-)
> > >
> > > No... it just is not fair. There is no justice. So you cannot
lay
> > > that on dear old Aimo...
> > >
>
> Okay, but didn't they give us lutefisk? That's just as bad. :
{b
>
> Chris

And ABBA!

4844. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 16:52:51 UTC
From: Paul V Birke PEng
Topic: 4819 Message: 4844

>

Okay, but didn't they give us lutefisk? That's just as bad. :{b

my dad used to make that

can you imagine a dead fish fillet lying around in lye for a week and then eating it

Paul

[Non-text portions of this message have been removed]

4845. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 16:56:58 UTC
From: Paul V Birke PEng
Topic: 4819 Message: 4845

And ABBA!

more importantly now Sissel of Norway
p

more

[Non-text portions of this message have been removed]

4846. Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 17:41:22 UTC
From: Ratzinger
Topic: 4819 Message: 4846

> That's what you get for sinking the Maine. :{b
>
> Chris
>
Ha! The Maine was an inside job!
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
> ---
> Never miss a thing. Make Yahoo your homepage.
>
> [Non-text portions of this message have been removed]
>

4847. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 21:40:00 UTC
From: aimo ruoho
Topic: 4819 Message: 4847

Well, well, well!
Breathing is also volunteer!
I understand your valued opinion.
The lazy people may do what ever they want as long as they don't harm others...

Isn't it so, that a person in a foreign country has to pay a lot more for something, that he/she buys from another coutry? So the seller gets more from them for all extra work they have to do. I have noticed it many times, because during tens of years I have purchased a lot of things from the U.S.A., the U.K., France, Germany, China and some others. And I must have paid a lot more for things from outside Europe, except from China.
Especially when buying some electronic machines from the U.S.A. I must have paid insurance and handling costs above the mailing costs and the cost of the thing I wanted! And last but not least: I must also pay for the customs and inland courier's charges! So dependent of the piece, I purchased, the cost has often more than doubled!
So it has been all for the benefit of the selling organization, I guess - not loss!
The handling costs have usually been rather high, a lot higher than would be reasonable (MHO)! Stuped me! Right? RIGHT!
73
Ken Javor <ken.javor@...> wrote:
It¹s not discrimination in a bad sense, it¹s just a recognition on the part
of many that regardless of the current state of globalism and
internationalism, that it is simply easier for someone in the US to do
business within the US, because of shipping and also if something goes wrong
and there is a dispute. It is exactly the same thing as what drove Europe
to become the EU Europe was trying to be more like the US in that regards.
If you have a large customer base that is easy to service and meets your
business needs, why go out and try to get a few more customers, each of
which costs more to service and brings along potentially more risks/costs?

Ken Javor

Phone: (256) 650-5261

From: aimo ruoho <aimounto@...>
Reply-To: <loopantennas@yahoogroups.com>
Date: Sat, 9 Feb 2008 05:50:39 -0800 (PST)
To: <loopantennas@yahoogroups.com>
Subject: RE: [loopantennas] Re: Ferrite Antenna Rods

Joke?
O.K., but I really hope, that there were none of my ancient Finnish
countrymen or my forefathers there on any side of that case?
Sorry for not being an expert in the history either of America or Spain.

But about that discrimination of possible foreign customers.
I think, that it doesn't show commercial wisdom at all, because

Internationalism and Globalism are the words of to-day and to-morrow, aren't
they?
The more open-eyed you are, the more you sell and the more profits you will
gain.....
Isn't that the TRUE AMERICANISM also?
Best wishes!
Aimo, a pure Finn living his retired days in South-Western Europe.
Joshua Everett <jbe123@charter.net <mailto:jbe123%40charter.net> > wrote:
hehehehheee

From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
[mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
] On
Behalf Of Chris Trask
Sent: Friday, February 08, 2008 7:25 PM
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Subject: Re: [loopantennas] Re: Ferrite Antenna Rods

> OH, NO!
> WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!
> U:S:ORDERS ONLY!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
> THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING
US!!!!!!!!!!!!!!!!!!!!
> IT STINKS!
> Ami
>

That's what you get for sinking the Maine. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlink.net
<mailto:christrask%40earthlink.net>
<mailto:christrask%40earthlink.net>
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

4848. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 21:44:57 UTC
From: aimo ruoho
Topic: 4819 Message: 4848

I'm out again, because my thick Reader's Digest dictionary doesn't contain the term "lutefisk". (And I suppose, that either the Swedes or the Norwegians produce and love it.) Must be terrible!
73
Chris Trask <christrask@...> wrote:
>
> >
> > >
> > > That's what you get for sinking the Maine. :{b
> > >
> > > "for sinking the Maine"???? Please, explain.
> > >
> > I meant it to be a joke.
>
> Yeah... but Aimo is originally from ... like Sweeden, Finland or
> Norway or some other place very. very North and very cold... and NOW
> hides out in much WARMER Spain. I don't think THEY were responsible
> for the sinking the Maine.
>
> No... those Northerners are more like responsible for Ursula Andres
> and other fine blond buxom beauties... and Nokia cell phones... The
> original Miss Universe - 1952 Armi Kuusela of Finland... and again in
> 1975 - Anne Marie Pohtamo ...it is in the sport of rallying that the
> Finns truly excel, as rally drivers from Finland have dominated the
> International rally scene for over four decades.... but I prefer the
> dames. ;-)
>
> No... it just is not fair. There is no justice. So you cannot lay
> that on dear old Aimo...
>

Okay, but didn't they give us lutefisk? That's just as bad. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \

'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

Looking for last minute shopping deals? Find them fast with Yahoo! Search.

[Non-text portions of this message have been removed]

4849. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-09 22:38:56 UTC
From: RexR
Topic: 4819 Message: 4849

Greetings aimo!

Let me interject this about lutefisk. I didn't know either!

I Googled it and this is their definition:

[Norwegian] fish dish of dried cod, cured in lye, then reconstituted by boiling. Traditionally served with clarified butter or in white sauce and ...
also
dried cod soaked in a lye solution before boiling to give it a gelatinous consistency
and finally,
Lutefisk (lutfisk) (pronounced in Norway, in Sweden and the Swedish-speaking areas in Finland) is a traditional food of the Nordic countries made from stockfish (air-dried whitefish) and soda lye (lut). In Sweden, this food is called lutfisk, omitting the medial 'e'. ...
Not being a lover of fish, I didn't know either, and keep posting, I enjoy your point of view.

Rex in Jamestown, CA USA

I'm out again, because my thick Reader's Digest dictionary doesn't contain the term "lutefisk". (And I suppose, that either the Swedes or the Norwegians produce and love it.) Must be terrible!

Recent Activity
a.. 21New Members
b.. 10New Photos
Visit Your Group
Yahoo! Finance
It's Now Personal

Guides, news,

advice & more.

Sell Online
Start selling with

our award-winning

e-commerce tools.

Find helpful tips
for Moderators

on the Yahoo!

Groups team blog.
.

[Non-text portions of this message have been removed]

4850. Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-10 01:13:14 UTC
From: Steve
Topic: 4819 Message: 4850

Keep it polite, people.

Steve Greenfield

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> OH, NO!
> WHAT IS THIS KIND OF DISCRIMINATION?!!!!!!!!U:S:ORDERS
ONLY!!
> THERE MIGHT BE A LOT MORE CUSTOMERS! YOU ARE DISGRACING
US!!!!!!!!!!!!!!!!!!!!
> IT STINKS!
> Ami
>

4851. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-10 02:30:50 UTC
From: Paul V Birke PEng
Topic: 4819 Message: 4851

I'm out again, because my thick Reader's Digest dictionary doesn't contain the term "lutefisk". (And I suppose, that either the Swedes or the Norwegians produce and love it.) Must be terrible!

73

we produce it and we love it

it is its production that is a bit terrible

best
Paul

[Non-text portions of this message have been removed]

4852. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-10 19:38:21 UTC
From: aimo ruoho
Topic: 4819 Message: 4852

Hello!
That's, what I was supposing, but because I'm not accustomed to use Google, and left my Finnis/Swedish/Finnish dictionary behind, when I moved to Spain, couldn't identify it.
My mother used to cook that white dried lye-fish once a year and called it "lipea¨kala". My mouth didn't like it at all! I must say, that I really hated it! As an adult I never ate it. In the Northern Europe it was and probably still is a tradition to make it at home and eat it during the chrismas time (or Easter day (Passover)). Perhaps my mother didn't know, how to make it more delicious? Later, visiting Indian restaurants in Spain, I've learned, that there are so many nice spices, that will kill any bad tastes! I think, that knowing that lye is poisonous, made me to be afraid of that stuff....

Thank you for your nice comments, Rex!
73, Aimo

RexR <rexr@...> wrote:
Greetings aimo!

Let me interject this about lutefisk. I didn't know either!

I Googled it and this is their definition:

[Norwegian] fish dish of dried cod, cured in lye, then reconstituted by boiling. Traditionally served with clarified butter or in white sauce and ...
also
dried cod soaked in a lye solution before boiling to give it a gelatinous consistency
and finally,
Lutefisk (lutfisk) (pronounced in Norway, in Sweden and the Swedish-speaking areas in Finland) is a traditional food of the Nordic countries made from stockfish (air-dried whitefish) and soda lye (lut). In Sweden, this food is called lutfisk, omitting the medial 'e'. ...
Not being a lover of fish, I didn't know either, and keep posting, I enjoy your point of view.

Rex in Jamestown, CA USA

I'm out again, because my thick Reader's Digest dictionary doesn't contain the term "lutefisk". (And I suppose, that either the Swedes or the Norwegians produce and love it.) Must be terrible!

Recent Activity
a.. 21New Members
b.. 10New Photos
Visit Your Group
Yahoo! Finance
It's Now Personal

Guides, news,

advice & more.

Sell Online
Start selling with

our award-winning

e-commerce tools.

Find helpful tips
for Moderators

on the Yahoo!

Groups team blog.
.

[Non-text portions of this message have been removed]

Looking for last minute shopping deals? Find them fast with Yahoo! Search.

[Non-text portions of this message have been removed]

4853. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-10 19:58:06 UTC
From: aimo ruoho
Topic: 4819 Message: 4853

Chris!
I neither liked the lyefish made of dry cod, so I agree with you...Bad, bad forefathers!
Aimo

Chris Trask <christrask@...> wrote:
>
> >
> > >
> > > That's what you get for sinking the Maine. :{b
> > >
> > > "for sinking the Maine"???? Please, explain.
> >
> > I meant it to be a joke.
>
> Yeah... but Aimo is originally from ... like Sweeden, Finland or
> Norway or some other place very. very North and very cold... and NOW
> hides out in much WARMER Spain. I don't think THEY were responsible
> for the sinking the Maine.
>
> No... those Northerners are more like responsible for Ursula Andres
> and other fine blond buxom beauties... and Nokia cell phones... The
> original Miss Universe - 1952 Armi Kuusela of Finland... and again in
> 1975 - Anne Marie Pohtamo ...it is in the sport of rallying that the
> Finns truly excel, as rally drivers from Finland have dominated the
> International rally scene for over four decades.... but I prefer the
> dames. ;-)
>
> No... it just is not fair. There is no justice. So you cannot lay
> that on dear old Aimo...
>

Okay, but didn't they give us lutefisk? That's just as bad. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \

'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

4854. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-10 20:10:22 UTC
From: Chris Trask
Topic: 4819 Message: 4854

```
>
> > Okay, but didn't they give us lutefisk? That's just as bad. :{b
>
> I neither liked the lyefish made of dry cod, so I agree with you...Bad,
bad forefathers!
>
```

Many years ago, while driving to the North Rim of the Grand Canyon, I was passed by an SUV that had a bumber sticker that read "Legalize Lutefisk".

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4855. SDR-IQ works great down to DC

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 03:42:50 UTC
From: malucoelbejuco
Topic: 4855 Message: 4855

Hi All,

I've been playing with the SDR-IQ from RFSPACE all weekend. It is the most incredible VLF receiver that I have ever played with. The frequency response is pretty much flat to below 400 Hz (NOT KHz). I can actually connect a microphone to the antenna port and hear myself on 0 HZ USB. With a 40 meter dipole, I am hearing all of the submarine stations on the 20 KHz range. The 60 KHz signal is booming in. This receiver also displays up to 190 KHz of band on the waterfall display and allows you to record the chunk for later analysys and tuning around.

They are currently available here;

www.broadcastconcepts.com under the Software Defined Receiver section. I think they are some on ebay too. That's were I got mine.

I need to build a loop antenna for it. Need something that I can tune 20KHz to 500 KHz.

Regards,

Marko

4856. Re: [loopantennas] SDR-IQ works great down to DC

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 09:32:37 UTC
From: Marc
Topic: 4855 Message: 4856

malucoelbejuco schreef:
>
> Hi All,
>
> I've been playing with the SDR-IQ from RFSPACE all weekend. It is the
> most incredible VLF receiver that I have ever played with. The
> frequency response is pretty much flat to below 400 Hz (NOT KHz). I
> can actually connect a microphone to the antenna port and hear myself
> on 0 HZ USB. With a 40 meter dipole, I am hearing all of the submarine
> stations on the 20 KHz range. The 60 KHz signal is booming in. This
> receiver also displays up to 190 KHz of band on the waterfall display
> and allows you to record the chunk for later analysys and tuning around.
>

So, if some people have hearing loss in that frequency range (20khz), is
that diue to submarine stations??
And what about dogs that hear far above 20khz? "dog at sea barking" ??

Marc

>
> They are currently available here;
>
> www.broadcastconcepts.com under the Software Defined Receiver section.
> I think they are some on ebay too. That's were I got mine.
>
> I need to build a loop antenna for it. Need something that I can tune
> 20KHz to 500 KHz.
>
> Regards,
>
> Marko
>
>

--
--
Shortwave transmissions in English, Francais, Nederlands, Deutsch, Suid-Afrikaans,
Chinese, Dansk, Urdu, Cantonese, Greek, Spanish, Portuguese, ...
http://users.fulladsl.be/spb13810/swlist/ Updated every month or so ....

4857. Re: [loopantennas] SDR-IQ works great down to DC

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 17:01:33 UTC
From: Jim Dunstan
Topic: 4855 Message: 4857

At 10:32 AM 2/11/2008 +0100, you wrote:

>malucoelbejuco schreef:
> >
> > Hi All,
> >
> > I've been playing with the SDR-IQ from RFSPACE all weekend. It is the
> > most incredible VLF receiver that I have ever played with. The
> > frequency response is pretty much flat to below 400 Hz (NOT KHz). I
> > can actually connect a microphone to the antenna port and hear myself
> > on 0 HZ USB. With a 40 meter dipole, I am hearing all of the submarine
> > stations on the 20 KHz range. The 60 KHz signal is booming in. This
> > receiver also displays up to 190 KHz of band on the waterfall display
> > and allows you to record the chunk for later analysys and tuning around.
> >
>
>So, if some people have hearing loss in that frequency range (20khz), is
>that diue to submarine stations??
>And what about dogs that hear far above 20khz? "dog at sea barking" ??
>
>Marc

Hi Marc

It is a strange world at these very low frequencies ... at first it is hard to get one's head around the difference between magnetic waves, electromagnetic waves, and traditional mechanical sound waves even though they may ALL be at the same frequency! Each manifestation requires a different detector .... although there can be strange cross-overs hi hi.

I recall when I was a kid I built my first multi-stage high gain transistor amplifier (made from Ratheon CK721's ... if anyone can remember them) I used to make directional microphones etc. One of my experiments (modeled after an article I read in Scientific American) was to attach a large multi-turn loop to the AF amplifier input. The objective was to pick up magnetic waves in the audio spectrum that are generated by natural phenomena such as electrical storms. I picked up these 'whistles' many times .... which could not be heard directly with the ear or microphone. There was no detector in the circuit ... just a loop to a high gain AF amplifier.

Now The signals used for submarine communications must be electromagnetic waves .... the low frequency of course to facilitate transmission over long distances below water .... but I would be curious to know if my old 'whistler' receiver would also pick up the transmissions if in close proximity to the transmitter site.

I have had (when I was a kid) other 'cross-over' experiences between (magnetic generating equipment) and electromagnetic receivers. But I have not experienced cross-over between mechanical sound waves and magnetic or electromagnetic waves .... although the study of earthquake detection and animals have some interesting stories. Maybe some dogs can detect magnetic waves in the high AF frequencies ... I know some dogs seem to panic in the presence of electrical storms .... it may not be just the audio bang of thunder.

Jim

4858. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 17:21:05 UTC
From: john nelson
Topic: 4819 Message: 4858

Ah memories. My Swede relatives ate it every
Christmas. Eric would soak in it the garage and you
could smell it clear out in the yard. My wife
actually ate some one year but I never did. Just
smelled too bad.
--- Paul V Birke PEng <nonlinear@...> wrote:

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> I'm out again, because my thick Reader's Digest
> dictionary doesn't contain the term "lutefisk". (And
> I suppose, that either the Swedes or the Norwegians
> produce and love it.) Must be terrible!
>
> 73
>
>
>
> we produce it and we love it
>
>
>
> it is its production that is a bit terrible
>
>
>
> best
> Paul
>
>
>

>
>
>
>
>
>
> [Non-text portions of this message have been
> removed]
>
>

Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping

4859. Re: SDR-IQ works great down to DC

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 17:30:02 UTC
From: tenorman1952
Topic: 4855 Message: 4859

> Hi Marc

(snip)
>
> I recall when I was a kid I built my first multi-stage high gain
transistor
> amplifier (made from Ratheon CK721's ... if anyone can remember
them) I
> used to make directional microphones etc. One of my experiments
(modeled
> after an article I read in Scientific American) was to attach a
large
> multi-turn loop to the AF amplifier input. The objective was to
pick up
> magnetic waves in the audio spectrum that are generated by natural
> phenomena such as electrical storms. I picked up these 'whistles'
many
> times .... which could not be heard directly with the ear or
> microphone. There was no detector in the circuit ... just a loop
to a high
> gain AF amplifier.

(snip)

> Jim

Jim, that seems to be what this fellow is doing. He also is a source
of large ferrite rods.

http://www.stormwise.com/ Scroll through his products on the left
side.

http://www.stormwise.com/page4.htm Lightning Alert Storm Detector

http://www.stormwise.com/page1.htm Backyard detector, solar powered

Interesting...

Paul C.

4860. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 19:13:01 UTC
From: Jay Heyl
Topic: 4819 Message: 4860

On Feb 9, 2008 4:40 PM, aimo ruoho <aimounto@...> wrote:

>
> Isn't it so, that a person in a foreign country has to pay a lot more for
> something, that he/she buys from another coutry? So the seller gets more
> from them for all extra work they have to do. I have noticed it many times,
> because during tens of years I

The seller doesn't get more. All that extra you pay goes for extra shipping and import duties. It's possible some sellers capitalize on the situation and charge more on export deals because they think they can get away with it, but most make the same profit regardless of where the product ends up. Those that don't sell overseas quite likely simply don't want to deal with the hassle of learning how to do it.

Getting back to the question from the OP, there's a guy on ebay (kwtubes) in Lithuania who sells a lot of surplus Russian electronics. I've purchased ferrite rods from him before. I did a quick check and he currently has some 10mmX200mm ferrite rods that were intended for use as antennas in Russian MW radios. $20 for eight of them. Shipping will obviously add a bit to the final price. I have no connection with this dealer other than having purchased from him before without incident. I was originally leery of buying from eastern Europe, but everything went smooth as could be. And he's still selling on ebay several years later.

-- Jay

[Non-text portions of this message have been removed]

4861. Re: [loopantennas] Re: SDR-IQ works great down to DC

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 20:19:38 UTC
From: Jim Dunstan
Topic: 4855 Message: 4861

At 05:30 PM 2/11/2008 +0000, you wrote:

> > Hi Marc
>
>(snip)
> >
> > I recall when I was a kid I built my first multi-stage high gain
>transistor
> > amplifier (made from Ratheon CK721's ... if anyone can remember
>them) I
> > used to make directional microphones etc. One of my experiments
>(modeled
> > after an article I read in Scientific American) was to attach a
>large
> > multi-turn loop to the AF amplifier input. The objective was to
>pick up
> > magnetic waves in the audio spectrum that are generated by natural
> > phenomena such as electrical storms. I picked up these 'whistles'
>many
> > times .... which could not be heard directly with the ear or
> > microphone. There was no detector in the circuit ... just a loop
>to a high
> > gain AF amplifier.
>
>(snip)
>
> > Jim
>
>Jim, that seems to be what this fellow is doing. He also is a source
>of large ferrite rods.
>
><http://www.stormwise.com/>http://www.stormwise.com/ Scroll through his
>products on the left
>side.
>
><http://www.stormwise.com/page4.htm>http://www.stormwise.com/page4.htm
>Lightning Alert Storm Detector
>
><http://www.stormwise.com/page1.htm>http://www.stormwise.com/page1.htm
>Backyard detector, solar powered
>
>Interesting...
>
>Paul C.

Hi Paul,

The original post, a description of the performance of the SDR-IQ, seems to indicate that it will respond to signals (voltage variations at the antenna input) from a microphone or from a wire antenna (either through induction from a magnetic field, an electric field, or an electromagnetic field). However, if he is receiving transmissions at 20khz from a transmitter hundreds or thousands of miles away I assume it travels as an electromagnetic field. If you modulate a magnetic field only the distance you can transmit is limited to a fixed field of several hundred feet at best. I assume electric storms can do better.

We all know that you can hear electrical storms hundreds of miles away .... obviously they create electromagnetic waves with lightning. However, the detectors at the sites you quote are detecting something else in the electrical storm .... either a building electric or magnetic field, or both .... and in the case of the Whistlers' these fields may be 'modulated' with audio signals. As I mentioned I picked them up using a loop ... in retrospect it was probably not the best arrangement for detecting these signals but probably the only practical approach given the type of audio amplifier i was using.

If it is a magnetic field that is being generated then the electrical storm must be causing current to flow somewhere (since current flow generates a magnetic field). Perhaps it is some sort of plasma flow in the atmosphere in the storm area ... that takes place before the actual lightning strikes and creates the electromagnetic waves (static) we can hear on receivers hundreds of miles away.

Jim

>

[Non-text portions of this message have been removed]

4862. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 20:37:02 UTC
From: Paul V Birke PEng
Topic: 4819 Message: 4862

Getting back to the question from the OP, there's a guy on ebay (kwtubes) in Lithuania who sells a lot of surplus Russian electronics. I've purchased ferrite rods from him before. I did a quick check and he currently has some 10mmX200mm ferrite rods that were intended for use as antennas in Russian MW radios. $20 for eight of them. Shipping will obviously add a bit to the final price. I have no connection with this dealer other than having purchased from him before without incident. I was originally leery of buying from eastern Europe, but everything went smooth as could be. And he's still selling on ebay several years later.

****

Dear Jay

these are the common ones for ~ BCB frequencies

sometimes the better shortwave ones come on the market

best
Paul

[Non-text portions of this message have been removed]

4863. Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 20:58:24 UTC
From: tenorman1952
Topic: 4819 Message: 4863

--- In loopantennas@yahoogroups.com, "Jay Heyl" <yahoogroups@...> wrote:
>
> On Feb 9, 2008 4:40 PM, aimo ruoho <aimounto@...> wrote:
>
> >
> > Isn't it so, that a person in a foreign country has to pay a lot more for
> > something, that he/she buys from another coutry? So the seller gets more
> > from them for all extra work they have to do. I have noticed it many times,
> > because during tens of years I

I sell some imported items (non electronic) and have to add cost of shipping and customs. These products are made in the UK. The cost depends on what country, how far shipped, customs and other hidden (to the consumer) costs.

Sometimes people think they are getting "ripped off" because my retail price is not the same as the UK price x the current pound to US dollar conversion factor.

It works both ways. People in the UK pay somewhat more for some US made products I sell that are also imported by my UK supplier (we sell to each other and distribute each other's lines).

I think most reputable sellers want to be competitive with their pricing. I know I do. But there are many costs that must be recovered for me to bring a product to your doorstep.

As a consumer I used to get upset over cost of shipping. But not only does it cost me to ship an item to you, but if it is not well packaged, and damaged in transit, we (seller and buyer) have both lost. This requires good cardboard boxes, bubble wrap, foam "peanuts", and other packing materials. Those all cost me. Not only do I have to pay for cardboard boxes, but I have to pay shipping on the boxes to me. Believe me, there is no such thing as "free shipping". It is in the cost of your goods somewhere.

There there is time filling out customs forms, and all the other hassles of shipping to other countries. I am not surprised that some companies won't ship to other countries.

Paul C.

4864. Re: SDR-IQ works great down to DC

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 21:08:48 UTC
From: tenorman1952
Topic: 4855 Message: 4864

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
(snip)
>
> If it is a magnetic field that is being generated then the
electrical storm
> must be causing current to flow somewhere (since current flow
generates a
> magnetic field). Perhaps it is some sort of plasma flow in the
atmosphere
> in the storm area ... that takes place before the actual lightning
strikes
> and creates the electromagnetic waves (static) we can hear on
receivers
> hundreds of miles away.
>
> Jim

In the photos on those links, the PVC pipes house his ferrite rods.
In another section of his site he sells a number of rods and
assembled antennae for VLF use.

Anyway, thought you'd be interested in his site. There are some
charts of how many turns of wire on what size rod works for whatever
frequency. I plan to try one for AM, compare to some of my air core
loops.

Paul

4865. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-11 21:23:25 UTC
From: aimo ruoho
Topic: 4819 Message: 4865

Please receive my apologies!
What I ment was not, that the seller would inevitably get more profit, but he gets more paid for his work in the final sum. Understood? There is a small difference, isn't there? So of cource he must earn at least as much or even more for his extra work, right?
73, Aimo

Jay Heyl <yahoogroups@...> wrote:
On Feb 9, 2008 4:40 PM, aimo ruoho <aimounto@...> wrote:

>
> Isn't it so, that a person in a foreign country has to pay a lot more for
> something, that he/she buys from another coutry? So the seller gets more
> from them for all extra work they have to do. I have noticed it many times,
> because during tens of years I

The seller doesn't get more. All that extra you pay goes for extra shipping and import duties. It's possible some sellers capitalize on the situation and charge more on export deals because they think they can get away with it, but most make the same profit regardless of where the product ends up. Those that don't sell overseas quite likely simply don't want to deal with the hassle of learning how to do it.

Getting back to the question from the OP, there's a guy on ebay (kwtubes) in Lithuania who sells a lot of surplus Russian electronics. I've purchased ferrite rods from him before. I did a quick check and he currently has some 10mmX200mm ferrite rods that were intended for use as antennas in Russian MW radios. $20 for eight of them. Shipping will obviously add a bit to the final price. I have no connection with this dealer other than having purchased from him before without incident. I was originally leery of buying from eastern Europe, but everything went smooth as could be. And he's still selling on ebay several years later.

-- Jay

[Non-text portions of this message have been removed]

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

4866. Re: SDR-IQ works great down to DC

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-12 14:43:18 UTC
From: john593613
Topic: 4855 Message: 4866

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
> At 10:32 AM 2/11/2008 +0100, you wrote:
>
> >malucoelbejuco schreef:
> > >
> > > Hi All,
> > >
> > > I've been playing with the SDR-IQ from RFSPACE all weekend. It
is the
> > > most incredible VLF receiver that I have ever played with. The
> > > frequency response is pretty much flat to below 400 Hz (NOT KHz). I
> > > can actually connect a microphone to the antenna port and hear
myself
> > > on 0 HZ USB. With a 40 meter dipole, I am hearing all of the
submarine
> > > stations on the 20 KHz range. The 60 KHz signal is booming in. This
> > > receiver also displays up to 190 KHz of band on the waterfall
display
> > > and allows you to record the chunk for later analysys and tuning
around.

There are currently several VLF/LF recivers in the UK E-Bay listings
http://search.ebay.co.uk/_W0QQdfspZ1QQfsooZ2QQfsopZ32QQlredZAny00000QQsassZhifihawker

4867. Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-12 15:11:23 UTC
From: aircheckIover
Topic: 4819 Message: 4867

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Please receive my apologies!
> What I ment was not, that the seller would inevitably get more profit, but he gets more paid for his work in the final sum. Understood? There is a small difference, isn't there?
> So of cource he must earn at least as much or even more for his extra work, right?
> 73, Aimo

Hi Aimo. I have some friends who will not sell overseas on eBay. They say the extra work and chance for getting ripped off is too high to take the risk. FWIW, I sell overseas and have had no problems. I have one friend is very protective of what he sees as "his nation" and as a rule, will only deal with Americans (but he likes Canada!). He is a good friend and I have learned it makes no sense to argue with him ... he gets angry and stops calling. I like my friend - he is very smart and is a loyal friend. But he makes no sense to me: He is in love with communicating to people around the world via SWL and ham radio yet doesn't not want to transact with these same people.

Email me personally if you need help purchasing something from an "American only" seller.

-Mark

==========

4868. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-12 15:18:31 UTC
From: Richards
Topic: 4819 Message: 4868

A friend is a person who can see your faults... and likes you just the same.
(Grandpappy)

//////////////// Richards //////////////

---

aircheckclover wrote:

> good friend and I have learned it makes no sense to argue with him ...
> he gets angry and stops calling. I like my friend - he is very smart
> and is a loyal friend.

==========

4869. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-12 16:32:11 UTC
From: Jay Heyl
Topic: 4819 Message: 4869

On Feb 11, 2008 4:23 PM, aimo ruoho <aimounto@...> wrote:

>
> What I ment was not, that the seller would inevitably get more profit,
> but he gets more paid for his work in the final sum. Understood? There is a
> small difference, isn't there?
> So of cource he must earn at least as much or even more for his extra
> work, right?
>

Ah, now I see where you were going. The seller does more to ship overseas so he rightly deserves more in return. I misunderstood your intent.

In reality, I suspect most sellers make LESS money on sales overseas. I'm sure the larger merchants have all the costs accounted for and charge accordingly, but I suspect merchants with fewer sales overseas end up with less profit due to not being aware of how much work is required for international shipments. For small items it doesn't have to be a big deal if the seller knows the ins and outs of shipping internationally. Shipments labeled "parts" tend to get through customs with little attention and very low tariffs. But that only works for small packages.

I bought my AR7030+ from the UK. The seller told me what to expect in the way of import duties. I thought I'd made out like a bandit when UPS only wanted $35 when they delivered. Sadly, a couple weeks later I got the bill for the actual duties. The $35 was just their fee for figuring out what the duties were and handling it for me. The real duties were exactly what the seller said they would be.

I would also add that the whole "CE" requirement in Europe is a bit of a mixed blessing. It does provide some assurance of safety and quality, but they don't make it easy to get that CE mark. I know from experience at work that it's a very involved and costly process. They even charge a not insignificant amount for the documents that explain the requirements. For a larger manufacturer cranking out thousands of units it's probably not that big a deal, but for smaller businesses it can make one question whether it's worth even doing business in the EU.

-- Jay

[Non-text portions of this message have been removed]

4870. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-12 17:28:24 UTC
From: aimo ruoho
Topic: 4819 Message: 4870

Jay, thank you very much for you putting so much thought into this!
73 from Aimo.

Jay Heyl <yahoogroups@...> wrote:
On Feb 11, 2008 4:23 PM, aimo ruoho <aimounto@...> wrote:

>
> What I ment was not, that the seller would inevitably get more profit,
> but he gets more paid for his work in the final sum. Understood? There is a
> small difference, isn't there?
> So of cource he must earn at least as much or even more for his extra
> work, right?
>

Ah, now I see where you were going. The seller does more to ship overseas so he rightly deserves more in return. I misunderstood your intent.

In reality, I suspect most sellers make LESS money on sales overseas. I'm sure the larger merchants have all the costs accounted for and charge accordingly, but I suspect merchants with fewer sales overseas end up with less profit due to not being aware of how much work is required for international shipments. For small items it doesn't have to be a big deal if the seller knows the ins and outs of shipping internationally. Shipments labeled "parts" tend to get through customs with little attention and very low tariffs. But that only works for small packages.

I bought my AR7030+ from the UK. The seller told me what to expect in the way of import duties. I thought I'd made out like a bandit when UPS only wanted $35 when they delivered. Sadly, a couple weeks later I got the bill for the actual duties. The $35 was just their fee for figuring out what the duties were and handling it for me. The real duties were exactly what the seller said they would be.

I would also add that the whole "CE" requirement in Europe is a bit of a mixed blessing. It does provide some assurance of safety and quality, but they don't make it easy to get that CE mark. I know from experience at work that it's a very involved and costly process. They even charge a not insignificant amount for the documents that explain the requirements. For a larger manufacturer cranking out thousands of units it's probably not that big a deal, but for smaller businesses it can make one question whether it's worth even doing business in the EU.

-- Jay

[Non-text portions of this message have been removed]

Looking for last minute shopping deals? Find them fast with Yahoo! Search.

[Non-text portions of this message have been removed]

4871. Re: [loopantennas] Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-12 18:04:13 UTC
From: aimo ruoho
Topic: 4819 Message: 4871

Thanks for trying to comfort me, Mark!

As we easily can see, we are all imperfect... You call your friend "very smart". If he were perfect, would he have negative attitudes? So, in all his loyalness, he too is imperfect! Just let us forgive him, so that we will be forgiven, right? Perhaps he too will learn something, perhaps not. It's volantary to change attitudes, isn't it? We can't force him. But as you consider him as your good friend, I hope that you will continue keeping him as such for mutual contentment. What would life be without a few good friends? No real satisfaction to live alone...

I read about us Finns today, that too many of us are very prejudiced. Perhaps that is one of the main reasons, why I always wanted to get away from that land? In January started my 8th year of living in Spain. The mental atmosphere here is just what I like, positive and joyful!

As you told me, there always is a circuitous route! If someone is negative, perhaps there are one or more positively thinking (and acting) persons, who are willing to aid us to reach our goals?
I will keep your suggestion in my mind, Mark!

73, Aimo.

aircheckIover <mdh@...> wrote:
--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Please receive my apologies!
> What I ment was not, that the seller would inevitably get more
profit, but he gets more paid for his work in the final sum.
Understood? There is a small difference, isn't there?
> So of cource he must earn at least as much or even more for his
extra work, right?
> 73, Aimo

Hi Aimo. I have some friends who will not sell overseas on eBay. They say the extra work and chance for getting ripped off is too high to take the risk. FWIW, I sell overseas and have had no problems. I have one friend is very protective of what he sees as "his nation" and as a rule, will only deal with Americans (but he likes Canada!). He is a good friend and I have learned it makes no sense to argue with him ... he gets angry and stops calling. I like my friend - he is very smart and is a loyal friend. But he makes no sense to me: He is in love with communicating to people around the world via SWL and ham radio yet doesn't not want to transact with these same people.

Email me personally if you need help purchasing something from an "American only" seller.

-Mark

==========

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

4872. great ferrite rods for sale 17cmx10mm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-12 22:17:54 UTC
From: ehydra
Topic: 4872 Message: 4872

Hi low-frequency folks -

I managed to get a big lot of rods.

So I can give away a bunch of ferrite rods for experimenting. Great as antenna for up to 10MHz or as a wideband transformer. If you can accept a sightly reduced effective ui you can bundle them together.

quick technical data:
manufacturer: Philips
material: 3B1
ui: 900
curie temerature: 150?C
length: 170mm
diameter: 10mm
outline: rod with six cuts (Improves Q of wound coil!)

Price: Euro 18,-

Here is more info:
http://www.ehydra.dyndns.info/temp_ferrite/

And I sell LCD 2x10 with i2c serial bus connection AND backlight: Euro 13,-
It is entirely shielded in tin metal and approx. 55x30mm outline. See photo here: http://www.ehydra.dyndns.info/temp_ferrite/

Shippping is from Germany. You can pay with PayPal (ehydra@...) or bank account transfer. I cannot offer insurance for money sent by snail mail.
Shipping costs (insured) in Germany is Euro 6,-. Other countries please ask or suggest a useful carrier.

Hope this helps. Just ask if you need further info.

regards -
Henry Kiefer

4873. Re: Ferrite Antenna Rods

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-13 14:25:45 UTC
From: airchecklover
Topic: 4819 Message: 4873

--- In loopantennas@yahoogroups.com, Richards <jruing@...> wrote:
>
> A friend is a person who can see your faults... and likes you just the
> same.
> (Grandpappy)
>
> /////////////// Richards //////////////

Thanks Gramps. I knew you would understand :>)

4874. Wellbrook LFL 1010

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-14 13:01:44 UTC
From: rabej_de
Topic: 4874 Message: 4874

Hi, group!

I wonder, whether anybody here uses a Wellbrook LFL1010!

I thought about buying one for LW and MW.
Would anybody know, how it performs on LW and MW compared to the
ALA1530 and what the usable frequency range "really" is?

Thanks very much in advance.

73

Joachim Rabe

4875. Re: [loopantennas] Wellbrook LFL 1010

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-14 20:35:32 UTC
From: f4dtl@aol.com
Topic: 4874 Message: 4875

Hello Joachim,you can find somes measures between my Wellbrook LFL1010 and my PA0RDT miniwhip especialy on VLF,LF and MF bands.

See in pictures folder of thisYahoogroups and browse in "F4DTL test LFL1010 Wellbrook"

all measures LF/MF was realised with Icom IC7400 like receiver and screen captures from Spectrum Lab.
For VLF receptions,direct conversion with my USB Soundcard EMU 202 at 192 kHz sample rate with Spectrum Lab VLF receiver config.

Enjoy LFL1010 and best regards dear Joachim.

F4DTL Nicolas

[Non-text portions of this message have been removed]

4876. Re: Wellbrook LFL 1010

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-15 16:07:50 UTC
From: mark7ut
Topic: 4874 Message: 4876

Joachim, I have been using an LFL1010 here since October of 2006 and have nothing but glowing admiration for it! I can only compare it a couple of coax loops that I have built in the past, no comparison, and my 160 meter inv-L antenna, beats it 90% of the time. I have it at about 23 feet AGL, on a city lot. The ability to rotate it of course helps considerably as well. Lots of noise here off and on during the night so its nice to null that out as well as the strong NDB's so I can try to make out the weaker ones underneath. It works great with the lowfer stations on 137 and 185 as well as the NDB band. Have not used it much on MW and above but it does work there. The only negative I can think of is that it does not like to be covered in snow or ice!

73, Mark, Ku7z
DN41af
Ogden, Northern UT (NUT)

--- In loopantennas@yahoogroups.com, "rabej_de" <rabej_de@...> wrote:
>
> Hi, group!
>
> I wonder, whether anybody here uses a Wellbrook LFL1010!
>
> I thought about buying one for LW and MW.
> Would anybody know, how it performs on LW and MW compared to the
> ALA1530 and what the usable frequency range "really" is?
>
> Thanks very much in advance.
>
> 73
>
> Joachim Rabe
>

4877. BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 09:50:49 UTC
From: C. Beijersbergen
Topic: 4877 Message: 4877

Hello,

For those of you who own a Wellbrook antenna I have a question.
Connection of the loop to the coax cable is through a BNC connector. Apparently this is out in the open. How does it stand up to rain, storm, snow and frost? Will this connection withstand this all through the years or is some additional sealing required?
No doubt some of you are having your Wellbrook placed on the roof or in the garden, unprotected from the elements. I'd like to hear about your experiences on this issue.

regards,

Cor Beijersbergen van Henegouwen

[Non-text portions of this message have been removed]

4878. BNC Connectors

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 13:24:42 UTC
From: Briggs Longbothum
Topic: 4878 Message: 4878

Unless a connector is specifically designed to be weatherproof or waterproof, it must be made so if it is survive operation in those enviornments. Wrapping in "Coax Seal" or encapsulation in something like a good silicone sealant will generally be sufficient but care must be taken to make sure all surfaces are well cleaned and dried beforehand. A BNC connector, by itself, is not weatherproof.

4879. Re: [loopantennas] BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 13:41:21 UTC
From: gandalfg8@aol.com
Topic: 4877 Message: 4879

In a message dated 17/02/2008 09:51:14 GMT Standard Time,
c.beijersbergen@... writes:

Hello,

For those of you who own a Wellbrook antenna I have a question.
Connection of the loop to the coax cable is through a BNC connector.
Apparently this is out in the open. How does it stand up to rain, storm, snow and
frost? Will this connection withstand this all through the years or is some
additional sealing required?
No doubt some of you are having your Wellbrook placed on the roof or in the
garden, unprotected from the elements. I'd like to hear about your
experiences on this issue.

Any BNC connector used outside will need to be protected.

The Wellbrook loops have a particular problem in that the BNC sticks out
sideways from the plastic junction box at the base of the loop thus potentially
exposing it more to rainfall etc.

So far I've only used my loops indoors but do intend to mount them outside.
As well as sealing the connector with self amalgamating tape I plan to make
a cover, cut from the bottom of a plastic bottle or using PVC pipe, that will
shield the junction box and connector from the worst of the weather which,
on the west coast of Scotland, can be quite extreme.

As a general comment, if using self amalgamating tape outside remember to
cover it with a layer of insulating tape or similar as it can deteriorate quite
badly when directly exposed to sunlight.

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

4880. Active Ferrite Rod Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 16:58:36 UTC
From: Chris Trask
Topic: 4880 Message: 4880

I just completed work on an active ferrite rod antenna with remote
tuning. It has a tuning Q of about 75 at 10MHz. The details are in:

http://www.home.earthlink.net/~christrask/Active Ferrite Rod Antenna.pdf

which can also be obtained using the more convenient:

http://tinyurl.com/ys293g

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4881. Re: BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 17:52:55 UTC
From: C. Beijersbergen
Topic: 4877 Message: 4881

Soon after I posted my question I received an answer from Any Ikin of Wellbrook explaining that the connector has te be coated with vaseline an has to be sealed with a PVC boot that is supplied with the antenna. Dominique Kemp mailed me a couple of pictures of his antenna that supported the description by Andy Ikin. A few others also told me that some seealing is strictly necessary.
So thank you for you responses, my question has been answered.

regards,

Cor Beijersbergen van Henegouwen

[Non-text portions of this message have been removed]

4882. Re: Quantum QX Loop 2.0 Plus+ for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 18:20:37 UTC
From: Jim
Topic: 4817 Message: 4882

--- In loopantennas@yahoogroups.com, Richards <jruing@...> wrote:
> Also, you may find that the Wellbrook does not do better at 20 feet
> and may work better down at, say, ten feet. Contact Andy at Wellbrook
> about this before assuming higher is better in all cases.

I can echo that. I first tried my Wellbrook out at approx. 20 feet high, then at 10 feet and finally settled for 6 feet where it worked better than the previous 2 heights. Having said that, experimentation would be wise if possible.

4883. Perhaps an odd question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 19:02:51 UTC
From: Jim
Topic: 4883 Message: 4883

I put this question up on the ALA1530 group but got only 1 reply"

How many (if any) people have
noticed any benefit from grounding their receiver while using the
Wellbrook ALA1530? I'm referring to possibly improved reception.

4884. Wellbrook ALA1530+ vs ALA330S Recommendation in Western USA

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 15:01:34 UTC
From: k7na6
Topic: 4884 Message: 4884

I posted the following in the ALA1530 group but, not receiving any replies, thought I would post on this more active and robust Loop Antennas group.

I am new to this group but for some time have been monitoring Wellbrook discussions on other groups such as SWL Antenna, ALA1530 and Eton E1-XM. Recently joining this group, I have read through many of the archived postings.

I live in a rather noisey suburban environment in Southern Calif. and am contemplating the purchase of a Wellbrook loop. I've nagged Andy Ikin repeatedly for information and he has been gracious and veryhelpful.

Although I had thought my choice would be the newer ALA1530S+, Andy cautioned that since I have two MW broadcast stations within about 10 miles of my home, the 1530+ (without the 10db amplification) might result in less of an intermod problem. I had thought the additional 10dB gain would be essential here in the western USA.

Currently, I am in a quandry whether to buy the 1530+ as Andy suggests, or run with the 330S for better SW performance. I enjoy SW listening but I also want excellent MW sensitivity as well. I kinda want it all.

I am wondering if there are group members living in the Western USA, where SW signal strengths tend to be weaker, who can give me the benefit of their experiences and recommendations. Will the 1530+ perform satisfactorily on SW here in the West or have most of you elected to use the 330S?

Also, I am wondering if the "S" designation on the 330S means that the same 10db amp is used in the receiver interface box as in the 1530S+? If that's the case, evidently Andy has somehow desensitized the MW coverage to improve results in strong MW environments, but this is not the case with the 1530S+.

My current receivers are the Eton E1-XM and the sub-receiver of my Tentec Orion ham transceiver. I am also thinking about the future purchase of a Drake R8B, R8, Palstar R30CC, Icom R75, or other suitable receiver for AM and SW DXing.

Thanks in advance for any constructive inputs. Much appreciated.

Vince
Carlsbad, CA

4885. Re: [loopantennas] Re: BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-17 23:22:11 UTC
From: sonicxcove@aol.com
Topic: 4877 Message: 4885

In a message dated 2/17/2008 12:53:08 P.M. Eastern Standard Time,
c.beijersbergen@... writes:

Soon after I posted my question I received an answer from Any Ikin of
Wellbrook explaining that the connector has te be coated with vaseline an has to be
sealed with a PVC boot that is supplied with the antenna. Dominique Kemp
mailed me a couple of pictures of his antenna that supported the description by
Andy Ikin. A few others also told me that some seealing is strictly
necessary.
So thank you for you responses, my question has been answered.

regards,

Cor Beijersbergen van Henegouwen

Be advised that some heat shrink tubing has a built in glue to help seal
to the PVC. Fine to use if you are installing your own connectors, a bit
late once the connector is put on the cable. BNC connectors, depending
on the design [and not the thread-on that I am aware of] do provide a much
higher degree of weather protection than most other connectors with the
exception of N connectors which are also moisture resistant. This is one
reason the US military gear uses BNC and N connectors to start with.

If you want to buy the tools for the F connectors that the SAT TV folks use,
those are relatively good. They also have a special goo that they put on the
connections to help seal them. Another plus there is that good quality
RG-6 is cheap and readily available these days.

Unless you purchase the silicone that is specifically for electrical
connectors
I would avoid that stuff altogether and buy a few rolls of Coax-Seal to wrap
everything with anyway. Small price to pay for the added protection.

Eric

**********Ideas to please picky eaters. Watch video on AOL Living.
(http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/
2050827?NCID=aolcmp00300000002598)

[Non-text portions of this message have been removed]

4886. Re: Wellbrook ALA1530+ vs ALA330S Recommendation in Western USA

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 04:35:31 UTC
From: Jim
Topic: 4884 Message: 4886

I can't answer the bulk of your questions, but:

--- In loopantennas@yahoogroups.com, "k7na6" <k7na6@...> wrote:

> Although I had thought my choice would be the newer ALA1530S+,
> Andy cautioned that since I have two MW broadcast stations within
> about 10 miles of my home, the 1530+ (without the 10db amplification)
> might result in less of an intermod problem. I had thought the
> additional 10dB gain would be essential here in the western USA.

this surprises me as most locations in a city have MW stations within
10 miles. Considering the Wellbrook loops are supposed to deal with
this as well as other types of interference, Andy's caution seems kind
of strange. Or perhaps I'm missing something?

4887. Re: [loopantennas] Re: Wellbrook ALA1530+ vs ALA330S Recommendation in Western USA

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 04:47:21 UTC
From: Paul V Birke PEng
Topic: 4884 Message: 4887

Or perhaps I'm missing something?

****

likely he just wants to make it better

I have cjoy 1460 here in guelph about 1.5 miles from me so it is a real issue

I never thought much about this till Dallas Lankford and Chris Trask make this intermodulation performance I would say the domininant design factor whereas most of would have though snr and gain

but I think now the design objective importance is

intermodulation performance

snr

gain

cost is whatever is needed to achieve the above within reason

best
Paul

[Non-text portions of this message have been removed]

4888. RE: [loopantennas] Perhaps an odd question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 06:25:50 UTC
From: Dominique Kremp
Topic: 4883 Message: 4888

It's not an odd question at all !
I NEVER experienced any difference, neither a negative nor a positive one, when grounding my receivers while connected to Wellbrook antennas (ALA1530/ALA100/ALA100M/AVA100).

Hope it helps
Have a nice day

Dominique
from Normandy/France

-----Message d'origine-----
De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de Jim
Envoyé : dimanche 17 février 2008 20:03
À : loopantennas@yahoogroups.com
Objet : [loopantennas] Perhaps an odd question

I put this question up on the ALA1530 group but got only 1 reply"

How many (if any) people have
noticed any benefit from grounding their receiver while using the
Wellbrook ALA1530? I'm referring to possibly improved reception.

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!
Yahoo! Groups Links

4889. Re: Wellbrook ALA1530+ vs ALA330S Recommendation in Western USA

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 07:04:58 UTC
From: cank13cat
Topic: 4884 Message: 4889

I'm gonna take a wild guess that intermod won't be a problem with the Palstar R30CC.

I live in Fort Worth where we have some flamethrower MW broadcasters, including WBAP on 820. My interest is mainly SW DXing, not MW. Occasionally I'll hear some MW very faintly in the background when my portables (Sony ICF-2010, Magnavox D2935) are set to LW or SW, but I've never heard anything break through the Palstar R30C. Well, there was *one* occasion when I set up a cheap Radio Shack active antenna incorrectly (bypassed the shield/outer conductor on the feedline), but that was strictly spurious imaging due to the active antenna, not the radio. Hooking up the feedline correctly eliminated that problem.

Personally, if it was in the budget, I'd go for the 1530 and use the Palstar's attenuation switch if necessary. I'd rather have too much antenna than not enough.

Also - and you might discuss this with Andy - it's possible to hook up an attenuator inline with the feedline. I have an attenuating cable that I use in conjunction with my cheapo active antenna to reduce problems with spurious signals.

--- In loopantennas@yahoogroups.com, "k7na6" <k7na6@...> wrote:
>
> I live in a rather noisey suburban environment in Southern Calif.
> and am contemplating the purchase of a Wellbrook loop. I've nagged
> Andy Ikin repeatedly for information and he has been gracious and
> veryhelpful.
>
> Although I had thought my choice would be the newer ALA1530S+,
> Andy cautioned that since I have two MW broadcast stations within
> about 10 miles of my home, the 1530+ (without the 10db amplification)
> might result in less of an intermod problem. I had thought the
> additional 10dB gain would be essential here in the western USA.
>
> Currently, I am in a quandry whether to buy the 1530+ as Andy
> suggests, or run with the 330S for better SW performance. I enjoy SW
> listening but I also want excellent MW sensitivity as well. I kinda
> want it all.
>
> I am wondering if there are group members living in the Western
> USA, where SW signal strengths tend to be weaker, who can give me the
> benefit of their experiences and recommendations. Will the 1530+
> perform satisfactorily on SW here in the West or have most of you
> elected to use the 330S?
>

> My current receivers are the Eton E1-XM and the sub-receiver of my
> Tentec Orion ham transceiver. I am also thinking about the future
> purchase of a Drake R8B, R8, Palstar R30CC, Icom R75, or other
> suitable receiver for AM and SW DXing.
>

4890. Re: Wellbrook ALA1530+ vs ALA330S Recommendation in Western USA

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 07:11:56 UTC
From: jr_dakota
Topic: 4884 Message: 4890

--- In loopantennas@yahoogroups.com, "k7na6" <k7na6@...> wrote:
>
> I posted the following in the ALA1530 group but, not receiving any
> replies, thought I would post on this more active and robust Loop
> Antennas group.
>
> I am new to this group but for some time have been monitoring
> Wellbrook discussions on other groups such as SWL Antenna, ALA1530
> and Eton E1-XM. Recently joining this group, I have read through
> many of the archived postings.
>
> I live in a rather noisey suburban environment in Southern Calif.
> and am contemplating the purchase of a Wellbrook loop. I've nagged
> Andy Ikin repeatedly for information and he has been gracious and
> veryhelpful.
>
> Although I had thought my choice would be the newer ALA1530S+,
> Andy cautioned that since I have two MW broadcast stations within
> about 10 miles of my home, the 1530+ (without the 10db amplification)
> might result in less of an intermod problem. I had thought the
> additional 10dB gain would be essential here in the western USA.
>
> Currently, I am in a quandry whether to buy the 1530+ as Andy
> suggests, or run with the 330S for better SW performance. I enjoy SW
> listening but I also want excellent MW sensitivity as well. I kinda
> want it all.
>
> I am wondering if there are group members living in the Western
> USA, where SW signal strengths tend to be weaker, who can give me the
> benefit of their experiences and recommendations. Will the 1530+
> perform satisfactorily on SW here in the West or have most of you
> elected to use the 330S?
>
> Also, I am wondering if the "S" designation on the 330S means that
> the same 10db amp is used in the receiver interface box as in the
> 1530S+? If that's the case, evidently Andy has somehow desensitized
> the MW coverage to improve results in strong MW environments, but
> this is not the case with the 1530S+.
>
> My current receivers are the Eton E1-XM and the sub-receiver of my
> Tentec Orion ham transceiver. I am also thinking about the future
> purchase of a Drake R8B, R8, Palstar R30CC, Icom R75, or other
> suitable receiver for AM and SW DXing.
>
> Thanks in advance for any constructive inputs. Much appreciated.

>
> Vince
> Carlsbad, CA
>

It doesn't help that their speccs don't seem to jive with reality ...

For instance the 1530S+ shows a higher IP2 and the same IP3 as the 1530+ which really isn't logical because of the 10db gain and Andy admits as much when he suggests the lower gain version ... This is what happens when the specmanship game is played and they don't tell you what they are really measuring, input IP2 and IP3 or output IP2 and IP3 ... We have to assume it's output IP2 and that the input IP2 will be degraded by the 10db gain of the extra amplifier in the 1530S+

If you think IP2 is going to be a problem because of nearby transmitters then the best option would be the 1530+ and if you think you'll need more gain you can add a good outboard 10db preamp such as the Kiwa Broadband Preamp 2.0 or DX Engineering DXE-RPA-1 (And I bet that the added 10db preamp in the Wellbrook is the same basic design as these two) ... You may also find that a MW BCB filter to be of use for above the MW BCB ... Kiwa makes a good 10db preamp with the MW BCB filter built in, so that might be your best option as you won't be needing a preamp for the MW BCB, your location will be way too noisy, so you can just take out the preamp/filter combination for the MW BCB

Then you can use the preamp (and BCB filter) and leave it inline and when you want to DX the BCB you can take it out ... You may not even need a preamp if you have a decent one built into your radio, for instance I have an Icom IC-R71a and it has a balanced 10db preamp that pretty stout already, not quite as good as the two preamps mentioned above (Or my homebrew versions of them) .... on the other hand my Ten Tec RX320D has no preamp and without a MW BCB filter (I took the internal one that degrades everything below 1800Khz) when I'm SW DXing it the front end will crumple from the two nearby AM BCB transmitters, not just from IP2 but from Blocking which desensitizes the entire front end

JR

4891. MW DXing question for fellow Texans

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 07:12:16 UTC
From: cank13cat
Topic: 4891 Message: 4891

This is more of a location question than an antenna-specific question, but this seems like the best forum to ask...

I'm not much of a MW DXer since most US stations are all the same. It's not much of a challenge to DX a MW station 1,000 miles away only to discover it's exactly the same format as my local stations (does the phrase "Fair and Balanced" ring a bell?).

However, I've noticed that from my home in Fort Worth using only a puny indoor antenna I can easily pick up Australia and New Zealand on shortwave, along with several African stations, from the 20 meter band on up. I thought it might be interesting to see whether DXing these countries in the tropical and MW bands is feasible.

However, before plunking down the dough for a highly specialized loop, I thought I'd ask other folks who live in Texas or elsewhere along the Gulf Coast states if they've had any luck DXing, oh, say, Alice Springs. Also, has a highly direction loop helped minimize that irritating OTHR/CODAR racket that plagues the tropical bands?

(BTW, I'll be using a Palstar R30C, which has no built-in ferrite bar, and has both a Hi-Z spring loaded clip and Lo-Z SO-239 input.)

Thanks much.

4892. Re: [loopantennas] MW DXing question for fellow Texans

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 07:18:14 UTC
From: PacificDx
Topic: 4891 Message: 4892

c> This is more of a location question than an antenna-specific question,
c> but this seems like the best forum to ask...

c> I'm not much of a MW DXer since most US stations are all the same.
c> It's not much of a challenge to DX a MW station 1,000 miles away only
c> to discover it's exactly the same format as my local stations (does
c> the phrase "Fair and Balanced" ring a bell?).

c> However, I've noticed that from my home in Fort Worth using only a
c> puny indoor antenna I can easily pick up Australia and New Zealand on
c> shortwave, along with several African stations, from the 20 meter band
c> on up. I thought it might be interesting to see whether DXing these
c> countries in the tropical and MW bands is feasible.

Unfortunately, I can't answer for these days as I don't DX MW any
more. However, 10+ years ago, I was able to easily DX US MW stations from
halfway down the South Island here in NZ using a simple homebuilt
loop. Don't know if that helps or not.

--
Jim
ZL1DX1M
http://pacificdx.dyndns.org:8080 (0900 - 1300 GMT)
http://www.sanctuaryweather.co.nz
Auckland, NZ 36°54'0"S 174°44'0"E (177ft ASL)
at 8:16 PM on Monday, 18 February 2008

Receivers: Kenwood R-5000 (2), Sangean ATS 909, Uniden UBC72xlt, Uniden UBCT8
Antennas: Wellbrook ALA1530, Par Electronics EF-SWL, Diamond D130 discone

4893. Re: MW DXing question for fellow Texans

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 14:13:59 UTC
From: tenorman1952
Topic: 4891 Message: 4893

> However, before plunking down the dough for a highly specialized loop,
> I thought I'd ask other folks who live in Texas or elsewhere along the
> Gulf Coast states if they've had any luck DXing, oh, say, Alice
> Springs. Also, has a highly direction loop helped minimize that
> irritating OTHR/CODAR racket that plagues the tropical bands?

From my home here on the Louisiana gulf coast, south of Baton Rouge, using the simple "Carver Ultimate AM Loop Antenna", which is an untuned loop of just 4 turns around a diamond shaped form, I can pick up KLVI 560 Beaumont, TX (180 miles and only 5000 w) clearly during the day.

At night I regularly pick up KBAP 820 DallasFortWorth (all one word, 420 miles), WOAI 1200 San Antonio (441 miles) quite clearly. Also WSB 750 Atlanta (487 miles), KMOX 1120 in St. Louis, MO (618 miles), WLW 700 in Cinncinatti, OH (754 miles), WGN 720 and WLS 890 in Chicago (859 miles).

My brother, who lives in the next town, with the same antenna regularly listens to a blues station in Memphis. I forget the call sign and frequency, but I can pick it up, too.

And all this is with the simple untuned loop. I can do better with the MTM Scientific tuned loop with my Onkyo tuners and receivers.

Photos of these loops are in my folder "Loop Kits" in the photo section, and I have placed other details and links in the files and links sections.

Paul C.

4894. Capacitor question for group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 15:29:57 UTC
From: metrobase201
Topic: 4894 Message: 4894

I have a dual gang 365pf capacitor, it also have 2 screws trimmers on the side, Can any one explain these to me and what they do?
-MetroBase 201

4895. Re: [loopantennas] Capacitor question for group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 15:49:26 UTC
From: gandalfg8@aol.com
Topic: 4894 Message: 4895

In a message dated 18/02/2008 15:30:47 GMT Standard Time,
metrobase201@... writes:

I have a dual gang 365pf capacitor, it also have 2 screws trimmers on
the side, Can any one explain these to me and what they do?

The trimmers are there to adjust oscillator tracking when used in a receiver.

In these days of digital displays it's not so noticeable as it was on tuning
scales with a pointer, but linearity of capacitor and oscillator tracking is
always a compromise and the trimmers help to get the best fit.
If, in a superhet receiver, one capacitor is used for a tuned RF amplifier
and the other for a local oscillator it's also important to have a fine
adjustment to keep them as well matched as possible over the tuning range.

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

4896. MetroBase Loops in photo section

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 16:10:56 UTC
From: metrobase201
Topic: 4896 Message: 4896

```
check them out.
-Metrobase
```

4897. Re: Capacitor question for group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 16:14:16 UTC
From: metrobase201
Topic: 4894 Message: 4897

--- In loopantennas@yahoogroups.com, gandalfg8@... wrote:
>
>
> In a message dated 18/02/2008 15:30:47 GMT Standard Time,
> metrobase201@... writes:
>
>
>
>
> I have a dual gang 365pf capacitor, it also have 2 screws trimmers
on
> the side, Can any one explain these to me and what they do?
>
>
>
>
>
>
> ------------------------------------
> The trimmers are there to adjust oscillator tracking when used in
a receiver.
>
> In these days of digital displays it's not so noticeable as it was
on tuning
> scales with a pointer, but linearity of capacitor and oscillator
tracking is
> always a compromise and the trimmers help to get the best fit.
> If, in a superhet receiver, one capacitor is used for a tuned RF
amplifier
> and the other for a local oscillator it's also important to have a
fine
> adjustment to keep them as well matched as possible over the
tuning range.
>
> regards
>
> Nigel
> GM8PZR
>
>
>
>
>
>
>
>

> [Non-text portions of this message have been removed]
>
Thank you, thats probally when using my Sony 7600gr and turning the
screws on the capacitor I don't notice anything.
Thanks again.
-Metrobase

4898. Re: [loopantennas] Re: Capacitor question for group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 16:26:53 UTC
From: gandalfg8@aol.com
Topic: 4894 Message: 4898

In a message dated 18/02/2008 16:14:55 GMT Standard Time,
metrobase201@... writes:

Thank you, thats probally when using my Sony 7600gr and turning the
screws on the capacitor I don't notice anything.

That's probably because they're much lower value than the main capacitor so
would have very little effect.
The adjustments I mentioned before would be carried out at manufacture and
then left.

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

4899. Re: Shielded multi turn loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 18:14:31 UTC
From: dxnature
Topic: 4794 Message: 4899

Hi Steve,

I made a conventional loop with 15 turns of wire on a 1.5 by 1.5 meter frame and 1 link coupling. It came almost on the resonated frequency I had calculated. It tuned from 700 to 200 khz. Sorry to say there is bit less noise and the signals are a bit stronger but not as I expected it to be. Ok it is a step in the right direction but I'm not content. There is still to mutch noise!!!

What I want to do right now is to replace the link coupling with a coax loop as pick-up and connect this to the feed line. What do you think? Will this give me a bit less noise?

Greetings,
Ron
>
> Unless someone has already worked out a formula, it may be a bit of
> cut and try. There is at least one Javascript on a website in the
> Links section (also mentioned recently, search for loop calculator in
> the archives) that calculates with a fixed spacing. You'll also have
> to take into account capacitance of the cable, there's where the
> cut-and-try comes in.
>
> I went and looked it up, here's Bruce Carter's javascript loop
> calculator. Uses turn spacing rather than loop width. Enter values,
> guessing at minimum capacitance, then calculate cable capacitance and
> use that to get a more accurate guess at minimum capacitance, repeat
> 'til the values don't change.
> http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm
>
> I would think a single loop coupling would be better than a direct
> connection. Less affect on loop capacitance, less loading of the tuned
> loop.
>
> Steve Greenfield
>

4900. Re: Wellbrook ALA1530+ vs ALA330S Recommendation in Western USA

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 22:24:00 UTC
From: k7na6
Topic: 4884 Message: 4900

JR wrote:

> It doesn't help that their speccs don't seem to jive with reality ...
>
> For instance the 1530S+ shows a higher IP2 and the same IP3 as the
> 1530+ which really isn't logical because of the 10db gain and Andy
> admits as much when he suggests the lower gain version ... This is
> what happens when the specmanship game is played and they don't tell
> you what they are really measuring, input IP2 and IP3 or output IP2
> and IP3 ... We have to assume it's output IP2 and that the input IP2
> will be degraded by the 10db gain of the extra amplifier in the
1530S+
>>
> JR

JR:
Thanks for the excellent suggestions with regard to use of
external amps if needed. It appears that the ALA330S or the ALA1530+
will offer the best options for my circumstance. Andy Ikin made these
recommendations in emails that we have traded back and forth.

Mr. Ikin also sent some additional information that I would like
to share with the group to shed some light on the IP2/IP3 and
amplification issues of the Wellbrook loops:

"Reference to concerns about intermodulation performance of
Wellbrook Loops; user feedback over the past 10 years has only
highlighted a handful of actual problems with the ALA1530 where the
antennas were deployed within a few miles of multiple 50-200kW BCB
transmitters. Notwithstanding the above, the ALA1530+ was introduced a
few years ago to provide much improved MW IOP3. Also in the past 6
months the new ALA1530 has a much higher MW IOP3 compared to the old
model.

"The level Intermodulation experienced when using active
antennas; loops or Whips is dependant on the incident field strength
of the most powerful signals, the Antenna Factor and the Receiver
Intermodulation performance. Where the incident field strength is very
high the Receivers' IMD performance can be the limiting factor.

"The measured MW Antenna Factor of the ALA1530+ is approx. 10db
i.e. the loop output dBuV is 10dB lower than the field strength in
dBV/m

"Therefore if the antenna is deployed approx. 15km from 2 x 50kw
MW transmitters, the incident field strength assuming good ground is
100dBuV/m. Thus with an antenna Factor of 10db the signal level at the

output of the antenna is 90dbuV or ☐17dBm (over S9+50dB). This is the same signal level as specified in the ALA1530+ Data Sheet. So the 2nd order intermod. is approx. -110dBm and the 3rd order intermod. is ☐ 131dBm. Most receivers with inputs as high as ☐17dBm show much higher levels of intermod. compared to the active antenna.

"Increasing the antenna gain by say +10dB using an amplifier with similar IOP2/3 as the antenna, we may start to see some noticeable 2nd order intermod. providing one is using a receiver with much higher IIP2 than the antenna. Most modern receivers just can't handle multiple S9+60dB signals.

"One suggested way to achieve the higher antenna gain at HF without overloading the receiver is to fit a MW hi-pass filter between the antenna and the 10dB antenna amplifier. There can be problem with this method; simple low cost hi-pass filters don't provide the correct 50 Ohm resistive termination in the MW stop-band. Hence, the antennas' MW IOP3 can be reduced because it sees a highly reactive load. Ideally the hi-pass filter should have also have a diplexer and a low-pass filter so that the stop-band signals drive into a 50 Ohm load. However, in some situations just adding a 50-100 Ohm resistor across the input of the hi-pass filter, will reduce some of the IOP3 degradation."

I hope the above is informative. Thanks again for your suggestions. Much appreciated.

Vince
Carlsbad, CA

4901. Re: BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 23:02:23 UTC
From: mhatlau
Topic: 4877 Message: 4901

For what it is worth, there are BNC's, and then theres BNC's. The Radio Shack Specials are for use inside only. They will leak like a sieve and deteriorate rapidly outside in the weather. The more expensive Mil-Spec- types are quite water resistant. For the plugs, look for the o-ring under the compression nut. Otherwise, you will have to wrap them in that rubber tape. Jacks are water resistant, I.E. if out in the rain, and on the bottom of the box, wind-blown water will not get into the connector or box (Hurricane-force winds excepted:)
Then there are the actual waterproof BNC Female connectors, good to a meter of immersion for at least an hour. Read very expensive.

One thing someone suggested is to use Silicone Rubber. DON'T. It will corrode the pins and connections rapidly, causing you a LOT of grief. The stuff that smells like Viniger do so because they emit Acidic fumes. They make some specifically for around electronic circuits, but it is hard to get in consumer quantities, and very expensive.

And yes, the rubber tape has to be protected by electrical tape.

--- In loopantennas@yahoogroups.com, sonicxcove@... wrote:
>
>
> In a message dated 2/17/2008 12:53:08 P.M. Eastern Standard Time,
> c.beijersbergen@... writes:
>
> Soon after I posted my question I received an answer from Any Ikin of
> Wellbrook explaining that the connector has te be coated with
vaseline an has to be
> sealed with a PVC boot that is supplied with the antenna. Dominique
Kemp
> mailed me a couple of pictures of his antenna that supported the
description by
> Andy Ikin. A few others also told me that some seealing is strictly
> necessary.
> So thank you for you responses, my question has been answered.
>
> regards,
>
> Cor Beijersbergen van Henegouwen
>
>
>
> Be advised that some heat shrink tubing has a built in glue to help
seal

> to the PVC. Fine to use if you are installing your own connectors,
a bit
> late once the connector is put on the cable. BNC connectors, depending
> on the design [and not the thread-on that I am aware of] do provide
a much
> higher degree of weather protection than most other connectors with the
> exception of N connectors which are also moisture resistant. This is
one
> reason the US military gear uses BNC and N connectors to start with.
>
> If you want to buy the tools for the F connectors that the SAT TV
folks use,
> those are relatively good. They also have a special goo that they
put on the
> connections to help seal them. Another plus there is that good quality
> RG-6 is cheap and readily available these days.
>
> Unless you purchase the silicone that is specifically for electrical
> connectors
> I would avoid that stuff altogether and buy a few rolls of Coax-Seal
to wrap
> everything with anyway. Small price to pay for the added protection.
>
> Eric
>
>
>
> **********Ideas to please picky eaters. Watch video on AOL
Living.
>
(http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/
> 2050827?NCID=aolcmp00300000002598)
>
>
> [Non-text portions of this message have been removed]
>

4902. Re: [loopantennas] MetroBase Loops in photo section

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-18 23:51:28 UTC
From: aimo ruoho
Topic: 4896 Message: 4902

Interesting, really!

What are the measures of your copper tube loop?
Have you cut the tube into 2 parts, or is it separated only on the lower part?
Thanks!
Aimo

metrobase201 <metrobase201@...> wrote:
check them out.
-Metrobase

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

4903. Re: [loopantennas] Re: BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 00:15:18 UTC
From: sonicxcove@aol.com
Topic: 4877 Message: 4903

In a message dated 2/18/2008 6:02:50 P.M. Eastern Standard Time,
mhuss1@... writes:

Then there are the actual waterproof BNC Female connectors, good to a
meter of immersion for at least an hour. Read very expensive.

I have some Mil gear is just that, The 30-76 MHz diplexers.
Big boy bath toys in a way. I do not paying extra for the better
connectors. A lot less grief down the road.

Eric

**********Ideas to please picky eaters. Watch video on AOL Living.
(http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/
2050827?NCID=aolcmp00300000002598)

[Non-text portions of this message have been removed]

4904. Re: [loopantennas] Re: Wellbrook ALA1530+ vs ALA330S Recommendation in Western USA

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 00:47:22 UTC
From: Richards
Topic: 4884 Message: 4904

I cannot see the issue here. I have the ALA-100M medium aperture loop (i.e., you supply your own wire loop about 20 feet on a side...) and I use it daily with my amateur transceiver. I often transmit on one antenna or another set to frequency, and use the ALA-100M as the receiving antenna.

Never had any problems with AM BCB stations and there are plenty withing ten miles of my operating position. I have used that antenna with cheap portables and fancy table tops and what all in between with no AM station bleed in.

/////////////// Richards - K8JHR //////////////
==========

k7na6 wrote:

> "Reference to concerns about intermodulation performance of
> Wellbrook Loops;

==========

4905. Re: MetroBase Loops in photo section

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 03:45:18 UTC
From: metrobase201
Topic: 4896 Message: 4905

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Interesting, really!
>
> What are the measures of your copper tube loop?
> Have you cut the tube into 2 parts, or is it separated only on
the lower part?
> Thanks!
> Aimo
>
> metrobase201 <metrobase201@...> wrote:
> check them out.
> -Metrobase
>
>
>
>
>
>
> ---------------------------------
> Be a better friend, newshound, and know-it-all with Yahoo! Mobile.
Try it now.
>
> [Non-text portions of this message have been removed]
>
Hello Aimo, Thank you for your interest. My QTH is in New York City
(lots of noise here, and this loop helps).
It's a complete 10 feet (3 meters) of 1/2 inch (12.5mm) coiled copper
pipe. Once fashioned into a loop it comes out to a 3 foot
circumference circle. Credit however goes to KR1ST at
http://www.kr1st.com/swlloop.htm. Please check it to get an idea of
it. At first I built it just like at his site and it worked fine.
Then using this as a starting point, I made another with made my own
modifications. I placed the pick-up coil on top rather then at the
bottom. I got tired of standing up to adjust the capacitor so I place
that at the bottom. The whole positioning now is upside down and
added the air variable 365pf capacitors in parallel and switch that
take me down to about 2300 khz. Doing away with the junk box am/fm
capacitor. The frame is my design and rotates for directivity. It
really is a superb loop and have logged some tropical DX with, ie: In
South America its Brazil, Peru and Honduras. In Afica it's Burkino
Faso, Mauritania, Zambia and Chad plus others.

Hope to speak again with you,
Cheers

73's
-MetroBase 201

4906. Re: MW DXing question for fellow Texans

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 07:04:44 UTC
From: cank13cat
Topic: 4891 Message: 4906

Thanks, Jim. Sounds like there's adequate reciprocity between Gulf Coast states in the US and your area to make MW DXing possible.

--- In loopantennas@yahoogroups.com, PacificDx <pacificdx@...> wrote:
>
> ...10+ years ago, I was able to easily DX US MW stations from
> halfway down the South Island here in NZ using a simple homebuilt
> loop. Don't know if that helps or not.
>

4907. Re: MW DXing question for fellow Texans

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 07:16:02 UTC
From: cank13cat
Topic: 4891 Message: 4907

Thanks, Paul. I'm afraid that being this far inland (Fort Worth) I'll need a more sophisticated loop than an untuned wire loop in order to exclude the US based MW stations, tho'. Another problem is the heavy QRN from local noise sources and atmospheric noise in the tropical bands and weak MW section. A well designed ferrite loop or expensive loop like the Wellbrook is probably the only antenna that'll cut through the mess for DXing beyond Mexico.

I'm just tired of US MW being dominated by the same programming - too much Foxnewsfairandbalanced-blah-blah-blah, too much Glenn Beck and his ilk, too much sports. I was temporarily excited to pick up WHO on 1040 from Des Moines, between two gospel stations on the same freq (one in Colorado, one in nearby Arlington, TX) - until I found out it's another 50,000 watt flamethrower with the same Foxnewsfairandbalanced-blah-blah-blah as my local stations.

For all I know, I might only succeed in DXing the Australian and New Zealand equivalent, but at least to me it'll *seem* interesting since it's more of a challenge.

The only interesting US based MW station I've caught recently from Fort Worth is KXTR classical music from Kansas City on 1660. Unfortunately it's swamped by yet another sports talk station. So I'd need a hi-Q loop to cut through.

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> From my home here on the Louisiana gulf coast, south of Baton Rouge,
> using the simple "Carver Ultimate AM Loop Antenna", which is an
> untuned loop of just 4 turns around a diamond shaped form, I can
> pick up KLVI 560 Beaumont, TX (180 miles and only 5000 w) clearly
> during the day.
>
> At night I regularly pick up KBAP 820 DallasFortWorth (all one word,
> 420 miles), WOAI 1200 San Antonio (441 miles) quite clearly. Also
> WSB 750 Atlanta (487 miles), KMOX 1120 in St. Louis, MO (618 miles),
> WLW 700 in Cinncinatti, OH (754 miles), WGN 720 and WLS 890 in
> Chicago (859 miles).
>
> My brother, who lives in the next town, with the same antenna
> regularly listens to a blues station in Memphis. I forget the call
> sign and frequency, but I can pick it up, too.
>
> And all this is with the simple untuned loop. I can do better with
> the MTM Scientific tuned loop with my Onkyo tuners and receivers.

>
> Photos of these loops are in my folder "Loop Kits" in the photo
> section, and I have placed other details and links in the files and
> links sections.
>
> Paul C.
>

4908. Re: MW DXing question for fellow Texans

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 15:01:43 UTC
From: tenorman1952
Topic: 4891 Message: 4908

--- In loopantennas@yahoogroups.com, "cank13cat" <wa_jenkins@...>
wrote:
(snip)

So I'd
> need a hi-Q loop to cut through.

Then check out the MTM Scientific. If you look at my photos you can see where I added a pickup loop to the antenna to feed my receivers. I drilled 1/16" holes just inboard, about 1/8" from the main 15 turn loop. The pickup loop is just one turn and routes back to a pair of speaker binding posts. I've used 300 ohm twin lead, though the ends are fragile, twisted pair of hookup wire, and coax. All work well.

This antenna is quite hi-Q.

You might also look at the Crane Twin Ferrite antenna. A friend has one and reports good dx from it. If you search Youtube you will find a video demonstration.

Paul

4909. Re: BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 15:08:47 UTC
From: tenorman1952
Topic: 4877 Message: 4909

--- In loopantennas@yahoogroups.com, "mhatlau" <mhuss1@...> wrote:
(snip)
> One thing someone suggested is to use Silicone Rubber. DON'T. It
> will corrode the pins and connections rapidly, causing you a LOT of
> grief. The stuff that smells like Viniger do so because they emit
> Acidic fumes. They make some specifically for around electronic
> circuits, but it is hard to get in consumer quantities, and very
> expensive.

I use a clear rubbery adhesive for this. It is sold under several names and viscosities. You can pick it up in craft and hobby stores under the name Aleene's 7800. It can be peeled off for removal if required. It is not silicone, not corrosive.

I use this adhesive, and a more viscous version, E6000, for gluing crossover components in speakers, various repairs on electronics and musical instruments. It dries clear, adheres good to dissimilar materials, and has a little bit of flex, so it is not brittle like epoxy.

Paul

4910. Re: MFJ-1788 loop antenna (subject line added by moderator)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 15:18:12 UTC
From: TOM
Topic: 4743 Message: 4910

Thanks all that replied on my ? MFJ, I have made a slinky hula loop,
and so far it tunes up on 80 and 40 and then my battery on the
Anneliser went flat.
I got the design from a friend it came from Practical Wireless Nov
2003 claimed to be very efficient Will let you know how it works
Tom
M0ZSA
Haywards Heath
West Sussex
UK

- In loopantennas@yahoogroups.com, "Tom" <tgleeman@...> wrote:
>
> Hello Tom and the loop Group,
>
> If you can get up to the upper corner of your ceiling and tape
> a white wire with white tape, then you can install an apartment
> loop as big as the entire apartment or largest room. I would use
> a 4:1 balun and a tuner in the mix as well.
>
> Yes, it won't have any angular adjustment, but it will be easier
> to tune for all bands.
>
> Careful on the ladder or let a fellow ham
> install it for you. As we know: "H. A. M."
> means "Helping All Mankind".
>
> Cheers.
>
> Tom
> KE6YNH, 73
> San Diego, CA
>
>
> [Non-text portions of this message have been removed]
>

4911. Re: BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 16:51:50 UTC
From: Bruce Conner
Topic: 4877 Message: 4911

Would it be possible to effectively seal a BNC connector with that self-fusing silicone tape? That stuff seems to do a good job on most things, so I'd think you could overwrap the whole connection with it and be OK. All depends on the configuration, I suppose.

There's also some sort of gummy putty that I've seen the cable guys use by just blobbing it over the connector. No idea what it's called or where to get it though.

Bruce
WB8OGK

4912. Re: [loopantennas] Re: BNC connector

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 19:28:50 UTC
From: Jeff
Topic: 4877 Message: 4912

I use it all the time and it works great.

http://www.coaxseal.com/

Jeff - NE0DX

> There's also some sort of gummy putty that I've seen the cable guys
> use by just blobbing it over the connector. No idea what it's called
> or where to get it though.

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.20.7/1283 - Release Date: 2/16/2008 2:16 PM

4913. Re: [loopantennas] Re: MetroBase Loops in photo section

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-19 21:10:34 UTC
From: aimo ruoho
Topic: 4896 Message: 4913

Thanks!
I have those prints of the KR1ST loop somewhere in my huge archive of photocopies.
Also I see an 8-angled (octagon) 1/2' copper tube loop parallel with my window. It doesn't have an amplifier of its own by now, nor is it equipped with a pickup-coil.
My problem is, that I don't have enough room in my shack to turn the loop around, so I have to wait for a little warmer nights to take it on my flat roof (upper patio, so to say) after I try to complete the whole thing first. It would be nice to find a low-cost step-motor for it, too...
So you can see, that there's some small effort here, too, my friend.
1978 I was in Big Apple, Brooklyn, President Street listening to South American stations during our 3 week stay with my son. We had the opportunity to spend time in a Jamaican born family. I used to climb up to their roof to admire the lights of the skyscrapers on Manhattan. What a mighty view!

But also the so-called citizens'-band (about 27/28 Mc)
was filled with people talking and talking... One young woman was behaving like "Lolita", that is, she was speaking so softly and sweet like the fairy-singers of Homer's journeys.

But, thanks for your interest!
73 from Aimo

metrobase201 <metrobase201@...> wrote:
--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Interesting, really!
>
> What are the measures of your copper tube loop?
> Have you cut the tube into 2 parts, or is it separated only on
the lower part?
> Thanks!
> Aimo
>
> metrobase201 <metrobase201@...> wrote:
> check them out.
> -Metrobase
>
>
>
>
>
>
>
> ---------------------------------
> Be a better friend, newshound, and know-it-all with Yahoo! Mobile.
Try it now.
>
> [Non-text portions of this message have been removed]

>
Hello Aimo, Thank you for your interest. My QTH is in New York City
(lots of noise here, and this loop helps).
It's a complete 10 feet (3 meters) of 1/2 inch (12.5mm) coiled copper
pipe. Once fashioned into a loop it comes out to a 3 foot
circumference circle. Credit however goes to KR1ST at
http://www.kr1st.com/swlloop.htm. Please check it to get an idea of
it. At first I built it just like at his site and it worked fine.
Then using this as a starting point, I made another with made my own
modifications. I placed the pick-up coil on top rather then at the
bottom. I got tired of standing up to adjust the capacitor so I place
that at the bottom. The whole positioning now is upside down and
added the air variable 365pf capacitors in parallel and switch that
take me down to about 2300 khz. Doing away with the junk box am/fm
capacitor. The frame is my design and rotates for directivity. It
really is a superb loop and have logged some tropical DX with, ie: In
South America its Brazil, Peru and Honduras. In Afica it's Burkino
Faso, Mauritania, Zambia and Chad plus others.

Hope to speak again with you,
Cheers
73's
-MetroBase 201

Looking for last minute shopping deals? Find them fast with Yahoo! Search.

[Non-text portions of this message have been removed]

4914. Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-20 00:07:08 UTC
From: Chris Trask
Topic: 4914 Message: 4914

I just completed testing a pair of complementary push-pull circuits for use with active amplifiers using commonly available parts, and the results were pleasantly surprising. With a 2N2222 and a 2N2907 pair as the output devices, the OIP2 and OIP3 were measured (not estimated) as being +68.5dBm and +44.25dBm, respectively. The details of all this plus much more can be found at:

http://www.home.earthlink.net/~christrask/Complementary Push-Pull Amplifiers.pdf

which is also available at the more convenient TinyURL of:

http://tinyurl.com/2gkndh

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4915. Re: [loopantennas] Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-20 12:20:44 UTC
From: aimo ruoho
Topic: 4914 Message: 4915

Very generous indeed from your part, Chris!

A stupid (?) idea came into my mind:
If there would raise interest among this group to get cheap these amplifiers, perhaps I could help by building (homebrewing) very neat and decent pieces? For 10 devices I only ask 1 for myself.
What is needed is construction drawings and boards for the components.
Because it is almost impossible to buy the parts here in Spain, there would be need to receive all parts preferably in one package from the U.S.A.

Perhaps someone could estimate a calculation for all costs for people to see, if it is worth going on?

Please note, that this is not a commercial, just a humble suggestion of a retired hobbyist!

Ofcource any other person may copy my idea for free. I'll be glad to pay for his/her work and both parts' and mailing costs. <For a small low cost package of "parts" there will not be any customs toll.>

Best regards to all, especially to Chris!
from Aimo

Chris Trask <christrask@...> wrote:
I just completed testing a pair of complementary push-pull circuits for
use with active amplifiers using commonly available parts, and the results
were pleasantly surprising. With a 2N2222 and a 2N2907 pair as the output
devices, the OIP2 and OIP3 were measured (not estimated) as being +68.5dBm
and +44.25dBm, respectively. The details of all this plus much more can be
found at:

http://www.home.earthlink.net/~christrask/Complementary Push-Pull
Amplifiers.pdf

which is also available at the more convenient TinyURL of:

http://tinyurl.com/2gkndh

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \

\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

4916. Re: [loopantennas] Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-20 13:30:30 UTC
From: Richards
Topic: 4914 Message: 4916

Hi Aimo -- I made the same offer to BMW to build exemplars of their prototype Z-8 roadster before they go into production.... I am still waiting for its reply.

;-)

Happy trails my friend. /// Richards - K8JHR ///
==========

aimo ruoho wrote:
>
perhaps I could help by building (homebrewing) very neat and decent pieces? For 10 devices I only ask 1 for myself. What is needed is construction drawings and boards for the components.

==========

4917. Re: [loopantennas] Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-20 13:48:57 UTC
From: Chris Trask
Topic: 4914 Message: 4917

I have a PC board designed for both of those circuits as well as one for my earlier transformer-coupled design. I have a couple more PCBs to design before I send the whole lot out for fabrication. I also have PCBs designed for the ferrite loop antenna and my earlier QEX loop antenna, plus I want to do one for a shielded loop version that requires a slightly different tuning network.

Now that we can have IMD performance comparable to that of the design that uses the obsolete 2N5160, the next goal is to address the NF of this class of amplifiers. Not that NF is a serious issue at HF frequencies and below, but it is for VHF and above. I have a design in mind, but it will require using the transformer-coupled design due to the lack of a low-noise P-channel device. It's also going to get the PCB treatment, this time without going through the prototype stage as I really don't like doing Ivan board prototypes with these itsy-bitsy SMT transistors.

-----Original Message-----
>From: aimo ruoho <aimounto@...>
>Sent: Feb 20, 2008 5:20 AM
>To: loopantennas@yahoogroups.com
>Subject: Re: [loopantennas] Complementary Push-Pull Amplifiers
>
>Very generous indeed from your part, Chris!
>
> A stupid (?) idea came into my mind:
> If there would raise interest among this group to get cheap these amplifiers, perhaps I could help by building (homebrewing) very neat and decent pieces? For 10 devices I only ask 1 for myself.
> What is needed is construction drawings and boards for the components.
> Because it is almost impossible to buy the parts here in Spain, there would be need to receive all parts preferably in one package from the U.S.A.
>
> Perhaps someone could estimate a calculation for all costs for people to see, if it is worth going on?
>
> Please note, that this is not a commercial, just a humble suggestion of a retired hobbyist!
>
> Ofcource any other person may copy my idea for free. I'll be glad to pay for his/her work and both parts' and mailing costs. <For a small low cost package of "parts" there will not be any customs toll.>
>
> Best regards to all, especially to Chris!
> from Aimo
>
>Chris Trask <christrask@...> wrote:
> I just completed testing a pair of complementary push-pull circuits for

>use with active amplifiers using commonly available parts, and the results
>were pleasantly surprising. With a 2N2222 and a 2N2907 pair as the output
>devices, the OIP2 and OIP3 were measured (not estimated) as being +68.5dBm
>and +44.25dBm, respectively. The details of all this plus much more can be
>found at:
>
>http://www.home.earthlink.net/~christrask/Complementary Push-Pull
>Amplifiers.pdf
>
>which is also available at the more convenient TinyURL of:
>
>http://tinyurl.com/2gkndh
>
>Chris
>
>,----------------------. High Performance Mixers and
>/ What's all this \ Amplifiers for RF Communications
>/ extinct stuff, anyhow? /
>\ _______,--------------' Chris Trask / N7ZWY
>_ |/ Principal Engineer
>oo\ Sonoran Radio Research
>(__)\ _ P.O. Box 25240
>\ \ .' `. Tempe, Arizona 85285-5240
>\ \ / \
>\ '" \ IEEE Senior Member #40274515
>. ( ) \
>'-|)__| :. \ Email: christrask@...
>| | | | \ '. http://www.home.earthlink.net/~christrask
>c__; c__; '-..'>.__
>
>Graphics by Loek Frederiks
>
>
>
>
>
>
>
>---------------------------------
>Never miss a thing. Make Yahoo your homepage.
>
>[Non-text portions of this message have been removed]
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research

(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4918. Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-20 19:52:16 UTC
From: Aimo Unto Olavi RUOHO
Topic: 4914 Message: 4918

HI!
Interesting!
Amusing!
Perhaps you had a good laugh with both of us, my honourable members?

I didn't mean my suggestion to be a joke.
And I didn't want to earn any money with it, although receiving money isn't too bad a purpose for any person like me as my pension isn't too high at all.(By mentioning that I am not begging any money from anybody!)

After all, this is purely a hobby to me, not a media to gain any economic win.

If I wanted to help others by putting together something, that might be interesting and so obviously beneficial to their listening to radio, but not too easy for them to homebrew, would anyone really be capable of to have a heart to stand up against it?

After reading Chris's emails I may possibly have understood something badly wrong?

I didn't notice any copyrights, but maybe I was too hasty reading? If so, I must apologize again, and not offer any unwanted and perhaps strongly forbidden "help" another time?

I may have broken your rules again...

Regrettingly very deeply,

your Aimo.

-- In loopantennas@yahoogroups.com, Richards <jruing@...> wrote:
>
> Hi Aimo -- I made the same offer to BMW to build exemplars of their
> prototype Z-8 roadster before they go into production.... I am
still
> waiting for its reply.
>
> ;-)
>
> Happy trails my friend. /// Richards - K8JHR ///
>
==========
>
> aimo ruoho wrote:
> >

> perhaps I could help by building (homebrewing) very neat and
decent
> pieces? For 10 devices I only ask 1 for myself. What is needed is
> construction drawings and boards for the components.
>
>
>
==========
=
>

4919. The PCB Fractal Loop Antenna model II

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 01:57:13 UTC
From: juan.m0wwa
Topic: 4919 Message: 4919

Hi all,
Just I uploaded the 10m PCB Fractal Loop Antenna, model II at Photos section.
This second model was designed with more wide tracks than model I to strengthen the overall antenna. The size now is 197mm x 197mm, 7.756 inches.
For more details, please visit my web site at
http://www.m0wwa.co.uk/page/projects.html
Thank you.
73s

Juan, M0WWA

4920. Re: [loopantennas] Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 03:25:20 UTC
From: Richards
Topic: 4914 Message: 4920

Aimo - my friend. You need to loosen up and take life at a more leisurely and slower, more fun pace. I poked some fun because I like you and thought you might get a little laugh out of it. No offense was intended and I was not intending to dampen your enthusiasm for the project you proposed. But I do not want to play if it is not going to be fun.

It is very difficult to communicate humor in this rather strile email medium. Always think if me as a good friend, sitting with you in the local pub or bistro, and we are talking and joking about the same thing. The only difficulty with this situation for you is that by closing time I will have lost my wallet...! ;-)

Happy trails and good luck. /// Richards - K8JHR ///
==========

Aimo Unto Olavi RUOHO wrote:

> Perhaps you had a good laugh with both of us, my honourable members?
>
> I didn't mean my suggestion to be a joke.

==========

4921. Re: [loopantennas] Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 13:56:30 UTC
From: Chris Trask
Topic: 4914 Message: 4921

>
> Aimo - my friend. You need to loosen up and take
> life at a more leisurely and slower, more fun pace.
> I poked some fun because I like you and thought you
> might get a little laugh out of it. No offense was
> intended and I was not intending to dampen your
> enthusiasm for the project you proposed. But I do
> not want to play if it is not going to be fun.
>
> It is very difficult to communicate humor in this
> rather strile email medium. Always think if me as a
> good friend, sitting with you in the local pub or
> bistro, and we are talking and joking about the same
> thing. The only difficulty with this situation for
> you is that by closing time I will have lost my
> wallet...! ;-)
>

I have found that it helps to make liberal use of "smilies" to show that you are joking or making a humourous remark, and they tend to be a universal language by themselves. This is especially true when joking with people whose first language is not English and they don't appreciate or comprehend the inflections of the language that we take as circumstance.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4922. Re: [loopantennas] Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 14:19:18 UTC
From: Chris Trask
Topic: 4914 Message: 4922

I'm at the point now where I'm contemplating having PC boards made for one or more of these amplifiers. Thus far I have the following three designs:

1. Transformer-coupled push-pull using a pair
of NE46134 or BFQ19 for the output stage.

2. Complementary push-pull output using J309
constant current source and BFQ19/BFQ149
output pair (Fig. 4 in the paper).

3. Complementary push-pull output using J309/J271
complementary input pair and BFQ19/BFQ149
output pair (Fig. 5 in the paper).

All three designs include ferrite beads for decoupling as well as a potentiometer for adjusting the bias current of the input stage for those who really feel a need to have something to adjust. The last two also include provision for adding a 1:1 wideband transformer for power supply decoupling so that the power can be sent up the cable.

I'm estimating that the cost of these boards will be in the vicinity of $US8 to $US10 with domestic USPS shipping. They will not have solder mask or silkscreen as that would almost double the cost of the boards in small quantities.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4923. Re: MetroBase Loops in photo section

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 15:23:05 UTC
From: metrobase201
Topic: 4896 Message: 4923

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Thanks!
> I have those prints of the KR1ST loop somewhere in my huge archive of photocopies.
> Also I see an 8-angled (octagon) 1/2' copper tube loop parallel with my window. It doesn't have an amplifier of its own by now, nor is it equipped with a pickup-coil.
> My problem is, that I don't have enough room in my shack to turn the loop around, so I have to wait for a little warmer nights to take it on my flat roof (upper patio, so to say) after I try to complete the whole thing first. It would be nice to find a low-cost step-motor
for it, too...
> So you can see, that there's some small effort here, too, my friend.
> 1978 I was in Big Apple, Brooklyn, President Street listening to South American stations during our 3 week stay with my son. We had the opportunity to spend time in a Jamaican born family. I used to climb up to their roof to admire the lights of the skyscrapers on Manhattan. What a mighty view!
>
> But also the so-called citizens'-band (about 27/28 Mc)
> was filled with people talking and talking... One young woman was behaving like "Lolita",
> that is, she was speaking so softly and sweet like the fairy-singers of Homer's journeys.
>
> But, thanks for your interest!
> 73 from Aimo
>
> metrobase201 <metrobase201@...> wrote:
> --- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@> wrote:
> >
> > Interesting, really!
> >
> > What are the measures of your copper tube loop?
> > Have you cut the tube into 2 parts, or is it separated only on
> the lower part?
> > Thanks!
> > Aimo
> >
> > metrobase201 <metrobase201@> wrote:
> > check them out.
> > -Metrobase
> >
> >
> >
> >
> >

> >
> > ---------------------------------
> > Be a better friend, newshound, and know-it-all with Yahoo! Mobile.
> Try it now.
> >
> > [Non-text portions of this message have been removed]
> >
> Hello Aimo, Thank you for your interest. My QTH is in New York City
> (lots of noise here, and this loop helps).
> It's a complete 10 feet (3 meters) of 1/2 inch (12.5mm) coiled copper
> pipe. Once fashioned into a loop it comes out to a 3 foot
> circumference circle. Credit however goes to KR1ST at
> http://www.kr1st.com/swlloop.htm. Please check it to get an idea of
> it. At first I built it just like at his site and it worked fine.
> Then using this as a starting point, I made another with made my own
> modifications. I placed the pick-up coil on top rather then at the
> bottom. I got tired of standing up to adjust the capacitor so I place
> that at the bottom. The whole positioning now is upside down and
> added the air variable 365pf capacitors in parallel and switch that
> take me down to about 2300 khz. Doing away with the junk box am/fm
> capacitor. The frame is my design and rotates for directivity. It
> really is a superb loop and have logged some tropical DX with, ie: In
> South America its Brazil, Peru and Honduras. In Afica it's Burkino
> Faso, Mauritania, Zambia and Chad plus others.
>
> Hope to speak again with you,
> Cheers
> 73's
> -MetroBase 201
>
>
>
>
>
>
> ---------------------------------
> Looking for last minute shopping deals? Find them fast with Yahoo! Search.
>
> [Non-text portions of this message have been removed]
>
Aimo,
Sorry I have'nt got back sooner, a little crazy here. I know it must be tough having to work
with a indoor SW antenna. All though they may be challedging, they can perform just as good as outdoor ones. I prefer magnetic loops, they have low-noise, can be rotated for nulling and tuned with a capacitor. They can also be home-brewed keeping cost down. I've had excellent results with the one in the photo. Please consider the 1/2 inch (12.5mm) coiled copper pipe and a small capacitor like at:
http://www.mtmscientific.com/capacitor.html ---or--- http://
www.midnightscience.com/catalog5.html#part2. Aimo, because of your space resriction

why not instead of copper pipe use coax RG8 or RG58 it's fexible enough and can give a little in a tight space. Food for thought. Anyway I know President St well being a native of
Brooklyn, and lived on Dean St for a while not far away. In 1978 I also was in brooklyn and was 20 years old, enjoying all the SW and CB DX in cycle 11 one of the best yet.
Let me know and I'll try to help if I can.

Regards
73's
KC2JXC
aka MetroBase201

4924. Re: [loopantennas] Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 17:00:24 UTC
From: Paul V Birke PEng
Topic: 4914 Message: 4924

Dear Chris

count me in for at least one board maybe two

OK let me say 2 now for sure !

best
Paul

----- Original Message ----
From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, February 21, 2008 9:19:18 AM
Subject: Re: [loopantennas] Complementary Push-Pull Amplifiers

I'm at the point now where I'm contemplating having PC boards made for one or more of these amplifiers. Thus far I have the following three designs:

1. Transformer- coupled push-pull using a pair

of NE46134 or BFQ19 for the output stage.

2. Complementary push-pull output using J309

constant current source and BFQ19/BFQ149

output pair (Fig. 4 in the paper).

3. Complementary push-pull output using J309/J271

complementary input pair and BFQ19/BFQ149

output pair (Fig. 5 in the paper).

All three designs include ferrite beads for decoupling as well as a potentiometer for adjusting the bias current of the input stage for those who really feel a need to have something to adjust. The last two also include provision for adding a 1:1 wideband transformer for power supply decoupling so that the power can be sent up the cable.

I'm estimating that the cost of these boards will be in the vicinity of $US8 to $US10 with domestic USPS shipping. They will not have solder mask or silkscreen as that would almost double the cost of the boards in small quantities.

Chris

,---------- --------- --. High Performance Mixers and

/ What's all this \ Amplifiers for RF Communications

/ extinct stuff, anyhow? /

\ _______,---- --------- -' Chris Trask / N7ZWY

_ |/ Principal Engineer

oo\ Sonoran Radio Research

(__)\ _ P.O. Box 25240

\ \ .' `. Tempe, Arizona 85285-5240

\ \ / \

\ '" \ IEEE Senior Member #40274515

. ( ) \

'-|)__| :. \ Email: christrask@earthlin k.net

| | | | \ '. http://www.home. earthlink. net/~christrask

c__; c__; '-..'>.__

Graphics by Loek Frederiks

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}

```
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
```

```
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

[Non-text portions of this message have been removed]

4925. Re:Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 10:44:15 UTC
From: i2NDT
Topic: 4914 Message: 4925

Chris,
if the diodes are entitled to compensate variations of the temperature, is it worth for them to be in "physical contact" with the hottest transistors? I remember I did such a thing in a VHF SSB power amplifier I built years ago

i2NDT Claudio

L'email della prossima generazione? Puoi averla con la nuova Yahoo! Mail

[Non-text portions of this message have been removed]

4926. Re:Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 10:49:51 UTC
From: i2NDT
Topic: 4914 Message: 4926

Chris,
if the diodes are entitled to compensate variations of the temperature, is it worth for them to be in "physical contact" with the hottest transistors? I remember I did such a thing in a VHF SSB power amplifier I built years ago

i2NDT Claudio

L'email della prossima generazione? Puoi averla con la nuova Yahoo! Mail

[Non-text portions of this message have been removed]

4927. Re: [loopantennas] Re:Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 17:13:12 UTC
From: Chris Trask
Topic: 4914 Message: 4927

>
> Chris,
> if the diodes are entitled to compensate variations of the
> temperature, is it worth for them to be in "physical contact"
> with the hottest transistors? I remember I did such a thing
> in a VHF SSB power amplifier I built years ago.
>
> i2NDT Claudio
>

For a power amplifier, yes as the temperatures will be elevated well
above ambient. For a small signal amplifier it's more a matter of sensing
the ambient temperature rather than that of the package, so close proximity
on the board is all that's really needed.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4928. Re: [loopantennas] Re: MetroBase Loops in photo section

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 22:18:37 UTC
From: aimo ruoho
Topic: 4896 Message: 4928

Thanks a lot for your nice email, Metrobase201!

I received today 2 RF amplifier kits from Australia. After I come back from assembly in Malaga, Fuengirola, I try to put together 1 of them to see, if I can pinpoint any interesting stations with it. I must bild the frame for a loop first and then put together the parts for an amplifier for AM, MW or SW. I wanted to test the other amplifier with the copper tube octangel loop I earlier made...
The kits came from www.oatleyelectronics.com .
Cost was Australian $ 22.50 each + pack post 17.39, all together in US $ 50.75.
Interesting to receive so many Australian stamps on the cover, 18 total! Most of them happened to be undamaged...
I'll email later, next week, if possible.
Best Regards,
Aimo

metrobase201 <metrobase201@...> wrote:
--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Thanks!
> I have those prints of the KR1ST loop somewhere in my huge archive of photocopies.
> Also I see an 8-angled (octagon) 1/2' copper tube loop parallel with my window. It doesn't have an amplifier of its own by now, nor is it equipped with a pickup-coil.
> My problem is, that I don't have enough room in my shack to turn the loop around, so I have to wait for a little warmer nights to take it on my flat roof (upper patio, so to say) after I try to complete the whole thing first. It would be nice to find a low-cost step-motor
for it, too...
> So you can see, that there's some small effort here, too, my friend.
> 1978 I was in Big Apple, Brooklyn, President Street listening to South American stations during our 3 week stay with my son. We had the opportunity to spend time in a Jamaican born family. I used to climb up to their roof to admire the lights of the skyscrapers on Manhattan. What a mighty view!
>
> But also the so-called citizens'-band (about 27/28 Mc)
> was filled with people talking and talking... One young woman was behaving like "Lolita",
> that is, she was speaking so softly and sweet like the fairy-singers of Homer's journeys.
>
> But, thanks for your interest!
> 73 from Aimo
>
> metrobase201 <metrobase201@...> wrote:
> --- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@> wrote:
> >

> > Interesting, really!
> >
> > What are the measures of your copper tube loop?
> > Have you cut the tube into 2 parts, or is it separated only on
> the lower part?
> > Thanks!
> > Aimo
> >
> > metrobase201 <metrobase201@> wrote:
> > check them out.
> > -Metrobase
> >
> >
> >
> >
> >
> >
> > ---------------------------------
> > Be a better friend, newshound, and know-it-all with Yahoo! Mobile.
> Try it now.
> >
> > [Non-text portions of this message have been removed]
> >
> Hello Aimo, Thank you for your interest. My QTH is in New York City
> (lots of noise here, and this loop helps).
> It's a complete 10 feet (3 meters) of 1/2 inch (12.5mm) coiled copper
> pipe. Once fashioned into a loop it comes out to a 3 foot
> circumference circle. Credit however goes to KR1ST at
> http://www.kr1st.com/swlloop.htm. Please check it to get an idea of
> it. At first I built it just like at his site and it worked fine.
> Then using this as a starting point, I made another with made my own
> modifications. I placed the pick-up coil on top rather then at the
> bottom. I got tired of standing up to adjust the capacitor so I place
> that at the bottom. The whole positioning now is upside down and
> added the air variable 365pf capacitors in parallel and switch that
> take me down to about 2300 khz. Doing away with the junk box am/fm
> capacitor. The frame is my design and rotates for directivity. It
> really is a superb loop and have logged some tropical DX with, ie: In
> South America its Brazil, Peru and Honduras. In Afica it's Burkino
> Faso, Mauritania, Zambia and Chad plus others.
>
> Hope to speak again with you,
> Cheers
> 73's
> -MetroBase 201
>
>
>
>
>

>
> ---------------------------------
> Looking for last minute shopping deals? Find them fast with Yahoo! Search.
>
> [Non-text portions of this message have been removed]
>
Aimo,
Sorry I have'nt got back sooner, a little crazy here. I know it must be tough having to work
with a indoor SW antenna. All though they may be challedging, they can perform just as good as outdoor ones. I prefer magnetic loops, they have low-noise, can be rotated for nulling and tuned with a capacitor. They can also be home-brewed keeping cost down. I've had excellent results with the one in the photo. Please consider the 1/2 inch (12.5mm) coiled copper pipe and a small capacitor like at:
http://www.mtmscientific.com/capacitor.html ---or--- http://
www.midnightscience.com/catalog5.html#part2. Aimo, because of your space resriction why not instead of copper pipe use coax RG8 or RG58 it's fexible enough and can give a little in a tight space. Food for thought. Anyway I know President St well being a native of
Brooklyn, and lived on Dean St for a while not far away. In 1978 I also was in brooklyn and was 20 years old, enjoying all the SW and CB DX in cycle 11 one of the best yet.
Let me know and I'll try to help if I can.

Regards
73's
KC2JXC
aka MetroBase201

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

4929. Re: [loopantennas] Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-21 22:37:18 UTC
From: aimo ruoho
Topic: 4914 Message: 4929

Thanks, Richards, for your consolation.
Surely you made a joke! I understood it like that, but unfortunately I just happened to see some possible sarcasm in it... Sorry for that, my friend. O.K.? No hard feelings anywhere. I admit, that I got overly enthusiastic, because such a noted professional person as Chris has started to give us so many good things, gifts, lately. I just wanted to show my eagerness to do at least something for our group's common benefit, because I see, that I have gained so much in my beloved hobby through you all.
I like your humor, Richards, so just go on making us laugh, why wouldn't you...

Aimo

Richards <jruing@...> wrote:
Aimo - my friend. You need to loosen up and take life at a more
leisurely and slower, more fun pace. I poked some fun because I like
you and thought you might get a little laugh out of it. No offense
was intended and I was not intending to dampen your enthusiasm for the
project you proposed. But I do not want to play if it is not going to
be fun.

It is very difficult to communicate humor in this rather strile email
medium. Always think if me as a good friend, sitting with you in the
local pub or bistro, and we are talking and joking about the same
thing. The only difficulty with this situation for you is that
by closing time I will have lost my wallet...! ;-)

Happy trails and good luck. /// Richards - K8JHR ///
==========

Aimo Unto Olavi RUOHO wrote:

> Perhaps you had a good laugh with both of us, my honourable members?
>
> I didn't mean my suggestion to be a joke.

==========

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

4930. Re: [loopantennas] Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-22 00:12:14 UTC
From: Richards
Topic: 4914 Message: 4930

My wife and I are planning another trip to Europe - very likely Spain
and Portugal... and if possible, I will find you and we will enjoy
something cold that will make us both happy. Not sure when, exactly,
but I will try to put you on my trip itinerary. What should we drink
with our Tapas...? Hmmmm... More later as plans come together.

/////////////// Richards //////////////

aimo ruoho wrote:
> Thanks, Richards, for your consolation.

==========

4931. Re: [loopantennas] Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-22 00:16:41 UTC
From: Richards
Topic: 4914 Message: 4931

Agreed - ;-)

/// Richards ///
==========

Chris Trask wrote:
>
> I have found that it helps to make liberal use of "smilies"

==========

4932. Re: MetroBase Loops in photo section

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-22 22:01:16 UTC
From: metrobase201
Topic: 4896 Message: 4932

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Thanks a lot for your nice email, Metrobase201!
>
> I received today 2 RF amplifier kits from Australia. After I come back from assembly in Malaga, Fuengirola, I try to put together 1 of them to see, if I can pinpoint any interesting
stations with it. I must bild the frame for a loop first and then put together the parts for an
amplifier for AM, MW or SW. I wanted to test the other amplifier with the copper tube octangel loop I earlier made...
> The kits came from www.oatleyelectronics.com .
> Cost was Australian $ 22.50 each + pack post 17.39, all together in US $ 50.75.
> Interesting to receive so many Australian stamps on the cover, 18 total! Most of them happened to be undamaged...
> I'll email later, next week, if possible.
> Best Regards,
> Aimo
>
>
> metrobase201 <metrobase201@...> wrote:
> --- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@> wrote:
> >
> > Thanks!
> > I have those prints of the KR1ST loop somewhere in my huge archive of photocopies.
> > Also I see an 8-angled (octagon) 1/2' copper tube loop parallel with my window. It
> doesn't have an amplifier of its own by now, nor is it equipped with a pickup-coil.
> > My problem is, that I don't have enough room in my shack to turn the loop around, so I
> have to wait for a little warmer nights to take it on my flat roof (upper patio, so to say)
> after I try to complete the whole thing first. It would be nice to find a low-cost step-motor
> for it, too...
> > So you can see, that there's some small effort here, too, my friend.
> > 1978 I was in Big Apple, Brooklyn, President Street listening to South American stations
> during our 3 week stay with my son. We had the opportunity to spend time in a Jamaican
> born family. I used to climb up to their roof to admire the lights of the skyscrapers on
> Manhattan. What a mighty view!
> >
> > But also the so-called citizens'-band (about 27/28 Mc)
> > was filled with people talking and talking... One young woman was behaving like
> "Lolita",

> > that is, she was speaking so softly and sweet like the fairy-singers of Homer's
> journeys.
> >
> > But, thanks for your interest!
> > 73 from Aimo
> >
> > metrobase201 <metrobase201@> wrote:
> > --- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@> wrote:
> > >
> > > Interesting, really!
> > >
> > > What are the measures of your copper tube loop?
> > > Have you cut the tube into 2 parts, or is it separated only on
> > the lower part?
> > > Thanks!
> > > Aimo
> > >
> > > metrobase201 <metrobase201@> wrote:
> > > check them out.
> > > -Metrobase
> > >
> > >
> > >
> > >
> > >
> > >
> > > ---------------------------------
> > > Be a better friend, newshound, and know-it-all with Yahoo! Mobile.
> > Try it now.
> > >
> > > [Non-text portions of this message have been removed]
> > >
> > Hello Aimo, Thank you for your interest. My QTH is in New York City
> > (lots of noise here, and this loop helps).
> > It's a complete 10 feet (3 meters) of 1/2 inch (12.5mm) coiled copper
> > pipe. Once fashioned into a loop it comes out to a 3 foot
> > circumference circle. Credit however goes to KR1ST at
> > http://www.kr1st.com/swlloop.htm. Please check it to get an idea of
> > it. At first I built it just like at his site and it worked fine.
> > Then using this as a starting point, I made another with made my own
> > modifications. I placed the pick-up coil on top rather then at the
> > bottom. I got tired of standing up to adjust the capacitor so I place
> > that at the bottom. The whole positioning now is upside down and
> > added the air variable 365pf capacitors in parallel and switch that
> > take me down to about 2300 khz. Doing away with the junk box am/fm
> > capacitor. The frame is my design and rotates for directivity. It
> > really is a superb loop and have logged some tropical DX with, ie: In
> > South America its Brazil, Peru and Honduras. In Afica it's Burkino
> > Faso, Mauritania, Zambia and Chad plus others.
> >

> > Hope to speak again with you,
> > Cheers
> > 73's
> > -MetroBase 201
> >
> >
> >
> >
> >
> >
> > ---------------------------------
> > Looking for last minute shopping deals? Find them fast with Yahoo! Search.
> >
> > [Non-text portions of this message have been removed]
> >
> Aimo,
> Sorry I have'nt got back sooner, a little crazy here. I know it must be tough having to
work
> with a indoor SW antenna. All though they may be challedging, they can perform just as
> good as outdoor ones. I prefer magnetic loops, they have low-noise, can be rotated for
> nulling and tuned with a capacitor. They can also be home-brewed keeping cost down.
I've
> had excellent results with the one in the photo. Please consider the 1/2 inch (12.5mm)
> coiled copper pipe and a small capacitor like at:
> http://www.mtmscientific.com/capacitor.html ---or--- http://
> www.midnightscience.com/catalog5.html#part2. Aimo, because of your space resriction
> why not instead of copper pipe use coax RG8 or RG58 it's fexible enough and can give a
> little in a tight space. Food for thought. Anyway I know President St well being a native
of
> Brooklyn, and lived on Dean St for a while not far away. In 1978 I also was in brooklyn
and
> was 20 years old, enjoying all the SW and CB DX in cycle 11 one of the best yet.
> Let me know and I'll try to help if I can.
>
> Regards
> 73's
> KC2JXC
> aka MetroBase201
>
>
>
>
>
>
> ---------------------------------
> Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.
>
> [Non-text portions of this message have been removed]
>
Great I check out http://secure.oatleyelectronics.com very nice site and interesting

antenna kit. Good luck with that and keep me in the loop (ha, ha no pun intended). I will check back here for messages from time to time.
Cheers,
good DX
-MetroBase201

4933. Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 05:06:38 UTC
From: renopithicus
Topic: 4933 Message: 4933

I like small, tuned loop antennas. I regularly use one on 20 meters that has a radiating element made out of 1/4 inch diameter copper refrigeration tubing. This 1/4 inch tubing works well, and as a radiating element it is much, much more efficient than, say, 10 gauge copper wire.

Of course, an even larger diameter tubing would be more efficient still, but large diameter copper tubing is expensive and very heavy. So, I wonder if anyone has suggestions about what else I might try. I'm looking for something that's fat, but still lightweight and reasonably flexible.

Thanks,

Steve

4934. RE: [loopantennas] Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 14:09:23 UTC
From: Bill McGraw
Topic: 4933 Message: 4934

Steve,

Give me a complete description of your tuned loop antenna, details I can grasp, especially an old 63-yr old newbie can understand.

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of renopithicus
Sent: Friday, February 22, 2008 11:07 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Radiating element for small (less than a quarter wavelength), tuned loop

I like small, tuned loop antennas. I regularly use one on 20 meters that has a radiating element made out of 1/4 inch diameter copper refrigeration tubing. This 1/4 inch tubing works well, and as a radiating element it is much, much more efficient than, say, 10 gauge copper wire.

Of course, an even larger diameter tubing would be more efficient still, but large diameter copper tubing is expensive and very heavy. So, I wonder if anyone has suggestions about what else I might try. I'm looking for something that's fat, but still lightweight and reasonably flexible.

Thanks,

Steve

[Non-text portions of this message have been removed]

4935. MW DXing Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 00:28:12 UTC
From: Jeff T. Casey
Topic: 4935 Message: 4935

Hi gang,

I'm relatively new to mediumwave DXing and I have a couple of questions that I'm hoping someone here would be willing to answer. My apologies for the fact that my questions are not specifically about loop antennas -- I asked these questions on a DXing list, but received no response.

When a US AM station is listed as running a certain power level during "critical hours," when are the critical hours?

How does one find out what a US or Canadian AM station's day and night antenna radiation patterns look like? Is there a database of radiation patterns somewhere on the web?

Is there a term for the frustrating AM reception phenomenon whereby a signal fades for a few seconds such that speech becomes temporarily distorted to the point of unintelligibility, despite the signal still being strong enough that it seems it should be readable? Is the term for this "selective-fade distortion" or does that refer to something different? Does this phenomenon have something to do with multipath reception or is it caused by something else? Is the main purpose of synchronous detectors to reduce this annoying effect? If not, then what is the purpose of a synchronous detector and how useful are they?

Thanks very much & 73,
Jeff
NE2J (formerly WB5GWB)

4936. RE: [loopantennas] MW DXing Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 16:27:59 UTC
From: Wild, Larry
Topic: 4935 Message: 4936

From Wikipedia...
Critical Hours is that time from sunrise to two hours after sunrise, and from two hours before sunset until sunset, local time.

Day and Night pattern:
Go to http://www.radio-locator.com/, enter your stations call letters and hit go. If there is more than one station with that call letter, fox example Wxxx and Wxxx-FM, click the information link (little yellow box). In the technical information box is a link to the stations day time and night time coverage map. If you clink on the link following Transmitter Location, Google Maps will open showing where the transmitter is located. If you go to the satellite view you can often see the tower. It's real cool.

Hope this helps
LarryWild
Aberdeen, SD

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of Jeff T. Casey
Sent: Friday, February 22, 2008 6:28 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] MW DXing Questions

Hi gang,

I'm relatively new to mediumwave DXing and I have a couple of questions that I'm hoping someone here would be willing to answer. My apologies for the fact that my questions are not specifically about loop antennas -- I asked these questions on a DXing list, but received no response.

When a US AM station is listed as running a certain power level during "critical hours," when are the critical hours?

How does one find out what a US or Canadian AM station's day and night antenna radiation patterns look like? Is there a database of radiation patterns somewhere on the web?

Is there a term for the frustrating AM reception phenomenon whereby a signal fades for a few seconds such that speech becomes temporarily distorted to the point of unintelligibility, despite the signal

still being strong enough that it seems it should be
readable? Is the term for this "selective-fade
distortion" or does that refer to something different?
Does this phenomenon have something to
do with multipath reception or is it caused by
something else? Is the main purpose of synchronous
detectors to reduce this annoying effect? If not,
then what is the purpose of a synchronous detector and
how useful are they?

Thanks very much & 73,
Jeff
NE2J (formerly WB5GWB)

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and
GIF into Photos. Please convert BMP or TIF to JPG or GIF before
uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!
Yahoo! Groups Links

4937. Re: [loopantennas] MW DXing Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 17:51:27 UTC
From: Jim Dunstan
Topic: 4935 Message: 4937

At 04:28 PM 2/22/2008 -0800, you wrote:

>Hi gang,
>
>I'm relatively new to mediumwave DXing and I have a
>couple of questions that I'm hoping someone here would
>be willing to answer. My apologies for the fact that
>my questions are not specifically about loop antennas
>-- I asked these questions on a DXing list, but
>received no response.
>
>When a US AM station is listed as running a certain
>power level during "critical hours," when are the
>critical hours?

Hi Jeff,

I'm not an expert ... but I do like DXing MW to a degree. To me MW dxing is done during the day. AM broadcast stations are generally licensed a differential power limit ... higher during the day than the night. There are some so called 'clear channels' where within which stations are licensed full power day and night ... up to the maximum. There may be some others who can elaborate on this. The differential power limit makes sense ... since once evening skip moves in all bets are off and a 500 watt station on the other side of the continent can come in with the same strength as the 5KW station located 20 miles away.

>How does one find out what a US or Canadian AM
>station's day and night antenna radiation patterns
>look like? Is there a database of radiation patterns
>somewhere on the web?

Again, station locations and licensed power is generally available ... however I am not aware of radiation patterns vs-a-vs licensing let alone publication. I would be interested to know if it is.

>Is there a term for the frustrating AM reception
>phenomenon whereby a signal fades for a few seconds
>such that speech becomes temporarily distorted
>to the point of unintelligibility, despite the signal
>still being strong enough that it seems it should be
>readable? Is the term for this "selective-fade
>distortion" or does that refer to something different?
>Does this phenomenon have something to
>do with multipath reception or is it caused by
>something else? Is the main purpose of synchronous

>detectors to reduce this annoying effect? If not,
>then what is the purpose of a synchronous detector and
>how useful are they?

As I mentioned, to me MW dxing is a daytime occupation. However I am sure there are other serious MW dxers that listen at night. In which case dealing with QRM, cross modulation, fading, and all kinds of other interference is the object. For example if you are interested in verifying reception of particular stations at particular locations thousands of miles away you will need good directional antennas, an excellent receiver that can deal with multiple overload signals, and means of dealing with fading.. Some of the die hard dxers use various techniques to cancel qrm and fading using antenna phasing.

Your particular question about synchronous detection .... it helps .... however I use it primarily on weak SW broadcast reception. There may be some MW nighttime dxers who can say more.

>Thanks very much & 73,
>Jeff
>NE2J (formerly WB5GWB)
>
>_

73

Jim, VE3CI

>434928.jpg
>

[Non-text portions of this message have been removed]

4938. Re: MW DXing Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 18:31:18 UTC
From: cank13cat
Topic: 4935 Message: 4938

Hi, Jeff,

An excellent resource is, believe it or not, the FCC database. Gummint websites don't always work well but the FCC database is an exception. Lots of info about stations, how much power they run day/night, etc. Even some info about Mexican stations that can be heard in the U.S.

http://www.fcc.gov/searchtools.html

Regarding broadcast patterns, some MW stations offer this info on their websites. WHO 1040 in Des Moines, for example, has some interesting info. It's often buried. Station managers and engineers are surprisingly receptive to questions and often welcome e-mail with questions about their operations and may direct you to where the technical info is buried on their websites.

You interpreted correctly the purpose of synchronous detection. Since DXing often involves direct and skywave propagation some interesting and quirky behavior can occur, which sync detectors can really help with.

For example, WBCQ transmits, nominally, on 5110 kHz in AM from afternoons through the night. Their transmitter is located in Maine. I'm in Texas. If I'm recalling correctly they're putting out 50,000 watts, but judging from the photos on their website the antenna is just a Yagi, no different from what many hams use. By the time that signal reaches me it's mostly fluttery skywave and centers around 5111.2 kHz. It's weak in normal AM mode, usable in USB and invisible in LSB. This is one signal where the sync detector on my Sony ICF-2010 shines. If I tune to 5111 kHz I get nothing; 5111.4, nuttin'; when I reach 5111.2 it pops into tune. The signal is never strong, but the sync detector grabs it and locks it in.

With strong signals the sync detector is useless and can even produce distortion. With deep fades it will continually lose lock. And, at least with the Sony (probably because the filters are too wide), the sync detector doesn't help isolate reception when two powerful stations are less than 10 kHz apart, which often occurs in the 49 meter SW band and some other popular broadcast bands. The reason it works so well with WBCQ is because while the signal is weak and off-frequency, it's relatively steady and there's no adjacent station.

So sometimes it's magic, sometimes it does nothing useful. I haven't found it to be particularly useful in isolating one station out of a crowd on the same frequency in the MW band. For example, there's a classical music station out of Kansas City on 1660 kHz. Pretty good signal to Texas, but there are at least two sports/talk stations on

the same freq. The sync detector can't help with this problem by
itself. It needs a highly direction antenna. (I'm hoping to squeeze
either a Wellbrook or Quantum loop into the budget this year.)

Hope this helps.

--- In loopantennas@yahoogroups.com, "Jeff T. Casey" <ne2j@...> wrote:
>
> Hi gang,
>
> I'm relatively new to mediumwave DXing and I have a
> couple of questions that I'm hoping someone here would
> be willing to answer. My apologies for the fact that
> my questions are not specifically about loop antennas
> -- I asked these questions on a DXing list, but
> received no response.
>
> When a US AM station is listed as running a certain
> power level during "critical hours," when are the
> critical hours?
>
> How does one find out what a US or Canadian AM
> station's day and night antenna radiation patterns
> look like? Is there a database of radiation patterns
> somewhere on the web?
>
> Is there a term for the frustrating AM reception
> phenomenon whereby a signal fades for a few seconds
> such that speech becomes temporarily distorted
> to the point of unintelligibility, despite the signal
> still being strong enough that it seems it should be
> readable? Is the term for this "selective-fade
> distortion" or does that refer to something different?
> Does this phenomenon have something to
> do with multipath reception or is it caused by
> something else? Is the main purpose of synchronous
> detectors to reduce this annoying effect? If not,
> then what is the purpose of a synchronous detector and
> how useful are they?
>
> Thanks very much & 73,
> Jeff
> NE2J (formerly WB5GWB)
>

4939. Re: [loopantennas] MW DXing Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 20:13:03 UTC
From: Jay Heyl
Topic: 4935 Message: 4939

On Sat, Feb 23, 2008 at 12:51 PM, Jim Dunstan <jdunstan@...> wrote:

>
> I'm not an expert ... but I do like DXing MW to a degree. To me MW dxing
> is done during the day. AM broadcast stations are generally licensed a

Day time is certainly when you should do comparative tests for sensitivity. Far, far too many people listen at night, hear a 50kW station 1500 miles away, and declare that receiver "X" is extremely sensitive. The reality is often that almost any receiver would be able to hear that powerhouse station under those conditions. During the day you have almost no skywave reception on MW. It's almost entirely groundwave. This makes for a level playing field and is when the differences in sensitivity between receivers should be most apparent.

However, most MW DXers would disagree with the contention that MW DXing is a day time activity. It depends to some extent on exactly how one defines "DX". Most serious DXers would agree it's not just a matter of distance. I think most would hang the definition on how unusual a reception is. I regularly hear the 50kW barn burners from New York, Chicago, and Detroit. I don't consider them DX even though they're all close to 1000 miles away. Yet, hearing a 500W station that's 200 miles away might well be considered DX, day time or night time.

I consider DX to be the catch that's not something that's regularly heard. It can occur day time or night time. This obviously depends on you being familiar with what's normal for your area, which takes a lot of time at the dials.

> ... since once evening skip moves in all bets are off and a 500 watt
> station on the other side of the continent can come in with the same
> strength as the 5KW station located 20 miles away.

If the 5kW station is on the other side of a huge mountain, maybe. It used to be a 500W signal could carry a very great distance at night. Today, though, there are so many stations and so much pollution of the RF spectrum that hearing a 500W station from the other side of the continent would be great cause for celebration.

If you want to do low power DX these days you need to move down to LW and listen for beacons. That's where, with the right equipment, you can hear a 25W transmitter 5000 miles away.

-- Jay

[Non-text portions of this message have been removed]

4940. Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 21:55:43 UTC
From: renopithicus
Topic: 4933 Message: 4940

--- In loopantennas@yahoogroups.com, "Bill McGraw" <mcgr3799@...> wrote:
>
> Steve,
>
> Give me a complete description of your tuned loop antenna, details I
can
> grasp, especially an old 63-yr old newbie can understand.
>
>
>
> William W."Bill" McGraw
> "Somewhere South of Chicago"
> Greenville, MS 38701
>
>

Well, my 20 meter loop consists of a 13 ft length of 1/4 inch copper tubing, fashioned into a circle and tuned with a butterfly capacitor. The copper tubing is great to work with because it is flexible but still stiff enough to hold the shape of a circle. The loop is fed with a short run of coax. Upon tuning the loop I'm just about always able to achieve a 1:1.2 or better SWR on 20 meters.

This is a modest little antenna, but it works. Today there was a Mississippi QSO party going on, and from my home in Brooklyn, NY I was getting 5 and 9 signal reports from these guys on the Gulf Coast. It was like shooting fish in a barrel. So, performance-wise it's about as good as it gets for a limited space antenna. It's not going to break through big pileups, but with patience it will get you some interesting contacts.

I hope this information is helpful.

Steve

4941. Re: [loopantennas] Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 22:15:56 UTC
From: Ray Phillips
Topic: 4933 Message: 4941

Renopithicus,

First idea.

Instead of using one "fat" conductor, how about trying a number of parallel conductors arranged as a single fat conductor? Maybe use a piece of thick-but-flexible irrigation pipe as the support for the loop and glue the conductors to its outside. Wrap a bare wire around each end to join the conductors together (solder each connection). Imagine a line drawing of a toroid with an air gap. I'd try six single core conductors first.

I don't know how well it would work, what the multiple conductors would do to the inductance of the loop or any other parameters. I'm just putting this up as an "out there" idea.

Antenna modellers, do I crash and burn on this one or does it have validity?

Second idea.

Take the loop of irrigation pipe and wrap it with copper foil tape (sometimes on eBay under crafts). Solder the overlaps frequently so that it doesn't turn into a multi-turn toriod.

I don't know how they will work but logic tells me that the Q of these loops would be ginormous. This would make tuning precise, to say the least. I would recommend a vernier-driven tuning capacitor.

Ray,
vk5fyar

4942. Re: [loopantennas] MW DXing Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 22:25:07 UTC
From: Jim Dunstan
Topic: 4935 Message: 4942

At 03:13 PM 2/23/2008 -0500, you wrote:

>On Sat, Feb 23, 2008 at 12:51 PM, Jim Dunstan
><<mailto:jdunstan%40tbaytel.net>jdunstan@...> wrote:
>
> >
> > I'm not an expert ... but I do like DXing MW to a degree. To me MW dxing
> > is done during the day. AM broadcast stations are generally licensed a
>
>Day time is certainly when you should do comparative tests for sensitivity.
>Far, far too many people listen at night, hear a 50kW station 1500 miles
>away, and declare that receiver "X" is extremely sensitive. The reality is
>often that almost any receiver would be able to hear that powerhouse station
>under those conditions. During the day you have almost no skywave reception
>on MW. It's almost entirely groundwave. This makes for a level playing field
>and is when the differences in sensitivity between receivers should be most
>apparent.

I agree with you. I am in a rather unique situation at my QTH ... in that there are now no local MW broadcast stations ... the last one on 580 KHZ changed over to FM .... All MW broad cast stations are south of me in Minn. and Wis. ... I have logged over 50 daytime stations ... the closest station is 150 miles away.

>However, most MW DXers would disagree with the contention that MW DXing is a
>day time activity. It depends to some extent on exactly how one defines
>"DX". Most serious DXers would agree it's not just a matter of distance. I
>think most would hang the definition on how unusual a reception is. I
>regularly hear the 50kW barn burners from New York, Chicago, and Detroit. I
>don't consider them DX even though they're all close to 1000 miles away.
>Yet, hearing a 500W station that's 200 miles away might well be considered
>DX, day time or night time.

I agree with you again. Nighttime MW DX is a different situation all together. For example if you want to log a MW broadcast station located on Tenerife you have no choice but to listen during the evening hours ... here the challenge is to deal with QRM and the other vagaries of the MW band when skip is in full swing hi hi.

>I consider DX to be the catch that's not something that's regularly heard.
>It can occur day time or night time. This obviously depends on you being
>familiar with what's normal for your area, which takes a lot of time at the
>dials.

What is real DX on the MW band is a matter of perspective and individual taste. Whether you log Tenerife at night, 1200 miles away ... or a 500

watt station on the Iron Range during the day, in Minn. 200 miles away ...
is a mute point. The skill and technique in either case is different ...
and in both cases a lot of fun.

> > ... since once evening skip moves in all bets are off and a 500 watt
> > station on the other side of the continent can come in with the same
> > strength as the 5KW station located 20 miles away.
>
>If the 5kW station is on the other side of a huge mountain, maybe. It used
>to be a 500W signal could carry a very great distance at night. Today,
>though, there are so many stations and so much pollution of the RF spectrum
>that hearing a 500W station from the other side of the continent would be
>great cause for celebration.
>
>If you want to do low power DX these days you need to move down to LW and
>listen for beacons. That's where, with the right equipment, you can hear a
>25W transmitter 5000 miles away.

You are raising the challenge hi hi ... maybe I will give it a listen Jay

Jim

[Non-text portions of this message have been removed]

4943. Re: [loopantennas] Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-23 23:21:03 UTC
From: Jim Dunstan
Topic: 4933 Message: 4943

At 08:45 AM 2/24/2008 +1030, you wrote:

>Renopithicus,
>
>First idea.
>
>Instead of using one "fat" conductor, how about trying a number of
>parallel conductors arranged as a single fat conductor? Maybe use a piece
>of thick-but-flexible irrigation pipe as the support for the loop and glue
>the conductors to its outside. Wrap a bare wire around each end to join
>the conductors together (solder each connection). Imagine a line drawing
>of a toroid with an air gap. I'd try six single core conductors first.
>
>I don't know how well it would work, what the multiple conductors would do
>to the inductance of the loop or any other parameters. I'm just putting
>this up as an "out there" idea.
>
>Antenna modellers, do I crash and burn on this one or does it have validity?
>
>Second idea.
>
>Take the loop of irrigation pipe and wrap it with copper foil tape
>(sometimes on eBay under crafts). Solder the overlaps frequently so that
>it doesn't turn into a multi-turn toriod.
>
>I don't know how they will work but logic tells me that the Q of these
>loops would be ginormous. This would make tuning precise, to say the
>least. I would recommend a vernier-driven tuning capacitor.
>
>Ray,
>vk5fyar

Hi Ray,

Maybe I am missing something ... eg the theory behind 'Litz' wire ... but the surface of a wire is directly related to its circumference. Circumference is determined by the factor of 'Pi' or 3.14. What this says to me is that a wire with a diam. of '1' has a surface of '3.14' and a 'fat' wire with a diameter of 4 has a surface of 4 x 3.14 = 12.56. An if I create a 'mult-wire' of 4 wires each with a dia. of 1 ... the surface of this multi-wire will be 4 x 3.14 = 12.56 !! exactly the same as the fat wire.

Not all is lost!

The weight of the wire is directly related to the cross section of the wire. So the cross section of a 1" dia. wire is PI x R squared or 3.14 x .5 x .5 = .785 Four wires would weigh .785 x 4 = 3.14

The weight of a wire with 4 times the diameter would be 3.14 x 2 x2 = 12.56 !!! or 4 times as much !!!

So there you go, a wire antenna made of 4 separate strands would have 1/4 the weight of a single strand having the same surface area.

Jim, VE3CI

4944. RE: [loopantennas] Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 02:11:52 UTC
From: Bill McGraw
Topic: 4933 Message: 4944

Steve,

Thanks for that but which butterfly cap do you use? Can I assume I could use another variable cap? Make one?

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

Well, my 20 meter loop consists of a 13 ft length of 1/4 inch copper tubing, fashioned into a circle and tuned with a butterfly capacitor. The copper tubing is great to work with because it is flexible but still stiff enough to hold the shape of a circle. The loop is fed with a short run of coax. Upon tuning the loop I'm just about always able to achieve a 1:1.2 or better SWR on 20 meters.

This is a modest little antenna, but it works. Today there was a Mississippi QSO party going on, and from my home in Brooklyn, NY I was getting 5 and 9 signal reports from these guys on the Gulf Coast. It was like shooting fish in a barrel. So, performance-wise it's about as good as it gets for a limited space antenna. It's not going to break through big pileups, but with patience it will get you some interesting contacts.

I hope this information is helpful.

Steve

–

[Non-text portions of this message have been removed]

4945. RE: [loopantennas] Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 02:59:09 UTC
From: Bill McGraw
Topic: 4933 Message: 4945

Is it the cross sectional area for resistance or actual external area of the wire for reception? If it is external area, then there is no advantage in smaller wire diameters. I can see where thin copper strips would give more area with less resistance (?). Set me straight as my physics is getting confused with geometry.

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Jim Dunstan
Sent: Saturday, February 23, 2008 5:21 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Radiating element for small (less than a quarter wavelength), tuned loop

At 08:45 AM 2/24/2008 +1030, you wrote:

>Renopithicus,
>
>First idea.
>
>Instead of using one "fat" conductor, how about trying a number of
>parallel conductors arranged as a single fat conductor? Maybe use a piece
>of thick-but-flexible irrigation pipe as the support for the loop and glue
>the conductors to its outside. Wrap a bare wire around each end to join
>the conductors together (solder each connection). Imagine a line drawing
>of a toroid with an air gap. I'd try six single core conductors first.
>
>I don't know how well it would work, what the multiple conductors would do
>to the inductance of the loop or any other parameters. I'm just putting
>this up as an "out there" idea.
>
>Antenna modellers, do I crash and burn on this one or does it have
validity?
>
>Second idea.
>
>Take the loop of irrigation pipe and wrap it with copper foil tape
>(sometimes on eBay under crafts). Solder the overlaps frequently so that
>it doesn't turn into a multi-turn toriod.
>
>I don't know how they will work but logic tells me that the Q of these

>loops would be ginormous. This would make tuning precise, to say the
>least. I would recommend a vernier-driven tuning capacitor.
>
>Ray,
>vk5fyar

Hi Ray,

Maybe I am missing something ... eg the theory behind 'Litz' wire ... but the surface of a wire is directly related to its circumference. Circumference is determined by the factor of 'Pi' or 3.14. What this says to me is that a wire with a diam. of '1' has a surface of '3.14' and a 'fat' wire with a diameter of 4 has a surface of 4 x 3.14 = 12.56. An if I create a 'mult-wire' of 4 wires each with a dia. of 1 ... the surface of this multi-wire will be 4 x 3.14 = 12.56 !! exactly the same as the fat wire.

Not all is lost!

The weight of the wire is directly related to the cross section of the wire. So the cross section of a 1" dia. wire is PI x R squared or 3.14 x .5 x .5 = .785 Four wires would weigh .785 x 4 = 3.14

The weight of a wire with 4 times the diameter would be 3.14 x 2 x2 = 12.56 !!! or 4 times as much !!!

So there you go, a wire antenna made of 4 separate strands would have 1/4 the weight of a single strand having the same surface area.

Jim, VE3CI

[Non-text portions of this message have been removed]

4946. Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 03:32:54 UTC
From: Michael Hebert
Topic: 4933 Message: 4946

Bill,

Think in terms of skin-depth at the frequency range of interest then use multiple-parallel strands whose radius is at least 10% of the skin-depth (90% of the signal current flows in the 10% of cross-sectional area closest to the surface. The idea of multiple parallel strands is to increase the surface area while simultaneously decreasing the ratio of conductor resistance to radiation resistance.

73,

'Bear' NH7SR

4947. Re: [loopantennas] Radiating element for small (less than a quarter wavelengt...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 03:35:10 UTC
From: sonicxcove@aol.com
Topic: 4947 Message: 4947

In a message dated 2/23/2008 12:06:46 A.M. Eastern Standard Time,
sdaniel13@... writes:

Of course, an even larger diameter tubing would be more efficient
still, but large diameter copper tubing is expensive and very heavy.
So, I wonder if anyone has suggestions about what else I might try. I'm
looking for something that's fat, but still lightweight and reasonably
flexible.

Thanks,

Steve

You could always buy a roll of aluminum refrigeration tubing.

Eric

**********Ideas to please picky eaters. Watch video on AOL Living.
(http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/
2050827?NCID=aolcmp00300000002598)

[Non-text portions of this message have been removed]

4948. Re: [loopantennas] Radiating element for small (less than a quarter wavelengt...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 05:04:00 UTC
From: toddroberts2001@aol.com
Topic: 4947 Message: 4948

In a message dated 2/23/2008 10:35:45 P.M. Eastern Standard Time,
sonicxcove@... writes:
Of course, an even larger diameter tubing would be more efficient
still, but large diameter copper tubing is expensive and very heavy.
So, I wonder if anyone has suggestions about what else I might try. I'm
looking for something that's fat, but still lightweight and reasonably
flexible.
Thanks,
Steve

I built a nice-working transmitting loop using a 2 inch wide strip of lightweight copper flashing. A 2 inch wide copper strip is about equal to 1 1/4 inch diameter tubing in surface area.

The skin depth at shortwave frequencies is only a few mils so copper flashing about 10 mils thick will work fine. The loop I built was supported by a wooden frame using pieces of white PVC pipe for insulators to support the copper strip. Someone could come up with a suitable plastic frame also.

With a little ingenuity someone could build a folding frame for easier storage or transport then fold it open using the flexible copper flashing strip. Would be great for portable use.

73 Todd WD4NGG

**********Ideas to please picky eaters. Watch video on AOL Living.
(http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/2050827?NCID=aolcmp00300000002598)

4949. Re: [loopantennas] Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 05:55:35 UTC
From: Paul V Birke PEng
Topic: 4933 Message: 4949

The idea of multiple parallel INSULATED strands is to increase the surface area while simultaneously decreasing the ratio of conductor resistance to radiation resistance.

a German invention for quite a while back

best Paul

[Non-text portions of this message have been removed]

4950. Re: [loopantennas] Radiating element for small (less than a quarter wavelengt...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 05:58:57 UTC
From: Paul V Birke PEng
Topic: 4947 Message: 4950

----- Original Message ----
From: "sonicxcove@..." <sonicxcove@...>

You could always buy a roll of aluminum refrigeration tubing.

great idea Eric !!!
very best
Paul

[Non-text portions of this message have been removed]

4951. Re: [loopantennas] Radiating element for small (less than a quarter wavelengt...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 06:12:59 UTC
From: sonicxcove@aol.com
Topic: 4947 Message: 4951

Handy stuff Paul,

I have used flare nuts and fittings with it. Brass fittings and aluminum tubing are compatible. For RF use a dab of NO-OX never hurt either.

Eric

In a message dated 2/24/2008 12:59:20 A.M. Eastern Standard Time, nonlinear@... writes:

You could always buy a roll of aluminum refrigeration tubing.

great idea Eric !!!
very best
Paul

**********Ideas to please picky eaters. Watch video on AOL Living. (http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/2050827?NCID=aolcmp00300000002598)

[Non-text portions of this message have been removed]

4952. RE: [loopantennas] Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 11:34:27 UTC
From: Jim Dunstan
Topic: 4933 Message: 4952

At 08:59 PM 2/23/2008 -0600, you wrote:

>Is it the cross sectional area for resistance or actual external area of the
>wire for reception? If it is external area, then there is no advantage in
>smaller wire diameters. I can see where thin copper strips would give more
>area with less resistance (?). Set me straight as my physics is getting
>confused with geometry.
>
>William W."Bill" McGraw
>"Somewhere South of Chicago"
>Greenville, MS 38701

Hi Bill.

Cross sectional area is related to DC resistance. With AC the phenomena of
'Skin Effect' takes over and at HF and VHF the resistance is related to
surface area.

Jim, VE3CI

4953. RE: [loopantennas] Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 12:36:38 UTC
From: Jim Dunstan
Topic: 4933 Message: 4953

At 08:59 PM 2/23/2008 -0600, you wrote:

>Is it the cross sectional area for resistance or actual external area of the
>wire for reception? If it is external area, then there is no advantage in
>smaller wire diameters. I can see where thin copper strips would give more
>area with less resistance (?). Set me straight as my physics is getting
>confused with geometry.
>
>William W."Bill" McGraw
>"Somewhere South of Chicago"
>Greenville, MS 38701

hi Bill,

Well the real story of why 'many' can be better than 'fat' re RF resistance starts with the fact there are 2 kinds of resistance in antennas. The normal concept of RF resistance (limited to the surface of the element due to skin effect) and radiation resistance which is a function of the design of the antenna. Power consumed in the more normal resistance of current flow is simply converted to heat while the power consumed by radiation resistance is converted to electromagnetic radiation (the function of the antenna!!).

If the design of the antenna is such that the radiation resistance is low then it becomes critical to make the RF resistance as low as possible since the ratio of the two gives the efficiency of the antenna. Small loop antennas are like this, having a low radiation resistance .... a circular surface seems to be the physical shape that gives maximum area and thus conductivity and thus maximum efficiency. The mass of the element material is not important in this scenario and thus the conductor can be hollow (like a tube) or flat and thin like foil. A tube has both and outside surface and an inside surface .... but then that is a different story/argument as to how that can relate to performance and so-called shielded antennas.

Getting back to one of the original questions, 'is it effective to use multiple wires instead of a single fat wire', the answer is yes .... but in context. A small transmitting loop with a low radiation resistance must be constructed of material like foil or tubing in order to have any useable efficiency ... eg as previously discussed. However in antenna or circuit design of a different nature such as mult-turn windings or longer antennas like full size loops or dipoles the construction material by definition is wire and not tubing. In these designs the bulk or mass is more important. Winding a coil with fat wire is difficult and it's size is a problem. Constructing a dipole or full size loop out of fat wire is

difficult because it is heavy and difficult to support.

It is possible to increase the surface area with multiple wires more efficiently (in relation to mass or weight or bulk) than using single fat wires. The reason is simple in that as you increase the diameter of wire the mass increases as the square while surface area increases in a linear fashion ... eg mass increases faster. So multiple wire antennas are sometimes used to maximize efficiency and special multiple insulated stranded wire (Litz wire) was invented to maximize efficiency of larger multi-turn inductors. But it must be mentioned that the increase in efficiency is not critical since the radiation resistance of long wire antennas like dipoles and full size loops is already quite high so marginal increase in RF conductivity is usually not worth the effort.

However, constructing a full size dipole out of tubing rather than wire can substantially improve performance but stops becoming practical from a physical point of view at about 20M.

Jim, VE3CI

4954. 10 meter sky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 14:48:18 UTC
From: Raymond Lucier
Topic: 4954 Message: 4954

I am thinking of putting up a 10 meter skyloop any pros and cons would be appreciated.
thanks n1plc

4955. Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 16:59:14 UTC
From: mhatlau
Topic: 4933 Message: 4955

You are missing something :) Take a typical wire, a seven strand wire, with 12AWG strands (O.K., not so typical :)So each strand has a radius of 0.5 mm, and a circumference of 3.14 mm. the seven strand bundle will have a radius of 1.5 mm, and a circumference of 9.44 mm. Since length and skin depth are constant, we can ignore these variables. The one thing you may not be aware of in this example is that the skin effect stops where the wires come into contact. so instead of having 7 times 3.14 mm, or 21.98 mm of skin, only 63% of the skin of the conductor is used. And none at all in the seventh conductor. So the actual skin of a seven strand conductor, as opposed to a solid conductor of the same diameter is 1.46 times the circumference of the solid. Which is better than the solid, which is why the RF resistance of a stranded conductor is lower than that of a solid conductor of the same diameter. Add more strands, and this number drops closer to the solid conductor as less and less of the circumference of the outer strands are conducting. And all the inner strands do not carry any current at all.

But what if in our example, the strands were insulated? Instead of only 63% of each outer six conductors carrying current, the entire 100% of each outer conductor carries current. And the seventh inner conductor which carried no current at all, will carry current too. So instead of 9.44 mm of surface for current conduction you have 22mm of surface area for conduction. So seven stranded, insulated, wire would have 2.33 times the conduction of a solid wire of the same diameter. That is a pretty big difference.

But we can do better when we consider that of each strand, only a small percentage of the area actually conducts. there are large swaths of area in each strand that do not conduct at all. Remembering that skin depth of conduction is not a function of the surface area of a wire, but rather frequency only, you can calculate the actual depth of conduction due to skin depth, then make the radius of the wire equal to the skin-depth. The result will be a much smaller wire, with a much smaller area of conduction, but the entire wire conducts, not just the outer skin. Apply a thin insulation to each strand, and bundle them together, and you end up with an equivalent wire that conducts as a function of area, rather than circumference, demonstrably a much larger value of conduction.

And that is what Litz wire does. And why Litz wire is rated by frequency. Lower frequencies require larger diameter strands. Higher frequencies require smaller diameter strands.

Mark.

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:

> Maybe I am missing something ... eg the theory behind 'Litz' wire
... but
> the surface of a wire is directly related to its
> circumference. Circumference is determined by the factor of 'Pi' or
> 3.14. What this says to me is that a wire with a diam. of '1' has a
> surface of '3.14' and a 'fat' wire with a diameter of 4 has a
surface of 4
> x 3.14 = 12.56. An if I create a 'mult-wire' of 4 wires each with a
dia.
> of 1 ... the surface of this multi-wire will be 4 x 3.14 = 12.56 !!
exactly
> the same as the fat wire.
>
> Not all is lost!
>
> The weight of the wire is directly related to the cross section of the
> wire. So the cross section of a 1" dia. wire is PI x R squared or
3.14 x
> .5 x .5 = .785 Four wires would weigh .785 x 4 = 3.14
>
> The weight of a wire with 4 times the diameter would be 3.14 x 2 x2
= 12.56
> !!! or 4 times as much !!!
>
> So there you go, a wire antenna made of 4 separate strands would
have 1/4
> the weight of a single strand having the same surface area.
>
> Jim, VE3CI
>

4956. Re: [loopantennas] Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-24 17:39:28 UTC
From: Jim Dunstan
Topic: 4933 Message: 4956

At 04:59 PM 2/24/2008 +0000, you wrote:

>You are missing something :) Take a typical wire, a seven strand
>wire, with 12AWG strands (O.K., not so typical :)So each strand has a
>radius of 0.5 mm, and a circumference of 3.14 mm. the seven strand
>bundle will have a radius of 1.5 mm, and a circumference of 9.44 mm.
>Since length and skin depth are constant, we can ignore these variables.
>The one thing you may not be aware of in this example is that the skin
>effect stops where the wires come into contact. so instead of having
>7 times 3.14 mm, or 21.98 mm of skin, only 63% of the skin of the
>conductor is used. And none at all in the seventh conductor. So the
>actual skin of a seven strand conductor, as opposed to a solid
>conductor of the same diameter is 1.46 times the circumference of the
>solid. Which is better than the solid, which is why the RF resistance
>of a stranded conductor is lower than that of a solid conductor of the
>same diameter. Add more strands, and this number drops closer to the
>solid conductor as less and less of the circumference of the outer
>strands are conducting. And all the inner strands do not carry any
>current at all.

No, I'm not missing this point. In order to increase surface area I agree each strand must be insulated from each other. This is in fact how 'Litz' wire is made.

Jim

4957. Re: [loopantennas] Re: Radiating element for small (less than a quarter wavel...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-25 00:32:32 UTC
From: sonicxcove@aol.com
Topic: 4957 Message: 4957

Thanks Mark,

Very good explication of how and why Litz wire works.

Along that line of thinking, bandwidth is a function of element diameter. The larger the diameter, the broader the bandwidth. Since few can afford 6" copper pipe to construct an antenna an alternative is to run wire with "X" spreaders to give an effective larger diameter element.

Back in the 1920's it was common practice to run parallel wires which had the same effect. Since the wire spacing is so small compared to the wavelength the RF really does not see the space between the wires.

Using the above methods, and the room to run a nice length antenna cheap electric fence wire can be used quite effectively. Steel MIG welding wire is copper plated and can be used too.

If you are building one of the antennas that requires a terminating resistor you might consider using stainless steel wire. SS wire is a rather poor conductor compared to copper and depending on the length needed the SS wire might have the needed resistance built in eliminating the need for the resistor.

Eric

In a message dated 2/24/2008 11:59:44 A.M. Eastern Standard Time, mhuss1@... writes:

And that is what Litz wire does. And why Litz wire is rated by frequency. Lower frequencies require larger diameter strands. Higher frequencies require smaller diameter strands.

Mark.

**********Ideas to please picky eaters. Watch video on AOL Living. (http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/2050827?NCID=aolcmp00300000002598)

[Non-text portions of this message have been removed]

4958. Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-25 03:11:14 UTC
From: Steve
Topic: 4933 Message: 4958

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 08:45 AM 2/24/2008 +1030, you wrote:
>
> >Renopithicus,
> >
> >First idea.
> >
> >Instead of using one "fat" conductor, how about trying a number of
> >parallel conductors arranged as a single fat conductor? Maybe use a
piece
> >of thick-but-flexible irrigation pipe as the support for the loop
and glue
> >the conductors to its outside. Wrap a bare wire around each end to join
> >the conductors together (solder each connection). Imagine a line
drawing
> >of a toroid with an air gap. I'd try six single core conductors first.
> >
> >I don't know how well it would work, what the multiple conductors
would do
> >to the inductance of the loop or any other parameters. I'm just putting
> >this up as an "out there" idea.
> >
> >Antenna modellers, do I crash and burn on this one or does it have
validity?
> >
> >Second idea.
> >
> >Take the loop of irrigation pipe and wrap it with copper foil tape
> >(sometimes on eBay under crafts). Solder the overlaps frequently so
that
> >it doesn't turn into a multi-turn toriod.
> >
> >I don't know how they will work but logic tells me that the Q of these
> >loops would be ginormous. This would make tuning precise, to say the
> >least. I would recommend a vernier-driven tuning capacitor.
> >
> >Ray,
> >vk5fyar
>
> Hi Ray,
>
> Maybe I am missing something ... eg the theory behind 'Litz' wire
... but

> the surface of a wire is directly related to its
> circumference. Circumference is determined by the factor of 'Pi' or
> 3.14. What this says to me is that a wire with a diam. of '1' has a
> surface of '3.14' and a 'fat' wire with a diameter of 4 has a
surface of 4
> x 3.14 = 12.56. An if I create a 'mult-wire' of 4 wires each with a
dia.
> of 1 ... the surface of this multi-wire will be 4 x 3.14 = 12.56 !!
exactly
> the same as the fat wire.

You are going about it the wrong way.

Take a wire of diameter 1. Circumference is therefore 3.14.

Now replace it with 4 wires that fit in the same circular area. Each wire has a diameter of 1/2, -not- 1/4. So 4 wires, 1/2 x 3.14, is a total surface area that is 2x the original.

7 strands is more common, one central with 6 around it. But that isn't 1/6 or 1/7th the diameter, it is 1/3. So 7 wires x 1/3 diameter x 3.14 is 2 and 1/3 the surface area.

Think about it simplistically: take a wire, split it down the middle line and insulate from each other. Is the surface area the same?

Your math for the weight doesn't work out, either. The split wire above, does it weigh less than unsplit wire?

Steve Greenfield

4959. Re: [loopantennas] Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-25 14:39:05 UTC
From: Jim Dunstan
Topic: 4933 Message: 4959

At 03:11 AM 2/25/2008 +0000, you wrote:
>he surface of a wire is directly related to its
> > circumference. Circumference is determined by the factor of 'Pi' or
> > 3.14. What this says to me is that a wire with a diam. of '1' has a
> > surface of '3.14' and a 'fat' wire with a diameter of 4 has a
>surface of 4
> > x 3.14 = 12.56. An if I create a 'mult-wire' of 4 wires each with a
>dia.
> > of 1 ... the surface of this multi-wire will be 4 x 3.14 = 12.56 !!
>exactly
> > the same as the fat wire.
>
>You are going about it the wrong way.
>
>Take a wire of diameter 1. Circumference is therefore 3.14.
>
>Now replace it with 4 wires that fit in the same circular area. Each
>wire has a diameter of 1/2, -not- 1/4. So 4 wires, 1/2 x 3.14, is a
>total surface area that is 2x the original.
>
>7 strands is more common, one central with 6 around it. But that isn't
>1/6 or 1/7th the diameter, it is 1/3. So 7 wires x 1/3 diameter x 3.14
>is 2 and 1/3 the surface area.
>
>Think about it simplistically: take a wire, split it down the middle
>line and insulate from each other. Is the surface area the same?
>
>Your math for the weight doesn't work out, either. The split wire
>above, does it weigh less than unsplit wire?
>
>Steve Greenfield

Hi Steve,

We are both right to a degree .... the perspective has a way of channeling one's thinking. But first lets agree on some basic facts:

-In a solid wire diameter (x) the area of the cross section is directly related to the mass or weight and the DC conductivity of the wire.
-In a solid wire diameter (x) the circumference of the wire is directly related to the surface area of the wire which in turn is directly related to the RF conductivity of the wire.
-If you increase the diameter of this solid wire the surface area and thus the RF conductivity will increase in direct proportion while the cross

section and thus the mass and DC conductivity will increases as the square.

Now lets look at stranding the wire. You are right, 7 is a magic number. Seven circles can be put together so they will all touch ... 1 in the middle and 6 around. Lets go from your perspective and start with a solid wire with a diameter of 3 (you mention 3 as the number that relates the diameters of individual strands to overall wire diameter with 7 strands). If you strand this wire and keep the same overall diameter you could use 7 strands each with a diameter of 1. Now lets compare the effect of this process on the mass and surface area of this new stranded wire.

The solid wire would have a cross section of 7.1 and a circumference of 9.4 ... while the stranded wire would have a cross section of 5.5 and a circumference of 22. Thus, the process of stranding a wire (keeping the overall diameter the same) has reduced the mass, DC conductivity, and strength by 23% and at the same time has increased the surface area and thus RF conductivity by 230%. This is the point you were making. (the added RF conductivity assumes the strands are insulated one from the other).

Now one of the points I was making was when you increase the size of the wire the mass increases as the square while the surface only increases in direct proportion (true whether the wire is solid or stranded). So now lets take the same 7 strand wire and double the size ... e.g. overall diameter is now 6 and each strand has a diameter of 2. Sure enough, the mass is now 22 up a factor of 4 from 5.5, and the circumference/surface area is now 44 up from 22 a factor of 2 (which is directly proportional to the overall diameter increase).

This is what Herr Litz discovered many years ago. Now the reason stranded copper wire is often used for hanging wire antennas (e.g. your 80m dipole) can't be to increase surface area and thus RF conductivity ... calculating the outside surface area is beyond me ... however i assume it must be very close to that of a solid wire of the same diameter. The reason must be mechanical ... in that stranded wire seems to handle various stresses better than solid equivalents.

I enjoyed your posting .... it did a lot to clarify my thinking ... hi hi

Jim

4960. Re: 10 meter sky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-25 15:18:18 UTC
From: brucevicknair
Topic: 4954 Message: 4960

--- In loopantennas@yahoogroups.com, "Raymond Lucier" <n1plc@...> wrote:
>
> I am thinking of putting up a 10 meter skyloop any pros and cons would
> be appreciated.
> thanks n1plc
>

I working on mobile 10m loop. (10 and 11m)

Trying different gamma matches and loop size now etc.

4961. Re: Radiating element for small (less than a quarter wavel...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 01:13:40 UTC
From: mhatlau
Topic: 4957 Message: 4961

What you are talking about is a cage antenna (cause it looks like a cage, don't you know :)

A wire consists of several electrical components. These are resistance, inductance, and capacitance. The resistance is a bit tricky, because of skin effect, which makes it have a higher resistance than at DC. The Inductance and capacitance are a function of length and area of the wire. At a given frequency, the inductance and capacitance equal, and cancel each other out. this is the resonate frequency. The bandwidth of this is a function of the RF resistance, as well as the impedance of the inductance and capacitance. This is called Q.

Now here is where the cage antennas come in. If you increase the diameter of the wire, you increase its capacitance per unit length. This means less inductance is needed to bring it into resonance, and the total length decreases. So you get a shorter, but thicker antenna.

And since gaps of 1/20th wavelength are for all intents and purposes invisible to the RF energy, the conductor need not be solid. you can run wires a foot or two apart, and it will appear solid to the RF energy.

But everything has a cost. In this case, the higher capacitance per unit length means you have a lower Q. This translates to less gain than a normal dipole. On the other hand, lower Q means that the impedance of the antenna feed point does not change as drastically as you tune off the frequency, giving you a wider bandwidth.

For receiving, the lower gain is not that critical, especially at HF where the atmospheric noise is quite high. You can always make the gain up using a preamp, On the other hand, the 'wire' has to get quite large in diameter before you get an appreciable decrease in length or increase in bandwidth. There is a program on S-Meter that will give you good ballpark values for a cage antenna. It is fun to experiment.

So why use a Cage Antenna. They are more for nitch applications. Say you need wider bandwidth than you would normally have for a dipole, but not very wide. A good example is 500-700 kHz at 6 MHz. You could use a Terminated antenna, but the Terminated antenna works by having the termination resistor 'eat' some of the reflected power. This helps stabilize the input impedance of the antenna over a wide bandwidth, but it is a less efficient radiator (or receptor) because the power that the termination converts to heat cannot be radiated. Another case of no free lunch.

But cage dipoles do look neat.

--- In loopantennas@yahoogroups.com, sonicxcove@... wrote:
>
>
> Thanks Mark,
>
> Very good explication of how and why Litz wire works.
>
> Along that line of thinking, bandwidth is a function of element
> diameter. The larger the diameter, the broader the bandwidth.
> Since few can afford 6" copper pipe to construct an antenna
> an alternative is to run wire with "X" spreaders to give an effective
> larger diameter element.
>
> Back in the 1920's it was common practice to run parallel wires
> which had the same effect. Since the wire spacing is so small
> compared to the wavelength the RF really does not see the space
> between the wires.
>
> Using the above methods, and the room to run a nice length antenna
> cheap electric fence wire can be used quite effectively. Steel MIG
> welding wire is copper plated and can be used too.
>
> If you are building one of the antennas that requires a terminating
> resistor you might consider using stainless steel wire. SS wire is
> a rather poor conductor compared to copper and depending on
> the length needed the SS wire might have the needed resistance
> built in eliminating the need for the resistor.
>
> Eric
>
>
> In a message dated 2/24/2008 11:59:44 A.M. Eastern Standard Time,
> mhuss1@... writes:
>
> And that is what Litz wire does. And why Litz wire is rated by
> frequency. Lower frequencies require larger diameter strands. Higher
> frequencies require smaller diameter strands.
>
> Mark.
>
>
>
>
>
>
>
> **********Ideas to please picky eaters. Watch video on AOL
Living.
>
(http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/
> 2050827?NCID=aolcmp00300000002598)

>
>
> [Non-text portions of this message have been removed]
>

4962. Another capacitor question for the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 03:01:19 UTC
From: metrobase201
Topic: 4962 Message: 4962

My shortwave copper loop (3 feet circumference_see photo section) has a 365pf cap which resonanates from 4500khz to 15000khz. I've added a second cap w/switch and when switched on goes down to about 2350khz. That fine and I want that. But my question is to go up to say 22000khz "What type of capacitor fixed or variable can I either add in parallel and/or switched in to get up that high.

Thank you group in advance.
-MetroBase

4963. Re: [loopantennas] Another capacitor question for the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 06:24:36 UTC
From: Ray Phillips
Topic: 4962 Message: 4963

Metrobase,

The loop will exhibit a natural resonance and it will be difficult to get the loop to resonate above that frequency. I can't say what the natural frequency of the loop is. You need to disconnect the capacitor and test the loop. If the loop resonates naturally above your top desired frequency then we can do things.

Assume that the loop DOES resonate above 22MHz:

Resonance occurs when the reactance of the capacitor and the reactance of the inductor are the same.

You do not specify the low value for your capacitor and so I will have to work from the fully meshed value which you have quoted as 365pf. You say that the loop resonates at 4.5Mhz when the cap is fully meshed.

Finding L:
Our formula is Fo = 1 / 2II SQR(LC)
Transpose the formula for L (the inductance of the loop).
L= 1/((F2II)squared)C (F = 4,500,000)
L=3.4uH (or thereabouts)

To get the low value of the capacitor:
Our formula is Fo = 1 / 2II SQR(LC)
Transpose for C (the low value of the capacitor)
C = 1/((F2II)squared)L (F = 15,000,000)
C=33pF

So we have a 3.4uH inductor resonating with a 33-365pF capacitor.

The desired resonant frequency is 22,000,000Hz

Our formula (once again) is Fo =1/2II SQR(LC)
Transpose for C again
C= 1/((F2II)squared)L (F =22,000,000)
C = 15.4pF.

So to tune your loop to 22MHz, you need to get the low value of your tuning assembly to 15.4pF. The lowest value of your tuning capacitor is 33pF and so you need to insert a series capacitor.

The formula for capacitors in series is 1/Ct = 1/C1+1/C2....1/Cn
Transpose for C2
1/C2=1/Ct-1/C1
=28.8pF

The nearest preferred value of capacitors is 27pF.

To tune to 22MHz (natural resonance permitting) you need to insert a 27pF capacitor in series with your tuning capacitor. When the tuning capacitor is fully meshed the effective capacitance is 25.1pF. When fully unmeshed the effective capacitance is 14.85pF. This will give a tuning range (series capacitor in circuit) of 17.2MHz to 22.4Mhz (give or take a coupla KHz).

That's the maths of the theory. BUT(a big but) there are always stray capacitances. Try the 27pF and test. It is unlikely that the loop will resonate too high for you with the 27pF. If it still resonates too low, drop the 27 down. 10pf parallel 15pF makes 25pF. Two 12pF's parallel makes 24pF. 10pF parallel 12pF makes 22pF. Two 10's make 20.

Or get a trimmer capacitor say 10-30pF and adjust it.

Waddayarekon guys? Is my maths right?

> My shortwave copper loop (3 feet circumference_see photo section) has a
> 365pf cap which resonanates from 4500khz to 15000khz. I've added a
> second cap w/switch and when switched on goes down to about 2350khz.
> That fine and I want that. But my question is to go up to say
> 22000khz "What type of capacitor fixed or variable can I either add in
> parallel and/or switched in to get up that high.
>
> Thank you group in advance.
> -MetroBase
>
>

All the best,
Ray

4964. Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 07:48:09 UTC
From: José
Topic: 4933 Message: 4964

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 03:11 AM 2/25/2008 +0000, you wrote:
> >.............................
> ....

> This is what Herr Litz discovered many years ago. ....

> Jim
>

Hi Jim, there is not such Herr Litz.

Litz is a short for Litzendraht that means "stranded" in german.
So "litzendraht wire = stranded wire"

But your explanation was very interesting. Thanks.
Jose

4965. AM & SHORTWAVE LOOP

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 14:45:58 UTC
From: dirnhvh
Topic: 4965 Message: 4965

Dear Group,

Has anyone built an indoor receiving loop for both AM & shortwave bands? Would I need to build one for each?

Does anyone know where you can find an air variable capaciter to use for tuning these days? Radio shack is only interested in selling me a phone or batteries!

Bill N1WL

4966. Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 17:43:00 UTC
From: Jim Miller
Topic: 4966 Message: 4966

For those of you that have used refrigerator grade copper tubing, what sizes have seemed to support themselves if the diameter is bridged vertically by something substantial? Will 1/4" be enough or is larger required to keep it from drooping into a pear shape? HomeDepot has sizes up to 5/8" OD but I'd like to use the smallest possible.

I'm looking at making a loop out of 2" copper strap, either 0.011" or 0.022" thick, and I know that won't support itself. Circumference will be 5 meters.

I was thinking of making an loop out of smallish copper tubing for support and then attach the copper strap to the outside of that with periodic solder joints. The copper strap will be the primary RF conductor. The copper tubing would just be there to support the strapping without causing dissimilar metal problems. Soldering makes for easy attachment. I was thinking of some polycarbonate tubing as the vertical diametrical support. Haven't figured out much beyond that.

I'm trying to make this thing look "pretty and sculptural" rather than my usual "ugly but works" approach since it will likely be a backyard installation, hence I'm trying to minimize the amount of elevated PVC. I'll likely have PVC in some places down below where it won't be noticed.

The less it looks like an antenna the more likely it is to be accepted...

tnx

jim ab3cv

4967. Re: AM & SHORTWAVE LOOP

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 17:48:48 UTC
From: Steve
Topic: 4965 Message: 4967

--- In loopantennas@yahoogroups.com, "dirnhvh" <dirnhvh@...> wrote:
>
> Dear Group,
>
> Has anyone built an indoor receiving loop for both AM & shortwave
> bands? Would I need to build one for each?
>
> Does anyone know where you can find an air variable capaciter to use
> for tuning these days? Radio shack is only interested in selling me a
> phone or batteries!

Midnight Science sells parts for crystal radios, and carries 365pF
single and dual gang tuning caps.

http://www.midnightscience.com/

You might also watch thrift stores for old radios. The old big AM
portable radios often use air variables, if they are old enough. Very
old clock-radios and table radios used air variables, if they are old
enough. I've gotten a lot of air variable tuning capacitors this way.

Steve Greenfield

4968. Re: [loopantennas] Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 18:44:55 UTC
From: John Popelish
Topic: 4966 Message: 4968

Jim Miller wrote:
> For those of you that have used refrigerator grade copper tubing, what sizes
> have seemed to support themselves if the diameter is bridged vertically by
> something substantial? Will 1/4" be enough or is larger required to keep it
> from drooping into a pear shape? HomeDepot has sizes up to 5/8" OD but I'd
> like to use the smallest possible.
>
> I'm looking at making a loop out of 2" copper strap, either 0.011" or 0.022"
> thick, and I know that won't support itself. Circumference will be 5 meters.
>
> I was thinking of making an loop out of smallish copper tubing for support
> and then attach the copper strap to the outside of that with periodic solder
> joints. The copper strap will be the primary RF conductor. The copper tubing
> would just be there to support the strapping without causing dissimilar
> metal problems. Soldering makes for easy attachment. I was thinking of some
> polycarbonate tubing as the vertical diametrical support. Haven't figured
> out much beyond that.
>
> I'm trying to make this thing look "pretty and sculptural" rather than my
> usual "ugly but works" approach since it will likely be a backyard
> installation, hence I'm trying to minimize the amount of elevated PVC. I'll
> likely have PVC in some places down below where it won't be noticed.
>
> The less it looks like an antenna the more likely it is to be accepted...

What about making an octagon out of thin walled PVC pipe and
wrapping the copper foil around it is a ling spiral?

Or, if you want to make it all out of copper, an octagon
made of type M, Thin wall rigid copper pipe) soldered into
45 degree elbows.
http://www.acehardware.com/sm-working-with-copper-pipe--bg-1280921.html

One inch type M pipe (actual outside diameter 1.125") is not
a lot more expensive per foot that the soft (very pure)
refrigeration tubing of considerably smaller diameter and is
much more self supporting.

--
Regards,

John Popelish

4969. Re: [loopantennas] Another capacitor question for the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 19:12:54 UTC
From: Jim Dunstan
Topic: 4962 Message: 4969

At 03:01 AM 2/26/2008 +0000, you wrote:

>My shortwave copper loop (3 feet circumference_see photo section) has a
>365pf cap which resonanates from 4500khz to 15000khz. I've added a
>second cap w/switch and when switched on goes down to about 2350khz.
>That fine and I want that. But my question is to go up to say
>22000khz "What type of capacitor fixed or variable can I either add in
>parallel and/or switched in to get up that high.
>
>Thank you group in advance.
>-MetroBase

Hi,

In order to bring the circuit back into resonance at this higher frequency you will have to lower the inductive reactance of the coil to bring it back into the range of the capacitive reactance of your capacitor. In order to lower the inductive reactance you need to lower the inductance .... in other words you need to make the loop smaller. Capacitors are funny things ... unlike inductors the capacitive reactance moves in the opposite direction to capacitance. Pretty hard to get more capacitive reactance from a capacitor already at minimum.

Jim

4970. Re: [loopantennas] Re: Radiating element for small (less than a quarter wavelength), tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 19:20:29 UTC
From: Jim Dunstan
Topic: 4933 Message: 4970

At 07:48 AM 2/26/2008 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
>Dunstan <jdunstan@...> wrote:
> >
> > At 03:11 AM 2/25/2008 +0000, you wrote:
> > >.............................
> > ....
>
> > This is what Herr Litz discovered many years ago. ....
>
> > Jim
> >
>
>Hi Jim, there is not such Herr Litz.
>
>Litz is a short for Litzendraht that means "stranded" in german.
>So "litzendraht wire = stranded wire"
>
>But your explanation was very interesting. Thanks.
>Jose

Hi Jose,

I never new that! I will have to change the name of the anonymous German
who invented stranded wire to 'Herr Litzendraht' Herr Litz for short
!! Hi Hi

Thanks,

Jim

[Non-text portions of this message have been removed]

4971. Re: [loopantennas] AM & SHORTWAVE LOOP

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 19:26:34 UTC
From: Jim Dunstan
Topic: 4965 Message: 4971

At 02:45 PM 2/26/2008 +0000, you wrote:

>Dear Group,
>
>Has anyone built an indoor receiving loop for both AM & shortwave
>bands? Would I need to build one for each?

Yes, I have built them for both and yes, the size is quite different and
really represent 2 different loops.

>Does anyone know where you can find an air variable capaciter to use
>for tuning these days? Radio shack is only interested in selling me a
>phone or batteries!
>
>Bill N1WL

If you Google the net you will find a number of mail order suppliers ....
but I have used old radios as a source ... check out garage sales etc ...
there are always some old radios that can be had for a song and they
usually have some excellent variable capacitors you can use for both kinds
of loop antennas. The only problem I find is I am usually torn between
scrounging parts and restoring the old radio hi hi.

Jim

4972. Re: [loopantennas] Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 19:58:16 UTC
From: Jim Dunstan
Topic: 4966 Message: 4972

At 12:43 PM 2/26/2008 -0500, you wrote:

>For those of you that have used refrigerator grade copper tubing, what sizes
>have seemed to support themselves if the diameter is bridged vertically by
>something substantial? Will 1/4" be enough or is larger required to keep it
>from drooping into a pear shape? HomeDepot has sizes up to 5/8" OD but I'd
>like to use the smallest possible.
>
>I'm looking at making a loop out of 2" copper strap, either 0.011" or 0.022"
>thick, and I know that won't support itself. Circumference will be 5 meters.
>
>I was thinking of making an loop out of smallish copper tubing for support
>and then attach the copper strap to the outside of that with periodic solder
>joints. The copper strap will be the primary RF conductor. The copper tubing
>would just be there to support the strapping without causing dissimilar
>metal problems. Soldering makes for easy attachment. I was thinking of some
>polycarbonate tubing as the vertical diametrical support. Haven't figured
>out much beyond that.
>
>I'm trying to make this thing look "pretty and sculptural" rather than my
>usual "ugly but works" approach since it will likely be a backyard
>installation, hence I'm trying to minimize the amount of elevated PVC. I'll
>likely have PVC in some places down below where it won't be noticed.
>
>The less it looks like an antenna the more likely it is to be accepted...
>
>tnx
>
>jim ab3cv

Hi Jim,

Interesting construction project .... first, is the copper strap solid or braided? The reason I ask is that braid is easily distorted which has a negative effect on RF conductivity. For my following comments I will assume it is solid copper strap. A 5 meter circumference is pretty big ... not too big .... but pretty big hi hi. .... 16.25 ft or just over 5 ft in diameter. I have built a number of self supporting loops from 5/16" copper tubing ... to about 3 to 3.5' in diameter. They were self supporting from the base. If you split it at the top ... with some tuning capacitor ... then it won't be self supporting .... you will need that center support at least.

Interesting concept of spot soldering the flat copper strap to the outside of the tubing. I think that would provide not only added RF conductivity but rigidity to the loop. It is a construction trick used in the housing

industry when manufacturing floor joists. Even then, I am not sure if 5/16" copper tubing would self support at 5' diam. (by the way I acquired a large role of 5/16 copper tubing years ago and use if for a lot of projects)

Your project should have something between 5/16" and the 5/8" you mentioned. However, larger is always better (from a performance point of view).

If you can build it, feed it, and tune it without slitting the top you could make it free standing and hang a nice wind chime in the center. No one would be the wiser.

73

Jim, VE3CI

4973. Re: [loopantennas] Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 20:10:49 UTC
From: Chris Trask
Topic: 4966 Message: 4973

>
> For those of you that have used refrigerator grade copper
> tubing, what sizes have seemed to support themselves if the
> diameter is bridged vertically by something substantial?
> Will 1/4" be enough or is larger required to keep it from
> drooping into a pear shape? HomeDepot has sizes up to 5/8" OD
> but I'd like to use the smallest possible.
>
> I'm looking at making a loop out of 2" copper strap, either
> 0.011" or 0.022" thick, and I know that won't support itself.
> Circumference will be 5 meters.
>
> I was thinking of making an loop out of smallish copper tubing
> for support and then attach the copper strap to the outside of
> that with periodic solder joints. The copper strap will be the
> primary RF conductor. The copper tubing would just be there to
> support the strapping without causing dissimilar metal problems.
> Soldering makes for easy attachment. I was thinking of some
> polycarbonate tubing as the vertical diametrical support.
> Haven't figured out much beyond that.
>
> I'm trying to make this thing look "pretty and sculptural"
> rather than my usual "ugly but works" approach since it will
> likely be a backyard installation, hence I'm trying to minimize
> the amount of elevated PVC. I'll likely have PVC in some places
> down below where it won't be noticed.
>
> The less it looks like an antenna the more likely it is to be
> accepted...
>

Jim,
I've used 1/4" refrigerator tubing for my 1m diameter and 2m diameter loops, but it needs some support even for small sizes such as that. 1/2" refrigerator tubing works well for the smaller loops, but still needs a support going up the middle. Hard 1/2" and 3/4" tubing could be self-supporting, but you would have to devise some method of bending it, such as a pretty hefty form made from plywood much like a conduit bender. Even so, you would still need some sort of PVC support going up the middle.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY

_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4974. Re: [loopantennas] AM & SHORTWAVE LOO

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 20:26:31 UTC
From: Jay Heyl
Topic: 4965 Message: 4974

On Tue, Feb 26, 2008 at 9:45 AM, dirnhvh <dirnhvh@...> wrote:

> Has anyone built an indoor receiving loop for both AM & shortwave
> bands? Would I need to build one for each?

You would be hard pressed to build one that would work well for both MW and the full SW band. I think you'd be happier making one for each.

> Does anyone know where you can find an air variable capaciter to use
> for tuning these days? Radio shack is only interested in selling me a
> phone or batteries!

http://www.midnightscience.com/catalog5.html is one source. There are others. You might also try ebay. There's a guy in Lithuania who sells surplus electronic parts from defunct Russian radio manufacturers. I've bought ferrite rods from him before. He has good prices and is reliable. It just takes a couple weeks for your stuff to arrive.

-- Jay

4975. Re: Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 20:58:16 UTC
From: Jim Miller
Topic: 4966 Message: 4975

at the risk of talking to myself...

i just figured out that if the smallest copper line is insufficient i can just run a length or two of electricians snake (spring steel) inside to make it hold it's shape.

it won't see any rf since it will be sealed inside the copper.

sorta like home brew copper clad steel. ;-)

i like cheap solutions!

73

jim ab3cv

4976. Re: [loopantennas] AM & SHORTWAVE LOO

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 22:30:41 UTC
From: aimo ruoho
Topic: 4965 Message: 4976

I've built a lot of different type and different size of receiving loops. They usually work on all bands, the same as my receivers, from 153 Kc/s to 30 Mc/s.

My humble opinion after testing them is as follows: What ever you can use successfully, depends on your personal wishes!

Any size antenna, from a 1" object of most metals to miles or kilometers of any metal wire or tube (or even water) will give you some radio stations, if you are using some kind of an antenna tuning unit, an antenna amplifier or an amplified preselector. But if you could use the most sensitive receiver, even your body could be an almost perfect antenna! Earth will be a very good antenna as well. The Scandinavian DX-contest was once one connecting the antenna connection to the warming element of a house. (Archives show, that the Scandinavian DXers are amongst the top of this planet's rare-DX-hunters.)

But ofcource, if you want to discriminate disturbing transmissions from a different direction than where your favourite transmitters exist, then you should preferably have super-directive antennas in your possession, 1 mile or more to one direction and 15 other about as long wires towards other possible directions. Or build a huge turnable beam (Yagi), but it should be very heavy and gigantic of its measures (and very expencive, too!).

Those small loops surely are just very light substitudes, when we consider, what really is effective! But most of us must be relatively satisfied with "substitudes", right? So the smart salespeople are receiving their living (and more) offering their products to us, who only are able to use hundreds instead of tens of thousands in any main currencies to buy their equipment...

Just the other day I happened to read an opinion of making better antennas at home, than those offered by the commercially thinking people...

So, let us study and try to make our best to homebrew one or two of our own!

It is nice to be able to do it with own hands with the help of such nice persons in this group, who make their inventions known to us, free!

Best regards from your friend Aimo.

Jay Heyl <yahoogroups@...> wrote:
On Tue, Feb 26, 2008 at 9:45 AM, dirnhvh <dirnhvh@...> wrote:

> Has anyone built an indoor receiving loop for both AM & shortwave
> bands? Would I need to build one for each?

You would be hard pressed to build one that would work well for both
MW and the full SW band. I think you'd be happier making one for each.

> Does anyone know where you can find an air variable capaciter to use
> for tuning these days? Radio shack is only interested in selling me a

> phone or batteries!

http://www.midnightscience.com/catalog5.html is one source. There are others. You might also try ebay. There's a guy in Lithuania who sells surplus electronic parts from defunct Russian radio manufacturers. I've bought ferrite rods from him before. He has good prices and is reliable. It just takes a couple weeks for your stuff to arrive.

-- Jay

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

4977. Re: [loopantennas] Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 23:11:30 UTC
From: aimo ruoho
Topic: 4966 Message: 4977

I made an "octagon" of 1/2" copper tube, 130cm diameter (4,3') or 41,4' (408cm) of length. For supporting frame I have a "cross" of 7/8' wood.

Time will tell, if it's going to work as well as I was expecting?

I must go out and test it and add a proper amplifier, if needed and ofcource an A.T.U.

Now it's hanging on my window waiting for future final tests...

But it is working as that very well, but no real DX, yet.

Best regards from Aimo.

Jim Miller <jim@...> wrote:
For those of you that have used refrigerator grade copper tubing, what sizes have seemed to support themselves if the diameter is bridged vertically by something substantial? Will 1/4" be enough or is larger required to keep it from drooping into a pear shape? HomeDepot has sizes up to 5/8" OD but I'd like to use the smallest possible.

I'm looking at making a loop out of 2" copper strap, either 0.011" or 0.022" thick, and I know that won't support itself. Circumference will be 5 meters.

I was thinking of making an loop out of smallish copper tubing for support and then attach the copper strap to the outside of that with periodic solder joints. The copper strap will be the primary RF conductor. The copper tubing would just be there to support the strapping without causing dissimilar metal problems. Soldering makes for easy attachment. I was thinking of some polycarbonate tubing as the vertical diametrical support. Haven't figured out much beyond that.

I'm trying to make this thing look "pretty and sculptural" rather than my usual "ugly but works" approach since it will likely be a backyard installation, hence I'm trying to minimize the amount of elevated PVC. I'll likely have PVC in some places down below where it won't be noticed.

The less it looks like an antenna the more likely it is to be accepted...

tnx

jim ab3cv

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

4978. Re: AM & SHORTWAVE LOO

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-26 23:55:59 UTC
From: Rob Moore
Topic: 4965 Message: 4978

That's true for tuned loops, however a broadband loop will work fine over a much wider frequency range. Witness the Wellbrook loops. Of course, if you make a broad band loop you'll need a decent hopefully balanced loop preamp, because the BB loops aren't resonant and so don't provide as much signal as a tuned loop... But you don't have to tune them!

Rob

--- In loopantennas@yahoogroups.com, "Jay Heyl" <yahoogroups@...> wrote:
>
> On Tue, Feb 26, 2008 at 9:45 AM, dirnhvh <dirnhvh@...> wrote:
>
> > Has anyone built an indoor receiving loop for both AM & shortwave
> > bands? Would I need to build one for each?
>
> You would be hard pressed to build one that would work well for both
> MW and the full SW band. I think you'd be happier making one for each.
>
> > Does anyone know where you can find an air variable capaciter to use
> > for tuning these days? Radio shack is only interested in selling me a
> > phone or batteries!
>
> http://www.midnightscience.com/catalog5.html is one source. There are
> others. You might also try ebay. There's a guy in Lithuania who sells
> surplus electronic parts from defunct Russian radio manufacturers.
> I've bought ferrite rods from him before. He has good prices and is
> reliable. It just takes a couple weeks for your stuff to arrive.
>
> -- Jay
>

4979. Re: [loopantennas] Re: AM & SHORTWAVE LOO

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 00:16:50 UTC
From: Richards
Topic: 4965 Message: 4979

In my experience with my Wellbrook ALS-100M larger aperture loop, I found it produced a signal as strong as my 75 foot random wire antenna. No loss of signal strength - and it was as quiet (or as noisy, as you will) as the random wire.

I took my random wire down to make room for a 160/80 meter sloper transmitting antenna. I often use my Wellbrook ALS-100M loop as a receiving antenna when transmitting. I listen on the one, transmit on the other. Tuning the random wire up for 160 meters sucked, so this arrangement works much better for me. I still have a decent receiving antenna and I now have a much better transmitting antenna for the top bands. I do not miss the random wire, which should have produced a stronger, quieter signal.

My Wellbrook loop uses a larger loop, one you make yourself, out of wire - and mine is square and 20 feet on a side, fed at the bottom for horizontal polarization. Feed it on the side and it favors vertical polarization. This is much larger than the one meter diameter aluminum loops they sell. I think this larger loop is what accounts for the strong signal response.

I have no complaint that it is broad banded. I just tune around the bands - no fussing with it.

////////////// Richards - K8JHR ///////////
==========

Rob Moore wrote:

> That's true for tuned loops, however a broadband loop will work fine
> over a much wider frequency range. Witness the Wellbrook loops. Of
> course, if you make a broad band loop you'll need a decent hopefully
> balanced loop preamp, because the BB loops aren't resonant and so
> don't provide as much signal as a tuned loop... But you don't have
> to tune them!
>
>
==========

4980. Re: Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 01:13:49 UTC
From: mdgolfbum
Topic: 4966 Message: 4980

This will be for transmitting as well as receiving for 20, 30 and 40M.

I could always go for an octagon but I wanted to try something different with no solder joints. The 2" solid copper strap gives a radiating surface equivalent to 1.25" diameter tubing. This isn't really a novel approach just some tweaks on good work done by others.

Both DX Engineering and TheWireMan have solid copper strapping. I'll probably go with the material from TheWireman since it is twice the thickness and therefore more rugged than the 0.011 material.

I know I'll need a vertical central support. With my windy QTH I'm probably going to do four diamond guys with the spreaders just below the loop terminating at the top below the capacitor housing on the central support and equidistant on the loop support pole below; probably about 4ft in each case. That should keep the torques of windload from ripping the loop from the support post.

I expect to support the loop atop an 8ft metal post which will turn with the loop. The spreaders will be at 45degrees to the plane of the loop.

Still working on the cap details and its housing.

73

jim ab3cv

4981. Re: 10 meter sky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 02:08:36 UTC
From: Raymond Lucier
Topic: 4954 Message: 4981

--- In loopantennas@yahoogroups.com, "brucevicknair" <vicknair@...>
wrote:
>
> --- In loopantennas@yahoogroups.com, "Raymond Lucier" <n1plc@> wrote:
> >
> > I am thinking of putting up a 10 meter skyloop any pros and cons
would
> > be appreciated.
> > thanks n1plc
> >
>
> I working on mobile 10m loop. (10 and 11m)
>
> Trying different gamma matches and loop size now etc.
>
let me know how it turns out send me plans. thanks n1plc

4982. Re: Another capacitor question for the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 02:21:42 UTC
From: metrobase201
Topic: 4962 Message: 4982

--- In loopantennas@yahoogroups.com, "Ray Phillips" <ray@...> wrote:
>
> Metrobase,
>
> The loop will exhibit a natural resonance and it will be difficult
to get
> the loop to resonate above that frequency. I can't say what the
natural
> frequency of the loop is. You need to disconnect the capacitor and
test
> the loop. If the loop resonates naturally above your top desired
frequency
> then we can do things.
>
> Assume that the loop DOES resonate above 22MHz:
>
> Resonance occurs when the reactance of the capacitor and the
reactance of
> the inductor are the same.
>
> You do not specify the low value for your capacitor and so I will
have to
> work from the fully meshed value which you have quoted as 365pf.
You say
> that the loop resonates at 4.5Mhz when the cap is fully meshed.
>
> Finding L:
> Our formula is Fo = 1 / 2II SQR(LC)
> Transpose the formula for L (the inductance of the loop).
> L= 1/((F2II)squared)C (F = 4,500,000)
> L=3.4uH (or thereabouts)
>
> To get the low value of the capacitor:
> Our formula is Fo = 1 / 2II SQR(LC)
> Transpose for C (the low value of the capacitor)
> C = 1/((F2II)squared)L (F = 15,000,000)
> C=33pF
>
> So we have a 3.4uH inductor resonating with a 33-365pF capacitor.
>
> The desired resonant frequency is 22,000,000Hz
>
> Our formula (once again) is Fo =1/2II SQR(LC)
> Transpose for C again
> C= 1/((F2II)squared)L (F =22,000,000)

> C = 15.4pF.
>
> So to tune your loop to 22MHz, you need to get the low value of your
> tuning assembly to 15.4pF. The lowest value of your tuning
capacitor is
> 33pF and so you need to insert a series capacitor.
>
> The formula for capacitors in series is 1/Ct = 1/C1+1/C2....1/Cn
> Transpose for C2
> 1/C2=1/Ct-1/C1
> =28.8pF
>
> The nearest preferred value of capacitors is 27pF.
>
> To tune to 22MHz (natural resonance permitting) you need to insert
a 27pF
> capacitor in series with your tuning capacitor. When the tuning
capacitor
> is fully meshed the effective capacitance is 25.1pF. When fully
unmeshed
> the effective capacitance is 14.85pF. This will give a tuning range
> (series capacitor in circuit) of 17.2MHz to 22.4Mhz (give or take a
coupla
> KHz).
>
> That's the maths of the theory. BUT(a big but) there are always
stray
> capacitances. Try the 27pF and test. It is unlikely that the loop
will
> resonate too high for you with the 27pF. If it still resonates too
low,
> drop the 27 down. 10pf parallel 15pF makes 25pF. Two 12pF's
parallel
> makes 24pF. 10pF parallel 12pF makes 22pF. Two 10's make 20.
>
> Or get a trimmer capacitor say 10-30pF and adjust it.
>
> Waddayarekon guys? Is my maths right?
>
>
>
>
> > My shortwave copper loop (3 feet circumference_see photo section)
has a
> > 365pf cap which resonanates from 4500khz to 15000khz. I've added a
> > second cap w/switch and when switched on goes down to about
2350khz.
> > That fine and I want that. But my question is to go up to say
> > 22000khz "What type of capacitor fixed or variable can I either
add in

> > parallel and/or switched in to get up that high.
> >
> > Thank you group in advance.
> > -MetroBase
> >
> >
>
>
>
> All the best,
> Ray
>
Ray, thank you for the math and theory. As always you guys are a big help. Seem a bit complicated but let me see if I understand in laymans terms. The lower value of the capacitor 33pF does not let or is'nt low enough to get that high when fully inmeshed. In other words won't resonate from 15khz~22khz. In order too I have to lower the pf I need to insert a series capacitor of 27pF to the variable capacitor in series. And thats a big maybe. Hope I'm correct. You have pointed me in the right direction and I'll experiment. Tell what type of capacitors, ceramic or other kind???
Thanks again hoping to hear from you soon.
-MetroBase

4983. Behavior of feed line

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 18:28:30 UTC
From: Jim Dunstan
Topic: 4983 Message: 4983

I need some confirmation on an assumption Re: 1/2 wavelengths of feed line. I assume if I connect a resistive load (50 ohms) across the end of a feed line (300 ohm twin lead) and cut it to a 1/2 wave length at 14.07 mhz for example (taking into account velocity factor) that the impedance I would measure on the other end would be 50 ohms .... a reflection of the load. I could connect any length of 50 ohm coax after that point ... using a 1:1 balun at the connection point.

Thanks,

Jim, VE3CI

4984. feeding two loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 18:05:42 UTC
From: drewbhoy67
Topic: 4984 Message: 4984

can you feed two horizontal loops for difrent bands i.e. 80m and 20m
with one feed point

4985. Re: [loopantennas] Re: Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 18:54:57 UTC
From: aimo ruoho
Topic: 4966 Message: 4985

WHAT SOLDER JOINTS? I just bent the tube to have 8 "sharp" corners. No problems with that ever!
73 from
Aimo

mdgolfbum <jim@...> wrote:
This will be for transmitting as well as receiving for 20, 30 and 40M.

I could always go for an octagon but I wanted to try something
different with no solder joints. The 2" solid copper strap gives a
radiating surface equivalent to 1.25" diameter tubing. This isn't
really a novel approach just some tweaks on good work done by others.

Both DX Engineering and TheWireMan have solid copper strapping. I'll
probably go with the material from TheWireman since it is twice the
thickness and therefore more rugged than the 0.011 material.

I know I'll need a vertical central support. With my windy QTH I'm
probably going to do four diamond guys with the spreaders just below
the loop terminating at the top below the capacitor housing on the
central support and equidistant on the loop support pole below;
probably about 4ft in each case. That should keep the torques of
windload from ripping the loop from the support post.

I expect to support the loop atop an 8ft metal post which will turn
with the loop. The spreaders will be at 45degrees to the plane of the
loop.

Still working on the cap details and its housing.

73

jim ab3cv

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

4986. Re: [loopantennas] Re: Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 18:57:24 UTC
From: Chris Trask
Topic: 4966 Message: 4986

```
>
> > I could always go for an octagon but I wanted to try something
> > different with no solder joints. The 2" solid copper strap gives a
> > radiating surface equivalent to 1.25" diameter tubing. This isn't
> > really a novel approach just some tweaks on good work done by others.
> >
> > Both DX Engineering and TheWireMan have solid copper strapping. I'll
> > probably go with the material from TheWireman since it is twice the
> > thickness and therefore more rugged than the 0.011 material.
> >
> > I know I'll need a vertical central support. With my windy QTH I'm
> > probably going to do four diamond guys with the spreaders just below
> > the loop terminating at the top below the capacitor housing on the
> > central support and equidistant on the loop support pole below;
> > probably about 4ft in each case. That should keep the torques of
> > windload from ripping the loop from the support post.
> >
> > I expect to support the loop atop an 8ft metal post which will turn
> > with the loop. The spreaders will be at 45degrees to the plane of the
> > loop.
> >
> > Still working on the cap details and its housing.
>
> WHAT SOLDER JOINTS? I just bent the tube to have 8 "sharp" corners.
> No problems with that ever!
> 73 from
> Aimo
>

Hmmm... You could possibly bend 5/8" copper pipe with a 1/2" EMT
bending tool.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
```

| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

4987. Re: [loopantennas] feeding two loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-27 19:06:57 UTC
From: Jim Dunstan
Topic: 4984 Message: 4987

At 06:05 PM 2/27/2008 +0000, you wrote:

>can you feed two horizontal loops for difrent bands i.e. 80m and 20m
>with one feed point

Hi,

I don't see why not. I have seen and used Quad antennas with 2 to 5 driven loops with the same number of reflector loops. the driven loops were all driven by the same feed line. Each loop is 1 wave length. These are vertically oriented loops ... I don't see why the same principle wouldn't hold for a horizontal version. However, I would see some mechanical problems in suspending loops of such different size as 80m and 20m.

73

Jim, VE3CI

4988. Re: [loopantennas] Behavior of feed line

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-28 14:21:24 UTC
From: Andy
Topic: 4983 Message: 4988

> I need some confirmation on an assumption Re: 1/2 wavelengths of feed
> line. I assume if I connect a resistive load (50 ohms) across the end of a
> feed line (300 ohm twin lead) and cut it to a 1/2 wave length at 14.07 mhz
> for example (taking into account velocity factor) that the impedance I
> would measure on the other end would be 50 ohms .... a reflection of the
> load. I could connect any length of 50 ohm coax after that point ...
> using a 1:1 balun at the connection point.

That is correct, with certain qualifications.

It is exactly correct for ideal lossless feedline. When you add losses, the impedance seen looking into the line tends to move towards the feedline's characteristic impedance (300 ohms), which gets worse the longer the line is and the more lossy it is. In the limit as you concatenate together infinitely many of these 1/2 wavelength (non-ideal, lossy) sections together, the impedance seen looking into the line approaches the line's Zo (300 ohms), regardless of what load resistor you have on the other end.

Your technique of using a 1/2 wavelength line of the "wrong" impedance, is indeed sometimes used.

Theoretically it only holds for some bandwidth around the frequency where the line is electrically 1/2 wavelength long (taking into account the velocity factor, as you note), and the impedance would deviate from what you want as you diverge from that frequency. But with only one 1/2 wavelength section, the bandwidth of this impedance transformation is fairly broad.

Twinlead's losses increase somewhat when it gets wet.

Andy

4989. Re: Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-28 17:30:52 UTC
From: Steve
Topic: 4966 Message: 4989

Has anyone tried filling the copper tube with sand or salt to bend
without kinking?

Steve Greenfield

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> WHAT SOLDER JOINTS? I just bent the tube to have 8 "sharp" corners.
No problems with that ever!
> 73 from
> Aimo
>
> mdgolfbum <jim@...> wrote:
> This will be for transmitting as well as receiving for 20,
30 and 40M.
>
> I could always go for an octagon but I wanted to try something
> different with no solder joints. The 2" solid copper strap gives a
> radiating surface equivalent to 1.25" diameter tubing. This isn't
> really a novel approach just some tweaks on good work done by others.
>

4990. Re: [loopantennas] Behavior of feed line

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-28 17:33:57 UTC
From: Jim Dunstan
Topic: 4983 Message: 4990

At 09:21 AM 2/28/2008 -0500, you wrote:

> > I need some confirmation on an assumption Re: 1/2 wavelengths of feed
> > line. I assume if I connect a resistive load (50 ohms) across the end of a
> > feed line (300 ohm twin lead) and cut it to a 1/2 wave length at 14.07 mhz
> > for example (taking into account velocity factor) that the impedance I
> > would measure on the other end would be 50 ohms .... a reflection of the
> > load. I could connect any length of 50 ohm coax after that point ...
> > using a 1:1 balun at the connection point.
>
>That is correct, with certain qualifications.
>
>It is exactly correct for ideal lossless feedline. When you add losses, the
>impedance seen looking into the line tends to move towards the feedline's
>characteristic impedance (300 ohms), which gets worse the longer the line
>is and the more lossy it is. In the limit as you concatenate together
>infinitely many of these 1/2 wavelength (non-ideal, lossy) sections
>together, the impedance seen looking into the line approaches the line's Zo
>(300 ohms), regardless of what load resistor you have on the other end.
>
>Your technique of using a 1/2 wavelength line of the "wrong" impedance, is
>indeed sometimes used.
>
>Theoretically it only holds for some bandwidth around the frequency where
>the line is electrically 1/2 wavelength long (taking into account the
>velocity factor, as you note), and the impedance would deviate from what you
>want as you diverge from that frequency. But with only one 1/2 wavelength
>section, the bandwidth of this impedance transformation is fairly broad.
>
>Twinlead's losses increase somewhat when it gets wet.
>
>Andy

Hi Andy,

Your information is really interesting ... eg feed line loss driving the
feed impedance closer to the inherent impedance of the feed line (in this
case 300 ohm). In my case I have a mechanical reason for inserting a
single 1/2 wave length of twin lead in the feed line. I don't expect to
realize significant loss at 14 mhz from a single half wave (32') of good
quality twin lead.

Thanks

Jim, VE3CI

4991. Re: [loopantennas] Re: Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-02-28 18:00:18 UTC
From: Chris Trask
Topic: 4966 Message: 4991

```
>
> Has anyone tried filling the copper tube with sand or salt to bend
> without kinking?
>
> Steve Greenfield
>
```

Oooooh!! I hadn't thought of that. Together with a plywood form to get the curvature correct, that may be a simple, cost-effective solution.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4992. BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-01 15:01:13 UTC
From: RICHARD JURKOWSKI
Topic: 4992 Message: 4992

The tube MAY kink if the bend is too sharp.
When I raced model boats we would heat the copper
tube with a bernzamatic torch until red hot then
drop it into a bucket of water to cool.The part
that was heated will be softer and bend easily
without kinking.If desired it can be heated again
and immersed into OIL to harden it up.
Good Luck,
Rich WB2WGX

4993. Re: [loopantennas] BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-01 18:51:43 UTC
From: ww8o@verizon.net
Topic: 4992 Message: 4993

>From: RICHARD JURKOWSKI <WB2WGX@...>
>Date: 2008/03/01 Sat AM 09:01:13 CST
>To: loopantennas@yahoogroups.com
>Subject: [loopantennas] BENDING COPPER TUBING

When I work on AC I use a spring for each side of copper
use that will bend copper and not kink. look at the hardware
and see if they still have thye spring..

Gary WW8O

> The tube MAY kink if the bend is too sharp.
>When I raced model boats we would heat the copper
>tube with a bernzamatic torch until red hot then
>drop it into a bucket of water to cool.The part
>that was heated will be softer and bend easily
>without kinking.If desired it can be heated again
>and immersed into OIL to harden it up.
> Good Luck,
> Rich WB2WGX
>
>

4994. Re: [loopantennas] BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-01 18:00:27 UTC
From: Brian Gerber
Topic: 4992 Message: 4994

Use a tubing bender!

It's a long spring type tool that goes over the full length of the bend, it keeps the tubing from going out of round!
Lowe's, home depot etc...

RICHARD JURKOWSKI <WB2WGX@...> wrote: The tube MAY kink if the bend is too sharp.
When I raced model boats we would heat the copper
tube with a bernzamatic torch until red hot then
drop it into a bucket of water to cool.The part
that was heated will be softer and bend easily
without kinking.If desired it can be heated again
and immersed into OIL to harden it up.
Good Luck,
Rich WB2WGX

[Non-text portions of this message have been removed]

4995. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-01 19:50:27 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 4995

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Loop_Patents/Expired Patents/loop-antenna004617571.pdf
Uploaded by : brucevicknair <vicknair@...>
Description : Expired patent, Magnetic Loop antenna-several have been uploaded

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Loop_Patents/Expired%20Patents/loop-anten
na004617571.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

brucevicknair <vicknair@...>

4996. Re: [loopantennas] BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-01 20:05:36 UTC
From: Chris Trask
Topic: 4992 Message: 4996

```
>
> When I work on AC I use a spring for each side of copper
> use that will bend copper and not kink. look at the hardware
> and see if they still have thye spring..
>
> Gary WW8O
>
```

Small Parts sells something like that for small diameter tubing.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

4997. Re: [loopantennas] BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-01 20:24:34 UTC
From: C. Beijersbergen
Topic: 4992 Message: 4997

An alternative method for bending tubes is as follows (I have never done it, but I remember from the text books):

Close one end of the tube by soldering an end piece to it.
Fill the tube completely with fine, dry sand.
Compact the sand as much as possible, make sure the tube remains completely filled.
Close the remaining end of the tube in the same manner.
Now the tube can be bent, it will not kink in sharp bends.

I remember to have seen a movie when I was a small boy about the fabrication of trombones, instead of sand oil was used. The closure of the ends of the tube was not done by soldering I suspect, but I can't recall those details.

Cor Beijersbergen

[Non-text portions of this message have been removed]

4998. Re: BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-02 00:41:43 UTC
From: gplynas
Topic: 4992 Message: 4998

Hi Cris and Cor, Packing sand into the tubing and then bending around a mandrel or form works very well. Our company manufactures transmitters and antenna products which involves bending tubing from 3/8 inch to as much as 3 inches or more. We flatten one end of the tubing as a seal, and pour sand into the tubing, while tamping down the tube. (For a tube that is 20 feet long, that means someone up on the roof pouring in the sand.) We have a device which bumps up the tube to ensure that the sand is packed tight. Once the tube is filled, the other end is flattened, and the tube is then rolled around the mandrel, flattened, or formed to create the coil. The hard part can sometimes be removing the sand.
Best regards,
Paul
WA5LFY

--- In loopantennas@yahoogroups.com, "C. Beijersbergen" <c.beijersbergen@...> wrote:
>
> An alternative method for bending tubes is as follows (I have never done it, but I remember from the text books):
>
> Close one end of the tube by soldering an end piece to it.
> Fill the tube completely with fine, dry sand.
> Compact the sand as much as possible, make sure the tube remains completely filled.
> Close the remaining end of the tube in the same manner.
> Now the tube can be bent, it will not kink in sharp bends.
>
> I remember to have seen a movie when I was a small boy about the fabrication of trombones, instead of sand oil was used. The closure of the ends of the tube was not done by soldering I suspect, but I can't recall those details.
>
> Cor Beijersbergen
>
>
> [Non-text portions of this message have been removed]
>

4999. Re: [loopantennas] Re: BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-02 14:14:50 UTC
From: Chris Trask
Topic: 4992 Message: 4999

I seem to recall that the method of filling the tubing with sand was seen in the movie "Flight of the Phoenix" (the original, not the remake) where the model airplane designer was distilling water from barrels of antifreeze, or something like that.

-----Original Message-----
>From: gplynas <gplynas@...>
>Sent: Mar 1, 2008 5:41 PM
>To: loopantennas@yahoogroups.com
>Subject: [loopantennas] Re: BENDING COPPER TUBING
>
>Hi Cris and Cor, Packing sand into the tubing and then bending around
>a mandrel or form works very well. Our company manufactures
>transmitters and antenna products which involves bending tubing from
>3/8 inch to as much as 3 inches or more. We flatten one end of the
>tubing as a seal, and pour sand into the tubing, while tamping down
>the tube. (For a tube that is 20 feet long, that means someone up on
>the roof pouring in the sand.) We have a device which bumps up the
>tube to ensure that the sand is packed tight. Once the tube is
>filled, the other end is flattened, and the tube is then rolled around
>the mandrel, flattened, or formed to create the coil. The hard part
>can sometimes be removing the sand.
>Best regards,
>Paul
>WA5LFY
>
>--- In loopantennas@yahoogroups.com, "C. Beijersbergen"
><c.beijersbergen@...> wrote:
>>
>> An alternative method for bending tubes is as follows (I have never
>done it, but I remember from the text books):
>>
>> Close one end of the tube by soldering an end piece to it.
>> Fill the tube completely with fine, dry sand.
>> Compact the sand as much as possible, make sure the tube remains
>completely filled.
>> Close the remaining end of the tube in the same manner.
>> Now the tube can be bent, it will not kink in sharp bends.
>>
>> I remember to have seen a movie when I was a small boy about the
>fabrication of trombones, instead of sand oil was used. The closure of
>the ends of the tube was not done by soldering I suspect, but I can't
>recall those details.
>>
>> Cor Beijersbergen
>>

>>
>> [Non-text portions of this message have been removed]
>>
>
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5000. K256 Active Loop Antenna Kit

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-02 22:33:38 UTC
From: aimo ruoho
Topic: 5000 Message: 5000

I built one, (I purchased 2 of them)...
I am still testing it, but I have to be more thorough to be able to see, how it works on separate bands. It gives some signal between LW and SW bands, especially on the tropical bands. On lower bands it is directional, but I think, that I should omit all metal screws and the steel frame tube for moving it and change them to plastic or nylon or wood. My window has a metal grating (probably to prevent robbery, as is usual in Spain!), which may not be too favourable for directive antennas. So I should test this cross-formed loop outside the house on my upper roof, I suppose, to see the total effect of it?
All in all, this loop seems to work, which is not always the absolute case, when you buy a new kit and try to understand, how to manage in building it!

Best regards and opinions from your part, please!
Aimo
metrobase201 <metrobase201@...>
wrote:
Great I check out http://secure.oatleyelectronics.com very nice site and interesting antenna
kit. Good luck with that and keep me in the loop (ha, ha no pun intended). I will check back
here for messages from time to time. Or write my e-mail:
kc2jxc@... "anytime"

Cheers,
good DX
-MetroBase201

Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
--0-1124873358-1204496524=:85849--

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

5001. Re: Self supporting copper tubing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-02 22:53:10 UTC
From: jr_dakota
Topic: 4966 Message: 5001

> >
>
> Hmmm... You could possibly bend 5/8" copper pipe with a 1/2" EMT
> bending tool.
>
> Chris
>

Hard copper tends to kink or at the very least oval out quite a bit (I doubt that would harm reception though) ... You can buy springs for bending hard copper without kinking it, that's that I did to make a quadrafilar helix for weathers sats ... It's a lot of work still to bend it without kinking

JR

5002. Re: BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-02 23:17:37 UTC
From: jr_dakota
Topic: 4992 Message: 5002

--- In loopantennas@yahoogroups.com, "C. Beijersbergen"
<c.beijersbergen@...> wrote:
>
> An alternative method for bending tubes is as follows (I have never
done it, but I remember from the text books):
>
> Close one end of the tube by soldering an end piece to it.
> Fill the tube completely with fine, dry sand.
> Compact the sand as much as possible, make sure the tube remains
completely filled.
> Close the remaining end of the tube in the same manner.
> Now the tube can be bent, it will not kink in sharp bends.
>
> I remember to have seen a movie when I was a small boy about the
fabrication of trombones, instead of sand oil was used. The closure of
the ends of the tube was not done by soldering I suspect, but I can't
recall those details.
>
> Cor Beijersbergen
>
>

I used to use a similar technique for bending 2" PVC conduit ... I had
a heater I called the Easy Bake Oven (I used to cook sandwiches in it
for lunch) and a set of plugs for 1" - 2" PVC and you put the plugs
in, place the section you want to bend in the oven until it is soft
and then bend a 90 or whatever angle(s) you need and the plugs hold
the air in and that keeps the PVC from collapsing when you bend it
.... That saved having to buy a 90 and 2 couplings as well as made for
a smoother pull as you don't have the joints to hang up on when you
pull your wire which is critical when you are pulling 3 wires large
enought to carry 100-100 amps of current ....

JR
> [Non-text portions of this message have been removed]
>

5003. Baseline loop testing?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-03 00:41:52 UTC
From: Jim Miller
Topic: 5003 Message: 5003

As I'm scheming the implementation of my ultimate loop I thought it would be smart to think about testing so as to know when I've screwed something up. ;-)

Since my loop is nearly 1/4 wave at 20M I thought that before hooking up any fancy capacitor I'd try just overlapping the loop ends a bit to achieve resonance. With just air for dielectric and no solder joints or mechanical complexity this should represent "as good as it gets."

Since the loop will be made of 2" copper strap with a copper tube stiffening rib I thought I'd start by suspending the loop in free air about 8ft off the ground and having the suspension line pass through to the bottom to support the whole thing to maintain its circular shape. I'll need to make a matching loop and that will get suspended in the same way. Obviously this rube goldberg mess will need to be tested on a calm day.

I've got an AA908 to measure the impedence with but I'm not too confident in its ability at this frequency. If can get to 2:1 SWR I can use a few feet RG-8X to get far enough away and there shouldn't be too much loss to confuse the measurements. As long as I can get the loop to resonate somewhere in the CW portion of 20M I should be able to evaluate how good it is by measuring the Q.

I can use my test generator to produce a sweepable test signal and measure the -3db points. I thought I might use my PIC powermeter to measure the signal strength and drive the test generator into an open 50ohm load several feet away. Any other ideas?

Once I'm satisfied this measurement is repeatable it should give me something to compare my various capacitor implementations against as I attempt to make caps which can allow the loop to tune 20, 30 and 40M. It will also be interesting to see how the Q compares to the values estimated for this design by the various loop design programs.

I'll also repeat the measurements with the overlapped-end approach with a PVC central support in place and again once it is mounted on something. I'm currently planning to mount it on a metal post with a saddle and a clamp with a base height of 8ft.

I'm going to order the copper strap from Wireman tomorrow and get the 1/4" copper tube from HD. Still need to design a plywood fixture to seam the two together.

Comments and recommendations welcomed.

tnx
jim ab3cv

5004. Re: [loopantennas] Re: BENDING COPPER TUBING

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-03 00:46:10 UTC
From: sonicxcove@aol.com
Topic: 4992 Message: 5004

There are some low melting bismuth alloys that can be used to fill tubing to keep it from kinking or flattening. One such alloy melts at 117° F, but is rather expensive. Another alloy melts at 160° F and is much cheaper. Since both melt below the boiling point of water the tubing would never be heated anywhere near the point of annealing it when filling or removing the alloy from the tubing.

Trumpet and trombone makers use a soap solution for making the bends needed in brass tubing. The tubing is filled then frozen with this solution inside the tubing. I do not know what solution they are using, but it would be worth looking into.

Filling the tube with about any liquid and tightly sealing the ends ought to work as long as you work the tubing at room temperature. The hydraulic pressure inside the tube would prevent it from collapsing.

Trying to tightly pack sand in a long tube would seem to be rather difficult if not impossible.

Sources for low melting alloys:
http://www.smallparts.com/products/descriptions/lma.cfm
(http://www.smallparts.com/products/descriptions/lma.cfm)
http://www.micromark.com (http://www.micromark.com)

Eric

In a message dated 3/1/2008 7:41:58 P.M. Eastern Standard Time, gplynas@... writes:

Hi Cris and Cor, Packing sand into the tubing and then bending around a mandrel or form works very well. Our company manufactures transmitters and antenna products which involves bending tubing from 3/8 inch to as much as 3 inches or more. We flatten one end of the tubing as a seal, and pour sand into the tubing, while tamping down the tube.

**********Ideas to please picky eaters. Watch video on AOL Living.
(http://living.aol.com/video/how-to-please-your-picky-eater/rachel-campos-duffy/2050827?NCID=aolcmp00300000002598)

[Non-text portions of this message have been removed]

5005. need an hf transceiver!!!!!!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-03 14:44:06 UTC
From: shubhamforme
Topic: 5005 Message: 5005

hello everyone .... i want a hf transceiver which has a 20m or 14mhz
band or even more will do,,,,any brand and any model is accepted ,
even if its a qrp transceiver or home brewed..... .....

if any 1 intrested in selling then please contact me.....
i am in a desperate need of a hf transceiver. ....
regards
will make the payments through paypal or by cheque or by western union
money transfer.... ....

shubham tiwari
contact---
shubhamformeATyahoo .com

5006. Ideas for a test loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-03 15:35:24 UTC
From: Ken
Topic: 5006 Message: 5006

I am looking at buying a Wellbrook ALA 330S but before sending my hard earned cash across the world I would like an idea of how a loop would work in my location. I am thinking of building a test loop and would like some input on where to start.

Some info...I have no interest in the AM band...my main interest are utilities in the 4mhz to 21mhz range....I have 100,000 volt power lines about 200-300 metres away. It's the noise generated by these power lines in rainy or foggy weather I am hoping the loop will help with. I do not have the room on my property to build a large wire loop. This will be Receive only.

Am I correct in assuming loops are just like a dipole in that the larger the diameter single turn copper loop the easier it will be to resonate between 4-21 mhz?

The tuning capacitor for a HF loop is Higher in capacitance or Lower than a loop used for the AM band?

Thanks for any ideas and help you can give me.

Ken

5007. Re: [loopantennas] need an hf transceiver!!!!!!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-03 17:50:05 UTC
From: resopkr@aol.com
Topic: 5005 Message: 5007

Check the classified ads at eham and qth. They might have what your'r looking for.

-----Original Message-----
From: shubhamforme <shubhamforme@...>
To: loopantennas@yahoogroups.com
Sent: Mon, 3 Mar 2008 9:44 am
Subject: [loopantennas] need an hf transceiver!!!!!!!!!

hello everyone .... i want a hf transceiver which has a 20m or 14mhz
band or even more will do,,,,any brand and any model is accepted ,
even if its a qrp transceiver or home brewed..... .....

if any 1 intrested in selling then please contact me.....
i am in a desperate need of a hf transceiver. ....
regards
will make the payments through paypal or by cheque or by western union
money transfer.... ....

shubham tiwari
contact---
shubhamformeATyahoo .com

[Non-text portions of this message have been removed]

5008. Re: [loopantennas] Ideas for a test loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-04 00:45:14 UTC
From: Richards
Topic: 5006 Message: 5008

Hello Ken ---

A couple of things spring to mind, although not really a comprehensive answer to your questions. Initially, I think building a test loop will only prove whether or not your test loop works well or not, and will not have any transferable relevance to the proposed Welbrook loop. Unless your design is very similar to the Wellbrook loop, it will not serve as a valid comparison.

Having a Wellbrook ALA-100M loop, myself, I believe the Wellbrook loop you mention will, pick up about as much noise as a random wire antenna fed by coaxial cable and a 9:1 balun/transformer. If you have significant RFI/EMI from the power lines down the block, and you pick that up on this type of random wire antenna, you will pick up about as much of the same hash on the loop. I know, in theory, such loops are supposed to focus on the magnetic portion of the signal, and less upon the electrical portion of the signal (which is supposed to be where the noise primarily resides,) but I don't think the loop you inquire about will sufficiently disregard the power line noise, assuming there is power line noise, to warrant the purchase.

Do you know that you are picking up noise from those power lines? They might be far enough away not to be causing your problem.

I suppose you are correct that the size of the loop relates to its frequency, somewhat loosely analogous to the way the length of a dipole antenna relates to its resonant frequency. but only in a very loose, generalized manner. Yes, size matters, but so do many other factors. You can use various loop calculation formulas and calculators you find on various websites and in antenna handbooks, to determine the optimum size for your loop. The size, type, and characteristics of the material used will impact those formulas.

Just MY take.... Happy trails and 73. ---- Richards - K8JHR ----
==========

Ken wrote:
> I am looking at buying a Wellbrook ALA 330S

thinking of building a test loop and would
> like some input on where to start.
>
the noise generated by these
> power lines in rainy or foggy weather I am hoping the loop will
>
assuming loops are just like a dipole in that the larger the
diameter single turn copper loop the easier it will be to

> resonate between 4-21 mhz?

==========

5009. Re: [loopantennas] Ideas for a test loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-04 01:12:58 UTC
From: Ray Phillips
Topic: 5006 Message: 5009

Ken,

Dealing with your queries in reverse order.

A tuning capacitor can just as well tune HF frequencies as it can MF frequencies. A loop antenna (any antenna actually) is at its best when it is resonant. Resonance is determined by both the capacitance of the capacitor and the inductance of the antenna.

This means that if you have an antenna with an inductance of x microhenries and it resonates at 1MHz with a capacitor, an antenna of .1x microhenries will resonate at 3.3MHz with the same capacitor.

The formula for resonance is 1 / 2pi SQR(LC). L=henries C=farads Frequency in Hertz.

Loop antennae (all antennae) have a natural resonance. The bigger the loop the lower the natural resonant frequency because the natural inductance of the loop is larger. Also antennae have inbuilt capacitance. Various factors affect this such as the size, shape, number of turns and proximity of metal. The natural inductance and natural capacitance give the loop its natural resonant frequency. You can't resonate a loop above its natural resonant frequency because you cannot have a minus capacitance.

To get the best performance from a loop over a band you need to make the loop as large as possible so that its natural resonance is the top frequency you want. You can then resonate it down with the variable capacitor.

Getting a loop antenna to swing between 4 and 21MHz is a fair ask and the performance at the bottom frequencies would be down a bit. I would recommend making two loops - one with a natural resonance at 21MHz and another with a natural resonance at about 10MHz. This will give you a fairly constant performance as you tune across the bands. Small plastic-dielectric variable capacitors are about the cost of a cappucino and will do your job nicely.

Don't use iron wire for your loop - its Q is unsatisfactory.

I am only 20 metres from HT power lines and I find that the RFI from them is worse at lower frequencies. To test if a loop will be staisfactory for you, just build a low frequency 4-10MHz test loop - it will tell you what you want to know.

Goto www.dxzone.com and follow the links to loop antennae for lots of good info. You will also find links to loop antenna calculators to help you

get it right easily.

Ray,
vk5fyar

> I am looking at buying a Wellbrook ALA 330S but before sending my hard
> earned cash across the world I would like an idea of how a loop would
> work in my location. I am thinking of building a test loop and would
> like some input on where to start.
>
> Some info...I have no interest in the AM band...my main interest are
> utilities in the 4mhz to 21mhz range....I have 100,000 volt power
> lines about 200-300 metres away. It's the noise generated by these
> power lines in rainy or foggy weather I am hoping the loop will help
> with. I do not have the room on my property to build a large wire
> loop. This will be Receive only.
>
> Am I correct in assuming loops are just like a dipole in that the
> larger the diameter single turn copper loop the easier it will be to
> resonate between 4-21 mhz?
>
> The tuning capacitor for a HF loop is Higher in capacitance or Lower
> than a loop used for the AM band?
>
> Thanks for any ideas and help you can give me.
>
> Ken
>
>
>

All the best,
Ray

5010. Re: Ideas for a test loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-04 03:30:17 UTC
From: Ken
Topic: 5006 Message: 5010

--- In loopantennas@yahoogroups.com, Richards <jruing@...> wrote:

> Do you know that you are picking up noise from those power lines?
> They might be far enough away not to be causing your problem.

First off thank you to both you Richards and to Ray for your replies!
You both gave me lots to think about.

As for the powerline noise, yes it is from the lines but only when it
rains and/or is foggy. I think the moisture on the surface of the
powerline wires conducts for a split second. If you stand under them
(there is a dog walking trail there) you can hear them "hissing" in
the rain or fog.

I think I will build a 10mhz loop just to see if it rejects even a
part of the noise.

I have some 0 gauge copper ground wire which is about 6mm/.25 inch.
Would that work? It's quite stiff and about 5-7 strand.

Ken

5011. Re: Ideas for a test loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-04 16:28:47 UTC
From: dldorrance
Topic: 5006 Message: 5011

--- In loopantennas@yahoogroups.com, "Ken" <mrkeeks@...> wrote:
> ... I am thinking of building a test loop and would
> like some input on where to start.
>

Hi Ken,

The Wellbrook antenna looks to be a small loop with a preamplifier.
Many of your questions would be answered by obtaining some useful
information with a small loop calculating program. I suggest
loopcalc.exe, which you may download here:
http://www.qrz.com/download/antennas/loopcalc.zip

You are correct that a loop antenna tends to reject the electric
component of electromagnetic radiation, however this works best before
the electric and magnetic fields merge into electromagnetic radiation
ie radio waves. So the closer to the source, the better the ability
for a loop to reject the noise.

Another use for a small loop to reduce noise is to rotate the loop
such that the noise source is in the null of the figure 8 loop
pattern. For a small loop this occurs when the plane of the loop is
perpendicular to the noise source (the loop receives signals strongest
traveling in the plane of the loop)

Dave

5012. Re: Ideas for a test loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-04 23:07:16 UTC
From: jr_dakota
Topic: 5006 Message: 5012

--- In loopantennas@yahoogroups.com, "Ken" <mrkeeks@...> wrote:
>
> I am looking at buying a Wellbrook ALA 330S but before sending my hard
> earned cash across the world I would like an idea of how a loop would
> work in my location. I am thinking of building a test loop and would
> like some input on where to start.
>
> Some info...I have no interest in the AM band...my main interest are
> utilities in the 4mhz to 21mhz range....I have 100,000 volt power
> lines about 200-300 metres away. It's the noise generated by these
> power lines in rainy or foggy weather I am hoping the loop will help
> with. I do not have the room on my property to build a large wire
> loop. This will be Receive only.
>
> Am I correct in assuming loops are just like a dipole in that the
> larger the diameter single turn copper loop the easier it will be to
> resonate between 4-21 mhz?
>
> The tuning capacitor for a HF loop is Higher in capacitance or Lower
> than a loop used for the AM band?
>
> Thanks for any ideas and help you can give me.
>
> Ken
>

The two main advantages of a Wellbrook over a tuned loop is if you are working low frequencies as well as high and not having to tune the loop remotely ....

Other than that *in it's tuning range* a tuned loop will outperform an untuned amplified loop every time as IP2 and IP3 problems are virtually non-existant unless you add an amplifier and even with an amplifier it's usually better because of the inherent filtering of the tuned loop

I'm shooting off the hip here but about 12 ft of copper tubing, a 365pf tuning cap and a remote drive for the cap and you should be in business for 4-21 Mhz ... If you need a little boost then get a Kiwa preamp w/BCB filter built-in and you'll have a system better than the Wellbrook (For your application) and still be able to pocket a couple of hundred bucks ...

If you were DXing NDB's or other low frequency signals or DXing everything from 100Khz to 30Mhz then the Wellbrook starts looking better than a tuned loop but the range you are after is perfect for a

tuned loop, the biggest problem will be rigging up a remote tuning mechanism but there are a few examples on the internet to help you out

JR

5013. Re: [loopantennas] K256 Active Loop Antenna Kit

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-05 23:37:10 UTC
From: aimo ruoho
Topic: 5000 Message: 5013

Hello again, Metro Base!

Here are two addresses:
sales@...

www.oatleyelectronics.com

OATLEY ELECTRONICS PTY LTD,
PO BOX 89 OATLEY NSW 2233 AUSTRALIA
PHONE: 02 9584 3563
FAX: 02 9584 3561

I am still testing the 1st one of the two kits, that I received.
I will try to find a little thicker plastic box to be able to fit the
9 V battery into it with the breadboard, variable resistor and
a switch to open and close the connection to the battery.
I want to use a rechargeable battery, so perhaps I will try to
recharge it without taking it out from the box every time.
That might be best, to spare extra work every now and then,
I think. Though I can see on the schematic, that a +11 to 30
VDC current may be introduced...
In that case I probably should just add a key for an outboard
DC? Perhaps avoid totally connection to main (house) power
source and use a car-battery or even a motorcycle-battery?
At least thouse might be more durable, than small batteries,
and give less noise, than AC/DC adapters.

From the addresses in the beginning you will find pictures of
these kits also, but I will try to send photos later into the
Photos-mail-box of the Loopantennas Group and perhaps into
the Shortwave-Antenna-Yahoo-Group, too?

As for the listening: Last night I heard very clearly both 5025
R.Rebelde, Cuba and Nouakchott, R.Mauritania. 5030 Radio
Ouagadougou had finished about 30 minutes before 0000 at
UT for some reason, so I'll try to listen in to it tonight a little
earlier... 60 meter band is an obsession to me!

Thanks for interest this time.
Aimo

kc2jxc@... wrote:
Aimo, muy buen.
Sorry I haven't wrote sooner, hope your trip went well. Please let me know more I'm really interested in the pre-amps and post pictures if you can. What was the site again where you got them? Please send me link. As for myself I'm working on a variation of the famous Radio Havana Arnie Coro's broomstick antenna.

http://www.hard-core-dx.com/nordicdx/antenna/special/bromstik.html

I'll let you know how that goes. Tell me what do you chase? I spend a lot of time on number stations and the tropical bands.

Cheers
de
KC2JXC
aka MetroBase

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

5014. Re: [loopantennas] K256 Active Loop Antenna Kit

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-06 18:51:11 UTC
From: aimo ruoho
Topic: 5000 Message: 5014

Very odd indeed!
SHOULD BE: www.oatleyelectronics.com
www.oatleyelectronics.com
"oatleyelectronics" is one (1) whole word.
The whole address must be in blue, all BLUE!

aimo ruoho <aimounto@...> wrote:
Hello again, Metro Base!

Here are two addresses:
sales@...

www.oatleyelectronics.com

OATLEY ELECTRONICS PTY LTD,
PO BOX 89 OATLEY NSW 2233 AUSTRALIA
PHONE: 02 9584 3563
FAX: 02 9584 3561

I am still testing the 1st one of the two kits, that I received.
I will try to find a little thicker plastic box to be able to fit the
9 V battery into it with the breadboard, variable resistor and
a switch to open and close the connection to the battery.
I want to use a rechargeable battery, so perhaps I will try to
recharge it without taking it out from the box every time.
That might be best, to spare extra work every now and then,
I think. Though I can see on the schematic, that a +11 to 30
VDC current may be introduced...
In that case I probably should just add a key for an outboard
DC? Perhaps avoid totally connection to main (house) power
source and use a car-battery or even a motorcycle-battery?
At least thouse might be more durable, than small batteries,
and give less noise, than AC/DC adapters.

From the addresses in the beginning you will find pictures of
these kits also, but I will try to send photos later into the
Photos-mail-box of the Loopantennas Group and perhaps into
the Shortwave-Antenna-Yahoo-Group, too?

As for the listening: Last night I heard very clearly both 5025
R.Rebelde, Cuba and Nouakchott, R.Mauritania. 5030 Radio
Ouagadougou had finished about 30 minutes before 0000 at
UT for some reason, so I'll try to listen in to it tonight a little
earlier... 60 meter band is an obsession to me!

Thanks for interest this time.
Aimo

kc2jxc@... wrote:
Aimo, muy buen.
Sorry I haven't wrote sooner, hope your trip went well. Please let me know more I'm really interested in the pre-amps and post pictures if you can. What was the site again where you got them? Please send me link. As for myself I'm working on a variation of the famous Radio Havana Arnie Coro's broomstick antenna.

http://www.hard-core-dx.com/nordicdx/antenna/special/bromstik.html

I'll let you know how that goes. Tell me what do you chase? I spend a lot of time on number stations and the tropical bands.

Cheers
de
KC2JXC
aka MetroBase

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

5015. KC8AON x2 Twin Lead Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-06 21:35:32 UTC
From: MASH
Topic: 5015 Message: 5015

Hi Everyone:
De Cliff WW6CC. This is my first posting. I have been reading
the mail for a few months.
I made a KC8AON x2 Loop. Its a 300 ohm twin lead double loop.
It is about 78 ft., both loops total. I made a 4:1 balun for it.
Whether I have the balun in or out of line, wether I use a tuner
or not, its is infinity SWR on all bands from 80M to 10M. Any
ideas on how to solve the infinity SWR problem?
Thanks in advance,
73s,
Cliff, WW6CC
--
MASH
mash4077@...

--
http://www.fastmail.fm - Accessible with your email software
or over the web

[Non-text portions of this message have been removed]

5016. Re: [loopantennas] KC8AON x2 Twin Lead Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-07 01:46:15 UTC
From: Jim Dunstan
Topic: 5015 Message: 5016

At 01:35 PM 3/6/2008 -0800, you wrote:

>Hi Everyone:
>De Cliff WW6CC. This is my first posting. I have been reading
>the mail for a few months.
>I made a KC8AON x2 Loop. Its a 300 ohm twin lead double loop.
>It is about 78 ft., both loops total. I made a 4:1 balun for it.
>Whether I have the balun in or out of line, wether I use a tuner
>or not, its is infinity SWR on all bands from 80M to 10M. Any
>ideas on how to solve the infinity SWR problem?
>Thanks in advance,
>73s,
>Cliff, WW6CC

Hi Cliff,

Not sure what the KC8AON x 2 loop configuration is but I assume ... x2 refers to 2 turns in the loop, 78 ft refers to total wire length, and 300 ohm twin lead is the feed line used to feed the 2 turn loop. I assume infinity SWR indicates a high SWR ??

I am sure you will need a balanced antenna tuner to couple this antenna to your transceiver. The impedance the tuner will have to deal with depend on the frequency you set your transceiver to and the length of the 300 ohm feed line. The SWR is basically a function of the amount of mismatch between the antenna impedance and the feed line impedance. If the antenna has a 300 ohm impedance and it is fed with 300 ohm feed line there will be no mismatch, the antenna will absorb all the energy, and there will be no energy reflected back and thus no standing waves .... an SWR of 1:1.

As the antenna feed point varies from 300 ohms (up or down) there will be power reflected back thus creating SWR. Typically balanced feed line like 300 twin lead, 450 ohm ladder line, and 600 ohm open wire line are lines that loose the least amount of power due to SWR. However, no matter what the feed line, the higher the SWR the greater the loss. In order to actually predict the SWR the feed line/tuner will have to deal with you need to know the impedance of the antenna at any particular frequency and the impedance of the feed line. There are antenna analyzers that can be used to measure this. However the majority of hams simply experiment with different configurations to see what works and what doesn't.

The SWR remains pretty much constant along the feed line ... but the impedance at any particular point along the feedline will be a function of the antenna voltage/current ratios .... some of which a tuner can deal with and others that simply refuse to be matched with the tuner. So you need to compromise ... if your antenna is 50 feet away from your operating position

your feed line has to be at least 50 ft long ... can't be less hi hi ... however if you can't tune it to a frequency you really want then you might add some line to get a 'sweet spot' that will tune with your tuner.

Coincidentally, the SGC antenna tuner company uses 80 ft in what they call their 'Stealth Antenna' . They advertise that you can use the 80 ft wire in either a 1, 2, 3, and even a 4 turn loop from 80-10m. They don't use a feed line to the loop but tune it directly with an automatic antenna tuner. The tuner has to be located at the antenna feed point. A coax feed connects the output of the tuner to the operating location.

Nothing is simple hi hi.

Jim, VE3CI

5017. 20m delta beam

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-07 23:03:33 UTC
From: John
Topic: 5017 Message: 5017

I am in the process of designing a 2 element delta loop beam for 20m. I am wondering if anybody here has taken the approach that I am using. I going to have it in the L configuration and I plan to feed it with a gamma match (basically like the old CB V-quad design). I settled on the L configuration because what I came up with using EZNEC showed me that it would be the best for my particular installation -- I am only going to have it up at 30ft.

By doing it in the L configuration it has a good horizontal lobe from about 45 degrees to about 15 degrees and then from 15-5 degrees the vertical and horizontal lobes meet and are almost equal in strength. My thinking is that this will be a good antenna for short haul skip, as well as being good for long haul DX since the horizontal and vertical energy are close to being equal -- my thinking is this would reduce fading due to polarization shifts that are common on long haul and trans-polar paths. I could be wrong, but I believe that it is a sound idea in theory. I used a delta loop beam like this for a while on 10m and on long haul it would outperform my 6 element yagi that was about 20ft higher about 50% of the time.

Any help with this before I put the money into the antenna would be greatly appreciated.

John, KC8NTP, east central Nevada

P.S. I have also thought about insulating the elements and using a 1/4 wave section of 75 ohm coax to feed the antenna, since this a very close impendence match.

5018. Great find - Heathkit dip meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-08 15:41:48 UTC
From: Steve Greenfield
Topic: 5018 Message: 5018

I built one of these long ago and sold it in a move, sad I hadn't kept it since then.

Just found one in a used computer store yesterday! Everything there, even the book. Barely looks used. Of course the foam in the case and around the battery has turned into that tar-like goo but that's easily replaced.

It only goes down to 1.6MHz, but easy enough to make coils for it, uses RCA photo plugs for the coils.

And it only cost me $22.95! Less than I could have bought the parts to build one.

Steve Greenfield

5019. Re: Great find - Heathkit dip meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-08 16:22:19 UTC
From: Terry
Topic: 5018 Message: 5019

Good stuff Steve! I got a Grid Dip meter made by James Millen Mfg for doing an antenna job for a fellow. They are great to have when working with traps.
Terry VE1TRB

-- In loopantennas@yahoogroups.com, Steve Greenfield <alienrelics@...> wrote:
>
> I built one of these long ago and sold it in a move, sad I hadn't
> kept it since then.
>
> Just found one in a used computer store yesterday! Everything
> there, even the book. Barely looks used. Of course the foam in the
> case and around the battery has turned into that tar-like goo but
> that's easily replaced.
>
> It only goes down to 1.6MHz, but easy enough to make coils for it,
> uses RCA photo plugs for the coils.
>
> And it only cost me $22.95! Less than I could have bought the parts
> to build one.
>
> Steve Greenfield
>

5020. Re: [loopantennas] Great find - Heathkit dip meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-08 17:31:12 UTC
From: Paul V Birke PEng
Topic: 5018 Message: 5020

Just found one in a used computer store yesterday! Everything

there, even the book. Barely looks used. Of course the foam in the

case and around the battery has turned into that tar-like goo but

that's easily replaced.

It only goes down to 1.6MHz, but easy enough to make coils for it,

uses RCA photo plugs for the coils.

And it only cost me $22.95! Less than I could have bought the parts

to build one.

Steve Greenfield

****

Dear Steve

great find

do you have the transistor one or the tunnel diode

anyways excellent shopping
Heathkit made great stuff

best
Paul

[Non-text portions of this message have been removed]

5021. Re: [loopantennas] Great find - Heathkit dip meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-08 21:38:41 UTC
From: Steve Greenfield
Topic: 5018 Message: 5021

Remove all that you can mechanically. IE, scoop and scrape it off.
Careful not to rub it in.

Then use paper towels and isopropyl (rubbing) alcohol. You want as
little as possible left when you do this, as what is there turns
gooey.

Careful of the lettering, some of these things were made with
something that dissolves in alcohol. Found that out the hard way
this morning, some of the lettering on this Heathkit is smudged
now.

It has something else wrong with it, too. Hard to get an indication
on the meter with a new battery (checked, 9.6V) and drops off to
zero at the ends of the scale. It may be bad connections after
sitting so long.

Steve Greenfield

--- Steve Ratzlaff <steveratz@...> wrote:

> Hi Steve,
> What do you do to clean out that tar-like goo? I have the same
> one I built
> many years ago that has everything where the coils go in a
> massive 'tar-like
> goo' state. I haven't tried to do anything with it though, just
> let it sit
> after looking inside. :)
> Steve
> NE Oregon

5022. Re: Great find - Heathkit dip meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-09 00:44:20 UTC
From: dldorrance
Topic: 5018 Message: 5022

--- In loopantennas@yahoogroups.com, Steve Greenfield
>
> It has something else wrong with it, too. Hard to get an indication
> on the meter with a new battery (checked, 9.6V) and drops off to
> zero at the ends of the scale. It may be bad connections after
> sitting so long.
>

Mine does this also with the 20 meter coil; it's the connection
between the coil and the meter is a little tricky. MFJ sells a dip
meter which has a similar appearance to the Heathkit, but with
different coil connectors.

5023. Re: Great find - Heathkit dip meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-09 02:10:14 UTC
From: Steve
Topic: 5018 Message: 5023

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> --- In loopantennas@yahoogroups.com, Steve Greenfield
> >
> > It has something else wrong with it, too. Hard to get an indication
> > on the meter with a new battery (checked, 9.6V) and drops off to
> > zero at the ends of the scale. It may be bad connections after
> > sitting so long.
> >
>
> Mine does this also with the 20 meter coil; it's the connection
> between the coil and the meter is a little tricky. MFJ sells a dip
> meter which has a similar appearance to the Heathkit, but with
> different coil connectors.

The RCA female does look a bit grey.

Strangely, I cannot pick anything up on my brand new frequency
counter. I'll have to check it out on my 'scope. It was built from a
kit, after all, and it may look unused because it was built incorrectly.

Steve Greenfield

5024. Plastic Foam Cheesecake

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-09 23:25:33 UTC
From: Hue Miller
Topic: 5024 Message: 5024

When was that Heathkit Dipmeter sold?
I am always interested in how long it took for the foam
padding to turn to greasey tarry petroleum cheesecake.
I scraped some of this off a printer at work the other day,
and was amazed that that the printer dated to something
like 1990. This phenomenon has something to do with
the 'plasticizer' which makes the plastics material flexible.
Maybe some other reader can comment on the mechanism
of this working.
I have used test equipment which had a plastic carry handle,
and the handle was beginning to have that "sticky" feel which
is a sign of trouble coming. I have a large plastics equipment
transit case which would be an expensive item to buy, except
that it has acres of yukky black cushioning inside and i haven't
had the fortitude to get in there and try to clean it out. Paint
thinner removes the traces but it is a lot of work and you get
a lungfull of toxic fumes. Maybe i will default and just drag it
to the trash dumpster. -Hue Miller

5025. Pickup Loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 00:58:08 UTC
From: John MacKay
Topic: 5025 Message: 5025

A few weeks ago I reported that the 8" pickup loop to my 30" receiving loop "had a life of its own". When the receiver was tuned to 17000-20000 khz the pickup loop directed local noise to the receiver even when the antenna loop was tuned as far off freq as 3500 khz.

I have since reduced the size of the pickup loop to 5", and am pleased to report that Australia on 17795 khz can now be heard without the neighbourhood bedlam. Either the noise source has disappeared or I have raised the resonsnt freq of the pickup loop + coax to a noise-free portion of the spectrum.

It was suggested at the time that I resort to tuning the main loop with ladder line and a tuner, thus eliminating the necessity for a pickup loop. I may try it for comparison later this year but my varactor tuner suits my purpose at this time. 73 de VE7AFN..

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5026. Re: Great find - Heathkit dip meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 06:01:42 UTC
From: Steve
Topic: 5018 Message: 5026

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...>
wrote:

> Dear Steve
>
> great find

> do you have the transistor one or the tunnel diode

Transistor and dual channel MOSFET.

Interestingly, somewhere here I still have some 40673 dual gate
MOSFETs in antistatic foam from -long- ago.

Steve Greenfield

5027. Kaito KA 35 Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 14:48:14 UTC
From: rugelj2002
Topic: 5027 Message: 5027

I am considering purchase of a Kaito KA-35 Loop Antenna. I have the KA-1103 receiver.....its great! Has anyone purchased the KA-35? Can you give your opinion? Is it worth the money? Thanks!

5028. Simple question about turns for a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 17:14:53 UTC
From: John
Topic: 5028 Message: 5028

Hi,
How do I know how many turns of wire do I need for my loop antenna? In case you need the dimensions it is going to be 11 11/16 inches wide and 13 3/4 Long. I am just trying to make a basic antenna for AM Radio, but I have no idea how many turns I need to make it work right. Thank you for your time.

John

5029. Re: Plastic Foam Cheesecake

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 19:08:03 UTC
From: Steve
Topic: 5024 Message: 5029

Don't know when this one was sold, but the one I had originally I
bought and built around 1981.

Use isopropyl to clean it out after scooping out as much as you can.
You still don't want to breath a lot of it, but it isn't as bad as
thinner.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "Hue Miller" <kargo_cult@...> wrote:
>
> When was that Heathkit Dipmeter sold?

> I have a large plastics equipment
> transit case which would be an expensive item to buy, except
> that it has acres of yukky black cushioning inside and i haven't
> had the fortitude to get in there and try to clean it out. Paint
> thinner removes the traces but it is a lot of work and you get
> a lungfull of toxic fumes. Maybe i will default and just drag it
> to the trash dumpster. -Hue Miller
>

5030. Re: [loopantennas] Kaito KA 35 Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 19:08:40 UTC
From: Paul V Birke PEng
Topic: 5027 Message: 5030

----- Original Message ----
From: rugelj2002 <rugelj2002@...>
To: loopantennas@yahoogroups.com
Sent: Monday, March 10, 2008 10:48:14 AM
Subject: [loopantennas] Kaito KA 35 Loop Antenna

I am considering purchase of a Kaito KA-35 Loop Antenna. I have the

KA-1103 receiver.... ..its great! Has anyone purchased the KA-35? Can

you give your opinion? Is it worth the money? Thanks!

****

The Kaito 1103 is just great. I do not know about the antenna

I would like to know from others if the KIWA audio upgrade for the Kaito 1103 is worth it??

Just wondering while we are talking about Kaito 1103

thanks in advance
Paul

__.-,-.__

[Non-text portions of this message have been removed]

5031. Re: [loopantennas] Plastic Foam Cheesecake

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 20:56:49 UTC
From: Andy
Topic: 5024 Message: 5031

> I have used test equipment which had a plastic carry handle,
> and the handle was beginning to have that "sticky" feel which
> is a sign of trouble coming.

The following is mostly unrelated to the discussion about Heathkit foam, and entirely unrelated to loop antennas ...

I just wanted to add a note, that Deet, the active ingredient in many insect repellants, also dissolves plastics.

So this could be another contributor to the handle stickiness.

My son found this out the hard way, when his camera case started to dissolve onto his hands while we were walking around taking pictures. It was a cheap camera so no big loss there, but his hands became black.

That, plus Deet's toxicity, are good reasons to use the newer insect repellants that use Picaridin instead.

Andy

5032. Re: [loopantennas] Simple question about turns for a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 22:45:18 UTC
From: Jim Dunstan
Topic: 5028 Message: 5032

At 05:14 PM 3/10/2008 +0000, you wrote:

>Hi,
>How do I know how many turns of wire do I need for my loop antenna? In
>case you need the dimensions it is going to be 11 11/16 inches wide and
>13 3/4 Long. I am just trying to make a basic antenna for AM Radio,
>but I have no idea how many turns I need to make it work right. Thank
>you for your time.
>
>John

Hi John,

I assume you are going to tune the loop with a single or double section capacitor ... eg about 365 pfd per section. It is an easy matter to experiment ... however for a loop of that dimension I would estimate (based on my experience with loops the same approx. size) that 16 turns will be close. I don't know if you want the lower half, the upper half, or the whole band ... eg. 540 - 1700 khz. In any event try 16 turns and see how low it will resonate with one section. If you want the whole band then prune the turns down to resonate at the low end with 2 capacitors and switch one of the capacitors out to cover right to the top of the band.

For me it is no problem since I am really interested in about 540 to 1000 khz. For me, that dimension will resonate down to 540 khz with a single 365 pfd capacitor and 16 turns.

Jim

5033. your Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-10 20:44:28 UTC
From: grant vyborny
Topic: 5033 Message: 5033

Hi, what is the "L" configuration? having a hard time imagining what it could be
thanks, Grant KT6L

[Non-text portions of this message have been removed]

5034. Re: Simple question about turns for a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-11 06:35:22 UTC
From: John
Topic: 5028 Message: 5034

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 05:14 PM 3/10/2008 +0000, you wrote:
>
> >Hi,
> >How do I know how many turns of wire do I need for my loop antenna? In
> >case you need the dimensions it is going to be 11 11/16 inches wide and
> >13 3/4 Long. I am just trying to make a basic antenna for AM Radio,
> >but I have no idea how many turns I need to make it work right. Thank
> >you for your time.
> >
> >John
>
> Hi John,
>
> I assume you are going to tune the loop with a single or double section
> capacitor ... eg about 365 pfd per section. It is an easy matter to
> experiment ... however for a loop of that dimension I would estimate (based
> on my experience with loops the same approx. size) that 16 turns will be
> close. I don't know if you want the lower half, the upper half, or the
> whole band ... eg. 540 - 1700 khz. In any event try 16 turns and see how
> low it will resonate with one section. If you want the whole band then
> prune the turns down to resonate at the low end with 2 capacitors and
> switch one of the capacitors out to cover right to the top of the band.
>
> For me it is no problem since I am really interested in about 540 to 1000
> khz. For me, that dimension will resonate down to 540 khz with a single
> 365 pfd capacitor and 16 turns.
>
> Jim
>

Thank you Jim!

5035. Re: Simple question about turns for a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-11 12:46:43 UTC
From: kg4lac
Topic: 5028 Message: 5035

John,
According to http://www.am-dx.com/loop_calc.htm, using your
dimensions, .25 winding spacing, with variable capacitor tuning from
14 pF to 390 pF calculates 24 turns will give 33 kHz to 1778 kHz.
You'll cover LW and MW with the loop.
Or, visit the site to test other sizes, numbers, etc.
73,
Kraig, KG4LAC

5036. Re: Simple question about turns for a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-11 17:42:46 UTC
From: tenorman1952
Topic: 5028 Message: 5036

--- In loopantennas@yahoogroups.com, "John" <wymanwvp1@...> wrote:
>
> Hi,
> How do I know how many turns of wire do I need for my loop antenna? In
> case you need the dimensions it is going to be 11 11/16 inches wide and
> 13 3/4 Long. I am just trying to make a basic antenna for AM Radio,
> but I have no idea how many turns I need to make it work right. Thank
> you for your time.
>
> John

John, I have a tuned loop, 24" diagonal, 17" on each side, with 15 turns of 22 ga magnet wire, 1/8" spacing, and it tunes the entire AM Broadcast Band (MW) with a 9.6-365 pf tuning capacitor.

Here is an online Loop Calculator by group member Bruce Carter.

http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

Entering 11.69" for width, and 13.75" for height, and 16 turns, as suggested before, it shows that it should cover the entire AM band.

Entering my dimensions above, the calculator shows coverage from 430 khz to 2.65 mhz.

Entering your dimensions, with 1/8" wire spacing, and 18 turns gives a result of 427 khz to 2.65 mhz coverage, very similar to mine.

I can just get 540 khz on the bottom end of the tuning capacitor range with a little bit to spare, so you might want to begin with 18 turns. You can always take off a turn or two to go higher, but that does not seem to be a problem with my antenna. I can get stations on the top end of the band, again, with some tuning cap rotation to spare.

I also have an untuned loop, 17" diagonal, 12" on each side, which is close enough to your dimensions, that uses 4 turns of closely spaced (touching) 22 ga insulated stranded hookup wire. And while not as strong as the tuned loop, it requires no tuning for each station, and picks up quite well.

Paul C.
tenorman1952

5037. Re: your Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-13 01:21:12 UTC
From: John
Topic: 5033 Message: 5037

I should have elaborated on that a little more clearer. I plan to have 1/3 of the antenna going vertical, 1/3 going horizontal ☐ both these parts are going to be aluminum tubing ☐ I am then going to complete the triangle with 14 gauge wire. I am then going to make another delta loop that is 5% bigger and mount it on a boom with 12ft spacing so that I can have a beam that I can turn with a rotor. Like I said in my last post, I used one of these on 10m for quite some time and have always had great luck with them. I also used one on the CB for years as well -- the one thing that I found was that I could talk to mobiles at extreme range using this antenna.

It is going to kind of be like the period example that I did below, but it going to have a different angle; I am going to bend the ends of the tubing at a 45 degree angle towards each other so there isn't as much stress at the ends of the vertical and horizontal portions of the antenna ☐ since the wire portion is going to naturally try to pull the elements to a 45 degree angle and cause undue stress at the center of the element. I also found that by bending the elements like this that I can make them slightly shorter, which changes the geometry slightly. I thought that by doing this that it would be detrimental to the performance. However, I found that it actually got about 1Db better, not much, but I will take every little bit I can get. I also found that the impendence went from about 250 ohms to 140 ohms, so now I can match it with a ¼ wave section of 75 ohm coax.

The antenna has great gain ☐ about 10Dbi @ 16 degrees take off. The best thing is that once it gets down to a take off of 5 degrees it still has better than 5Dbi and the radiation is equal in vertical and horizontal polarization. I also like that it is very usable down to about a 2 degree take off where it has -1.5Dbi gain, which is much but better than a lot of verticals have at that take off.

I hope that I was able to clarify everything for you. I thought about doing a Moxon antenna for 20m, but I have always been a loop man. I like my yagis but I always seem to gravitate back to loops at some point.

John, KC8NTP, east central Nevada

If you have EZNEC, I can send you the file for this antenna.
Just contact me at kc8ntp at yahoo

Not a good example, but I think you will get the point.

.
. .
. .
. .
. .
. .
. .
. .
. .
. .
. .
. . . . . .

5038. For Sale: MFJ 1786 HF Magnetic Loop Antenna 30-10 Meters (Needs Work)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-13 06:11:05 UTC
From: dwebst
Topic: 5038 Message: 5038

I have for sale an MFJ 1786 Loop Antenna for sale. Asking $100 plus actual shipping charges. It was on a vacation house for several months and worked fine. When I returned I could no longer get the SWR to dip. Upon internal inspection of the loop, I noticed the case on the motor had cracked. I tried to epoxy the case, but it did not cure the problem. A new motor through MFJ is $26.00. I have another MFJ loop on my main QTH and have tested the control unit. It works fine. Both the loop and the control unit are in very good physical condition other than the above problem. I really don't have time to mess with it further, and am willing to part with it for the above price.

5039. Re: [loopantennas] For Sale: MFJ 1786 HF Magnetic Loop Antenna 30-10 Meters (Needs Work)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-13 23:40:48 UTC
From: David Moorman
Topic: 5038 Message: 5039

Where are you located?

Dave K9SW

Downers Grove,
Illinois

On Mar 13, 2008, at 1:11 AM, dwebst wrote:

> I have for sale an MFJ 1786 Loop Antenna for sale. Asking $100 plus
> actual shipping charges. It was on a vacation house for several
> months and worked fine. When I returned I could no longer get the SWR
> to dip. Upon internal inspection of the loop, I noticed the case on
> the motor had cracked. I tried to epoxy the case, but it did not cure
> the problem. A new motor through MFJ is $26.00. I have another MFJ
> loop on my main QTH and have tested the control unit. It works fine.
> Both the loop and the control unit are in very good physical
> condition other than the above problem. I really don't have time to
> mess with it further, and am willing to part with it for the above
> price.
>
>
>

[Non-text portions of this message have been removed]

5040. Brazing copper?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 01:57:44 UTC
From: Jim Miller
Topic: 5040 Message: 5040

I've been researching some ways to join my copper cap together and come across silver brazing.

From what I've read so far it seems that 56% Silver, Cd free solder should be pretty appropriate with MAPP gas and silver flux.

Has anyone had any experience with this?

tnx
jim ab3cv

5041. Re: [loopantennas] Brazing copper?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 03:12:32 UTC
From: sonicxcove@aol.com
Topic: 5040 Message: 5041

In a message dated 3/13/2008 9:58:42 P.M. Eastern Daylight Time,
jim@... writes:

I've been researching some ways to join my copper cap together and come
across silver brazing.

From what I've read so far it seems that 56% Silver, Cd free solder should
be pretty appropriate with MAPP gas and silver flux.

Has anyone had any experience with this?

tnx
jim ab3cv

I was a weldor for 30 years and did my share of brazing.
MAPP [And the last letter does not stand for Petroleum
as one idiot stated on This Old House, or other DIY TV
show] that comes in a standard Benz-O-Matic cylinder
will work for silver brazing, and if you are good it will
also work for brazing with brass filler rod.

The alloys vary as do the melting points, but most welding
supply houses will have more than one alloy to choose
from. _http://www.harrisproductsgroup.com/_
(http://www.harrisproductsgroup.com/) has a nice
list of alloys, fluxes, and FAQ's.

Do not be afraid to use what looks to be too much flux.
I have never seen too much used, but if you use too little
you will have problems. Another trick is to heat the flux
very slowly so that all the water boils out. Once the water
has all evaporated [the bubbling and spitting will stop]
you can be more aggressive with the heat. The flux
will turn water clear and start flowing nicely when up to
heat. Do not heat directly on the joint, but heat where
you want the silver to flow too. Capillary action will
draw the silver braze into the joint and produce a very
strong joint.

Cleaning the area to be brazed with a Scotch-Brite
pad is not a bad idea either but due to the higher
than soldering temperature and aggressiveness
of the flux is not necessary. If the parts brazed are
small enough, toss them in a bucket while still warm.
this will aid in flux removal. If too large for that, toss
a wet rag over the area.

I hope that this helps,

Eric

Next week: Welding copper with a torch.

**********It's Tax Time! Get tips, forms, and advice on AOL Money & Finance. (http://money.aol.com/tax?NCID=aolprf00030000000001)

[Non-text portions of this message have been removed]

5042. Re: [loopantennas] Brazing copper?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 03:33:47 UTC
From: Jim Miller
Topic: 5040 Message: 5042

thanks for the info!

i see the white paste silver flux and Cd free 56% silver "solder" are available on ebay.

melting point is around 1100F.

the content is 56% Ag, 22% Cu, 17% Zn, 0 Cd, 0 Ni, 5% Sn

this should be interesting.

jim ab3cv

5043. Re: [loopantennas] Brazing copper?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 03:49:29 UTC
From: sonicxcove@aol.com
Topic: 5040 Message: 5043

Jim,

If that is anything like the Eutectic [forget the #] alloy that melts at that
temperature, good stuff. The Eutectic flowed like water in a really thin layer. I do not think that it is quite as strong as the Ag/Cu alloys, but ought to work well. For joints that overlap there is enough surface area to provide a very sound joint.

Silver solder is another bird. I still use Harris Stay-Brite 8 for all the
plumbing that I do here. Overkill as it is strong enough for all refrigeration
joints as well. This could be an option for you too. All depends on joint structure.

Eric-KB8TJR

In a message dated 3/13/2008 11:34:49 P.M. Eastern Daylight Time, jim@... writes:

thanks for the info!

i see the white paste silver flux and Cd free 56% silver "solder" are available on ebay.

melting point is around 1100F.

the content is 56% Ag, 22% Cu, 17% Zn, 0 Cd, 0 Ni, 5% Sn

this should be interesting.

jim ab3cv

**********It's Tax Time! Get tips, forms, and advice on AOL Money & Finance. (http://money.aol.com/tax?NCID=aolprf00030000000001)

[Non-text portions of this message have been removed]

5044. Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 18:58:24 UTC
From: Aimo Unto Olavi RUOHO
Topic: 5044 Message: 5044

Hello, the Wise ones!

I sent for ferrite rods from LY2KW in Lithuania and received 48 of 10mm x 200 mm (3/8" x 8") rods.

My question is: how to best construct a ferrite loop for lower SW, the so-called Tropical bands between 60 m to 120 m.b.?

I imagine, that it would look like a "T" to be able to rotate it on my MFJ-959C Receiver Antenna Tuner/Amplifier, on which I have made a corresponding connection for a 6 mm male jack. This works very well with my homebrew 6 mm (1/4") copper-tube-ring-loop with 30 cm (12") diameter.

I would like to use 1 mm (or less) diameter enamelled copper wire, because I don't have any Litz wire.

How many turns should be best? Should there be primary and secondary part as are common on MW and LW ferrite rods? Which end should be connected with which connection?

I made these questions not only to be sure myself, but also for them, who are making their "2nd" steps on this noble hobby....

I'm sure, that you as a large group have a lot more experience than my humble person does.

Are there available any links with exact drawings/photos to make this idiot-sure? If there are, what are they? ("Yes" is not the most wise answer for the beginners, and for sure not for me.)

73 from Aimo, the eager home brewer.

5045. Re: [loopantennas] Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 19:36:14 UTC
From: Chris Trask
Topic: 5044 Message: 5045

>
> My question is: how to best construct a ferrite loop for lower SW,
> the so-called Tropical bands between 60 m to 120 m.b.?
>

<<SNIP>>

>
> I would like to use 1 mm (or less) diameter enamelled copper wire,
> because I don't have any Litz wire.
>
> How many turns should be best? Should there be primary and secondary
> part as are common on MW and LW ferrite rods? Which end should be
> connected with which connection?
>

<<SNIP>>

>
> Are there available any links with exact drawings/photos to make this
> idiot-sure? If there are, what are they? ("Yes" is not the most wise
> answer for the beginners, and for sure not for me.)
>

Aimo,
You may find it useful to look at my design for a tunable active ferrite rod antenna for HF frequencies at:

http://tinyurl.com/ys293g

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5046. Re: Brazing copper?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 21:14:55 UTC
From: querencias
Topic: 5040 Message: 5046

I was sent to the Army Welder/Blacksmith school in Aberdeen Proving Grounds almost 50 years ago where I learned to use "Silver Solder," along with other joining techniques. Brazing refers to the use of brass in the joints and works fine - silver solder is a great way
to join small pieces, especially jewelry but it can be very expensive compared to plumber's grade solder. Also, it requires a special flux which is painted on the components of the joint then heated until the flux dries into a crust and then when the crust reaches the temperature where it again melts the solder is applied, usually flowing like a magic stream throughout the joint. Great stuff, but probably not stronger than the cheaper grade.

I did use the silver solder about 15 years ago to build my son a racing bike frame and it works in that application also, much better than brass or tin solder.

As I recall, the Brazed joints are closer to actual welds than solder because the interface between the brass and steel/copper/etc. tend to form stronger bonds as the metals flow together.

Best of luck,

Grant

--- In loopantennas@yahoogroups.com, "Jim Miller" <jim@...> wrote:
>
> I've been researching some ways to join my copper cap together and come
> across silver brazing.
>
> From what I've read so far it seems that 56% Silver, Cd free solder should
> be pretty appropriate with MAPP gas and silver flux.
>
> Has anyone had any experience with this?
>
> tnx
> jim ab3cv
>

5047. Re: [loopantennas] Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 22:30:31 UTC
From: aimo ruoho
Topic: 5044 Message: 5047

Thank you very much!

I searched my archives and found photocopies of your plan, 9 whole pages.

I understand, that our minds are working at two quite different levels, my dear friend.

You are the architect and I am the carpenter, barely capable of reading your plans, but invalid to put them into practice right away without further exact advice. That's why a really good architect usually has a work group to draw picture after picture after picture including all possible details needed for all idiots on the building place to do their job exactly as the architect had planned. Still all those idiots are the ones, who are needed to complete the common task for all to be satisfied. And all working there are happy, when the work is done.

In other words: I am a kit builder, who can not build about anything from schemes, only through point to point instructions. Still also I am very happy to be able to do my part and get things done as well as humanly possible to me at my own level.

I am very thankful to you, Chris, and all others on this group, to have received so much encouragement from you all. It may be totally impossible for you to understand, how big part of my present everyday life has been spent with you and your texts and drawings and photographs. After saying this I remain in the hope of more assistance in the future to people like myself from all of us on this group capable of giving it, from me to others, too, where possible...

73 (Best Wishes!)
Aimo

Chris Trask <christrask@...> wrote:
>
> My question is: how to best construct a ferrite loop for lower SW,
> the so-called Tropical bands between 60 m to 120 m.b.?
>

<<SNIP>>

>
> I would like to use 1 mm (or less) diameter enamelled copper wire,
> because I don't have any Litz wire.
>
> How many turns should be best? Should there be primary and secondary
> part as are common on MW and LW ferrite rods? Which end should be
> connected with which connection?
>

<<SNIP>>

>
> Are there available any links with exact drawings/photos to make this
> idiot-sure? If there are, what are they? ("Yes" is not the most wise
> answer for the beginners, and for sure not for me.)
>

Aimo,
You may find it useful to look at my design for a tunable active ferrite rod antenna for HF frequencies at:

http://tinyurl.com/ys293g

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

5048. Re: [loopantennas] Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-14 22:47:05 UTC
From: Osamu Hazawa
Topic: 5044 Message: 5048

Hello Aimo,

This may be of interest to you (sorry, Japanese).
http://www.eonet.ne.jp/~doi/
He uses thick rods (including straight 4).
And you may need tapping to cover all the SW range (up to 30MHz).

Osamu

----- Original Message -----
From: Aimo Unto Olavi RUOHO
To: loopantennas@yahoogroups.com
Sent: Saturday, March 15, 2008 3:58 AM
Subject: [loopantennas] Ferrite Rod Loop for SW

Hello, the Wise ones!

I sent for ferrite rods from LY2KW in Lithuania and received 48 of
10mm x 200 mm (3/8" x 8") rods.

My question is: how to best construct a ferrite loop for lower SW,
the so-called Tropical bands between 60 m to 120 m.b.?

I imagine, that it would look like a "T" to be able to rotate it on
my MFJ-959C Receiver Antenna Tuner/Amplifier, on which I have made a
corresponding connection for a 6 mm male jack. This works very well
with my homebrew 6 mm (1/4") copper-tube-ring-loop with 30 cm (12")
diameter.

I would like to use 1 mm (or less) diameter enamelled copper wire,
because I don't have any Litz wire.

How many turns should be best? Should there be primary and secondary
part as are common on MW and LW ferrite rods? Which end should be
connected with which connection?

I made these questions not only to be sure myself, but also for them,
who are making their "2nd" steps on this noble hobby....

I'm sure, that you as a large group have a lot more experience than
my humble person does.

Are there available any links with exact drawings/photos to make this
idiot-sure? If there are, what are they? ("Yes" is not the most wise
answer for the beginners, and for sure not for me.)

73 from Aimo, the eager home brewer.

[Non-text portions of this message have been removed]

5049. Re: Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-15 13:24:42 UTC
From: John Stumm
Topic: 5044 Message: 5049

--- In loopantennas@yahoogroups.com, "Aimo Unto Olavi RUOHO"
<aimounto@...> wrote:
>
> Hello, the Wise ones!
>
> I sent for ferrite rods from LY2KW in Lithuania and received 48 of
> 10mm x 200 mm (3/8" x 8") rods.
>
> My question is: how to best construct a ferrite loop for lower SW,
> the so-called Tropical bands between 60 m to 120 m.b.?
>
> I imagine, that it would look like a "T" to be able to rotate it on
> my MFJ-959C Receiver Antenna Tuner/Amplifier, on which I have made
a
> corresponding connection for a 6 mm male jack. This works very well
> with my homebrew 6 mm (1/4") copper-tube-ring-loop with 30 cm (12")
> diameter.
>
> I would like to use 1 mm (or less) diameter enamelled copper wire,
> because I don't have any Litz wire.
>
> How many turns should be best? Should there be primary and
secondary
> part as are common on MW and LW ferrite rods? Which end should be
> connected with which connection?
>
> I made these questions not only to be sure myself, but also for
them,
> who are making their "2nd" steps on this noble hobby....
>
> I'm sure, that you as a large group have a lot more experience than
> my humble person does.
>
> Are there available any links with exact drawings/photos to make
this
> idiot-sure? If there are, what are they? ("Yes" is not the most
wise
> answer for the beginners, and for sure not for me.)
>
> 73 from Aimo, the eager home brewer.
>
Aimo,
I recently salvaged a ferrite rod for SW from an old Sears Wayfarer.
It had a coil wound on either end. One side had 5 turns, the other,
about 20. It was just bare copper wire, I'm thinking about the same

gage as what you have. There seemed to be just enough spacing between turns to prevent shorting. This rod sounds to be about the same size as one of the ones you obtained. (i'm out of town right now) Anyway, I made a "Tee" mount for it using a piece of slotted 1/2" pvc pipe. The vertical pipe was an even smaller diameter pvc tube into which a 6 mm male jack fit very nicely. This made it easy to test both loops in my Palomar base amp. I've only had time to reveal that, yes, it does work. The 20 turns tunes the whole tropical band and the 5 turns works the higher bands fairly well also. Using a Sat 800, I traded using the whip against the amplified loop and got equal results, even into the higher frequencies where ferrite loops are supposed to fall off. Higher meaning below 10 mhz. To make it easy to switch loops, I used two pairs of mini crimp lugs, the shovel nose male lug on the loop side and the female lug for the plug side. The wires from the plug run up the tube on the outside to maintain spacing. I will post a pic or two when I get home... tomorrow hopefully? Good luck with yours.

Regards,
John

5050. Re: Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-15 15:58:38 UTC
From: tenorman1952
Topic: 5044 Message: 5050

--- In loopantennas@yahoogroups.com, "Aimo Unto Olavi RUOHO"
<aimounto@...> wrote:
>
> Hello, the Wise ones!

(snip)
>
> My question is: how to best construct a ferrite loop for lower SW,
> the so-called Tropical bands between 60 m to 120 m.b.?
>
(snip)

> How many turns should be best? Should there be primary and
secondary
> part as are common on MW and LW ferrite rods? Which end should be
> connected with which connection?
>
> 73 from Aimo, the eager home brewer.

I found this chart at Stormwise.com, who is also a source for ferrite
rods.

http://www.stormwise.com/page26.htm

Paul

5051. Re: [loopantennas] Re: Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-15 20:09:49 UTC
From: aimo ruoho
Topic: 5044 Message: 5051

Thanks!
This is the smart one selling only to USA&Canada!
I protested on these pages earlier about this unfortunate situation.
Any way, those ferrites are rather expencive...
So, I have to make my own experiences by glueing many thinner (10 mm x 200 mm) rods together. As I mentioned earlier, I now have 48 this size rods to begin with.
It is a lot cheaper to me to buy the rods I need from eastern Europe.

I started yesterday planning a turnable ferrite rod antenna. Today I sew some pieces of plastic tube to make a "T"-shape antenna to be sticked into my modified MFJ-959C's jack connection. I hope to be ready at midnight or next day afternoon...This will be the first one of an expected long row of this type antennas, I hope, from my "homebrewery".

73
Ami

tenorman1952 <tenorman1952@...> wrote:
--- In loopantennas@yahoogroups.com, "Aimo Unto Olavi RUOHO" <aimounto@...> wrote:
>
> Hello, the Wise ones!

(snip)
>
> My question is: how to best construct a ferrite loop for lower SW,
> the so-called Tropical bands between 60 m to 120 m.b.?
>
(snip)

> How many turns should be best? Should there be primary and secondary
> part as are common on MW and LW ferrite rods? Which end should be
> connected with which connection?
>
> 73 from Aimo, the eager home brewer.

I found this chart at Stormwise.com, who is also a source for ferrite rods.

http://www.stormwise.com/page26.htm

Paul

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

5052. Re: [loopantennas] Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-15 23:19:08 UTC
From: aimo ruoho
Topic: 5044 Message: 5052

Thank you Osamu Hazawara!

Really interesting photographs.
I am sorry for not have continued my Japanese language studies. I received for many years ago a booklet from Nippon Hoso Kyokai (Radio Japan), which was a first level language course, but probably have lost it by now.
I also had a nice architect student as work mate. I hope, that he received his goals.

We could learn a lot from our Japanese friends, so please, let us know more often from you and your inventions/experiments.

Tsugi ni, minami no mado o akeru to, soko wa natsu no keshiki...
(Kun seuraavaksi avataan etelaan pain oleva ikkuna, siella on kesamaisema. =Finnish)

Best Regards from
Ami

Osamu Hazawa <pomerol@...> wrote:
Hello Aimo,

This may be of interest to you (sorry, Japanese).
http://www.eonet.ne.jp/~doi/
He uses thick rods (including straight 4).
And you may need tapping to cover all the SW range (up to 30MHz).

Osamu

----- Original Message -----
From: Aimo Unto Olavi RUOHO
To: loopantennas@yahoogroups.com
Sent: Saturday, March 15, 2008 3:58 AM
Subject: [loopantennas] Ferrite Rod Loop for SW

Hello, the Wise ones!

I sent for ferrite rods from LY2KW in Lithuania and received 48 of
10mm x 200 mm (3/8" x 8") rods.

My question is: how to best construct a ferrite loop for lower SW,
the so-called Tropical bands between 60 m to 120 m.b.?

I imagine, that it would look like a "T" to be able to rotate it on
my MFJ-959C Receiver Antenna Tuner/Amplifier, on which I have made a
corresponding connection for a 6 mm male jack. This works very well
with my homebrew 6 mm (1/4") copper-tube-ring-loop with 30 cm (12")
diameter.

I would like to use 1 mm (or less) diameter enamelled copper wire, because I don't have any Litz wire.

How many turns should be best? Should there be primary and secondary part as are common on MW and LW ferrite rods? Which end should be connected with which connection?

I made these questions not only to be sure myself, but also for them, who are making their "2nd" steps on this noble hobby....

I'm sure, that you as a large group have a lot more experience than my humble person does.

Are there available any links with exact drawings/photos to make this idiot-sure? If there are, what are they? ("Yes" is not the most wise answer for the beginners, and for sure not for me.)

73 from Aimo, the eager home brewer.

[Non-text portions of this message have been removed]

Never miss a thing. Make Yahoo your homepage.

[Non-text portions of this message have been removed]

5053. How to "grid dip" with mfj259b

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-15 23:57:44 UTC
From: brucevicknair
Topic: 5053 Message: 5053

I have a new copper pipe loop, 3' dia octagon with an air variable cap. I want to set the loop to resonance prior to installing the gamma match.
What is the proper procedure with the mfj259? What type of coupling if any? I have the MFJ dip coils. Both meters react but I'm not sure what I looking at.
Thanks

5054. Re: Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-16 00:01:46 UTC
From: Paul Norman
Topic: 5044 Message: 5054

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Thank you Osamu Hazawara!
>
> Really interesting photographs.
> I am sorry for not have continued my Japanese language studies. I received for many years ago a booklet from Nippon Hoso Kyokai (Radio Japan), which was a first level language course, but probably have lost it by now.
> I also had a nice architect student as work mate. I hope, that he received his goals.
>
> We could learn a lot from our Japanese friends, so please, let us know more often from you and your inventions/experiments.
>
> Tsugi ni, minami no mado o akeru to, soko wa natsu no keshiki...
> (Kun seuraavaksi avataan etelaan pain oleva ikkuna, siella on kesamaisema. =Finnish)
>
> Best Regards from
> Ami

"Next, when opening [the] southern window, [the] summer landscape ....". Aimo, you may or not know that Japanese [like Korean] is NOT a Sinitic language. Instead, there are good reasons to place both in the Ural-Altaic language group. And as you are almost certainly aware of, Finnish [like Estonian] is from the western branch of that same language group. It's quite likely that when picking up a distant broadcast of Japanese or Korean where the words aren't clear enough for recognition, the rhythm and "flavor" of it will sound vaguely "familiar" to your ear.

Regards from the Left Coast, Paul Norman

5055. Re: [loopantennas] Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-16 01:29:25 UTC
From: John Popelish
Topic: 5044 Message: 5055

aimo ruoho wrote:
> Thank you Osamu Hazawara!
>
> Really interesting photographs.
> I am sorry for not have continued my Japanese language
studies. I received for many years ago a booklet from Nippon
Hoso Kyokai (Radio Japan), which was a first level language
course, but probably have lost it by now.
(snip)

You might look at how Google translates
http://www.eonet.ne.jp/~doi/
into English:
http://translate.google.com/translate?hl=en&sl=ja&u=http://www.eonet.ne.jp/~doi/&sa=X&oi=translate&resnum=1&ct=result&prev=/search%3Fq%3Dhttp://www.eonet.ne.jp/~doi/%26hl%3Den%26safe%3Doff%26sa%3DG

--
Regards,

John Popelish

5056. Re: [loopantennas] Re: Brazing copper?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-16 05:01:55 UTC
From: sonicxcove@aol.com
Topic: 5040 Message: 5056

For the books:

What is the difference between brazing and soldering?
Brazing - The AWS defines brazing as a group of joining processes that
produce coalescence of materials by heating them to the brazing temperature and by
using a filler metal (solder) having a liquidus above 840°F (450°C), and
below the solidus of the base metals.
Soldering - Soldering has the same definition as brazing except for the fact
that the filler metal used has a liquidus below 840°F (450°C) and below the
solidus of the base metals.
Above from _www.Silfos.com_ (http://www.Silfos.com)
Eric

In a message dated 3/14/2008 5:15:18 P.M. Eastern Daylight Time,
tuquerencia@... writes:

As I recall, the Brazed joints are closer to actual welds than solder
because the interface
between the brass and steel/copper/etc. tend to form stronger bonds as the
metals flow
together.

Best of luck,

Grant

**********It's Tax Time! Get tips, forms, and advice on AOL Money &
Finance. (http://money.aol.com/tax?NCID=aolprf00030000000001)

[Non-text portions of this message have been removed]

5057. Re: How to "grid dip" with mfj259b

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-16 13:06:01 UTC
From: Doug Kniffen
Topic: 5053 Message: 5057

2. How to "grid dip" with mfj259b
Posted by: "brucevicknair" vicknair@... brucevicknair
Date: Sat Mar 15, 2008 4:57 pm ((PDT))

>I have a new copper pipe loop, 3' dia octagon with an air variable
>cap. I want to set the loop to resonance prior to installing the gamma
>match.
>What is the proper procedure with the mfj259? What type of coupling if
>any? I have the MFJ dip coils. Both meters react but I'm not sure what
>I looking at.

I had those coils with a MFJ249. Fine for dipping small LC pairs (tank), not so good with antenna elements. Much better results with a homebrew contact dipping adapter. Take a PL259,solder 2 inches of 12 Ga. solid into the center, and then add a 150 Ohm resistor across the connector. Gave the same results as the "test tanks" with the MFJ add-on coils, but much less ambiguity with antenna elements. Just touch your 12 Ga. "probe" to the radiator and adjust meter frequency until the meter "dips" to the lowest SWR.

Doug Kniffen

5058. 20M Loop progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-16 14:12:11 UTC
From: Jim Miller
Topic: 5058 Message: 5058

The brazing material I'm planning to use is 56% silver and 22% copper. That should make for a high conductivity attach between the copper vanes and spacers used in the stator elements of the all-copper capacitor. The remainder is 17% zinc and 5% tin. The melting point is over 1100F and the flow temp is around 1250F. MAPP gas with a high temp nozzle and just air for the oxidizer should be sufficient.

Other than the conductivity of the alloy, the important feature is that it has no cadmium which would give off toxic fumes during brazing. I plan to wear breathing protection anyway as well as set up some sort of exhaust fan. The work will be done in the garage with doors open.

Next step on the cap is to buy the hard copper vane and spacer materials, likely from McMaster, and work out the details of the fixturing to hold the assembly while brazing. I'll probably need to buy some firebrick somewhere. I also need to get a metal shear and tumbler, probably from Harbor Freight, to cut and polish the vanes. McMaster also has some teflon bushing/bearings which I'll probably get for the rotor bearings. The tuning motor will be a old RC servo for now.

I received the 0.020" x 2" x 20ft soft copper strap from TheWireman and the 1/4" OD copper tube from HD and I think I've figured out how fixture the tube properly centered within the hoop of strapping for solder attach.

My next step will be to form the copper strapping into a 16ft circumference loop with as little supporting structure as possible (mostly fishing line and a few dabs of glue) and with ends overlapped to form the tuning capacitor. The strap I bought is a continuous piece 20ft long to give me the additional length for this cap. (The strap ends eventually will attach directly to the stators of the copper butterfly cap.) That should allow me to create a reference loop to which I'll refer all my other measurements as I go along.

I want to get that reference measurement done before attaching the 1/4" copper tubing as a rib and I'll remeasure it after that attachment and after each piece is added to the assembly. That way I'll know immediately if anything I've added has spoiled the Q.

I hope to work the 20M QRP Foxhunts with the simple overlapped and ribbed version of the loop this summer while working on the cap assembly which I expect to take most of the construction effort. The bandwidth for this configuration computed by various loopcalc programs is 51Khz which is plenty wide enough to have some CW fun without retuning.

Once the cap is constructed I should be able to tune 20, 30 and 40M.

73

jim ab3cv

5059. Re: [loopantennas] Re: Ferrite Rod Loop for SW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-16 18:39:55 UTC
From: aimo ruoho
Topic: 5044 Message: 5059

Thank you for your enlightening remarks!

Best from Ami, Fenno-Ugri, from the Right Coast.

Paul Norman <pnorman314@...> wrote:
--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Thank you Osamu Hazawara!
>
> Really interesting photographs.
> I am sorry for not have continued my Japanese language studies. I received for many years ago a booklet from Nippon Hoso Kyokai (Radio Japan), which was a first level language course, but probably have lost it by now.
> I also had a nice architect student as work mate. I hope, that he received his goals.
>
> We could learn a lot from our Japanese friends, so please, let us know more often from you and your inventions/experiments.
>
> Tsugi ni, minami no mado o akeru to, soko wa natsu no keshiki...
> (Kun seuraavaksi avataan etelaan pain oleva ikkuna, siella on kesamaisema. =Finnish)
>
> Best Regards from
> Ami

"Next, when opening [the] southern window, [the] summer landscape ....". Aimo, you may or not know that Japanese [like Korean] is NOT a Sinitic language. Instead, there are good reasons to place both in the Ural-Altaic language group. And as you are almost certainly aware of, Finnish [like Estonian] is from the western branch of that same language group. It's quite likely that when picking up a distant broadcast of Japanese or Korean where the words aren't clear enough for recognition, the rhythm and "flavor" of it will sound vaguely "familiar" to your ear.

Regards from the Left Coast, Paul Norman

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5060. Re: How to "grid dip" with mfj259b

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-17 01:07:34 UTC
From: dldorrance
Topic: 5053 Message: 5060

--- In loopantennas@yahoogroups.com, "brucevicknair" <vicknair@...> wrote:
>
> I have a new copper pipe loop, 3' dia octagon with an air variable
> cap. I want to set the loop to resonance prior to installing the gamma
> match.
> What is the proper procedure with the mfj259? What type of coupling if
> any? I have the MFJ dip coils. Both meters react but I'm not sure what
> I looking at.
> Thanks

Here is how to do it with a genuine dip meter. I would assume an
antenna tuner with a dipping coil would work the same.

Make a large loop, maybe 1 foot in diameter. Twist it at the bottom
into a figure 8, with a large diameter loop and a tiny loop through
which you insert the dipping coil. Suspend this figure 8 structure
with some tape inside your loop under test. The large loop of the
figure 8 will couple with your loop under test; read off the resonant
frequency with your dip meter coil inserted into the tiny loop of the
figure 8. You may then experimentally determine the frequency range
of your loop, by checking the frequencies on your dip meter with the
capacitor fully unmeshed, then fully meshed.

Having said this, I don't see any reason why you need to set the
tuning capacitor at a particular point prior to adjusting the "gamma
match", which is actually an autoformer, like a Variac. This is
because at all frequencies at which the main loop resonates its
impedance is the same. The "gamma match" simply transforms that high
impedance to 50 ohms. The measurement is frequency independent.

So just set the capacitor an any point. Attach your MFJ analyzer (no
dipping coil...use it as an antenna analyzer set to
Z) to the main loop and slowly move the shorting wire on your "gamma
match". When it is in the right ballpark you will note a sudden dip
in Z. Switch to SWR and find 1:1 or if you can measure R and X, find
R=50 ohms and X=0.

Dave, WA6YSO

5061. AEA Isoloop motor wanted!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-16 22:07:07 UTC
From: trident_3b
Topic: 5061 Message: 5061

Hi,

Does anyone know where I can buy a replacement motor for my AEA Isoloop??
I bought the antenna last summer but the motor was seized and I'd like
to replacement and get this antenna on the air!

Cheers,
Andrew

5062. Re: [loopantennas] AEA Isoloop motor wanted!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-17 16:02:12 UTC
From: n5ztw@texasdata.net
Topic: 5061 Message: 5062

The AEA equipment was built in the US. There is a chance the
motor can be purchased from Mouser or Graingers. Does it
have any manufactures numbers on it? Even better a company
name? I expect they used an off the shelf motor and you
should be able to find one that will work. You may have to
remove it and make some measurments and visit a catalog or
two.
If you find one please post in the files section.
de N5ZTW

----- Original Message Follows -----
From: "trident_3b" <andrew_martin62@...>
To: loopantennas@yahoogroups.com
Subject: [loopantennas] AEA Isoloop motor wanted!
Date: Sun, 16 Mar 2008 22:07:07 -0000

> Hi,
>
> Does anyone know where I can buy a replacement motor for
> my AEA Isoloop?? I bought the antenna last summer but the
> motor was seized and I'd like to replacement and get this
> antenna on the air!
>
> Cheers,
> Andrew
>
>

5063. Re: How to "grid dip" with mfj259b

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-18 13:09:07 UTC
From: brucevicknair
Topic: 5053 Message: 5063

Sorry its still not clear,
"So just set the capacitor an any point. Attach your MFJ analyzer (no dipping coil...use it as an antenna analyzer set to
Z) to the main loop and slowly move the shorting wire on your "gamma match". When it is in the right ballpark you will note a sudden dip in Z. Switch to SWR and find 1:1 or if you can measure R and X, find R=50 ohms and X=0."

A. Attach 259 to loop as an antenna with coax/pl259, cap and gamma match untuned
B. Adjust Z to 50 ohms using the gamma match slide
C. Switch to SWR and tune cap for 1:1

Thanks
Bruce Vicknair

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "brucevicknair" <vicknair@> wrote:
> >
> > I have a new copper pipe loop, 3' dia octagon with an air variable
> > cap. I want to set the loop to resonance prior to installing the gamma
> > match.
> > What is the proper procedure with the mfj259? What type of coupling if
> > any? I have the MFJ dip coils. Both meters react but I'm not sure what
> > I looking at.
> > Thanks
>
> Here is how to do it with a genuine dip meter. I would assume an
> antenna tuner with a dipping coil would work the same.
>
> Make a large loop, maybe 1 foot in diameter. Twist it at the bottom
> into a figure 8, with a large diameter loop and a tiny loop through
> which you insert the dipping coil. Suspend this figure 8 structure
> with some tape inside your loop under test. The large loop of the
> figure 8 will couple with your loop under test; read off the resonant
> frequency with your dip meter coil inserted into the tiny loop of the
> figure 8. You may then experimentally determine the frequency range
> of your loop, by checking the frequencies on your dip meter with the
> capacitor fully unmeshed, then fully meshed.
>
> Having said this, I don't see any reason why you need to set the
> tuning capacitor at a particular point prior to adjusting the "gamma
> match", which is actually an autoformer, like a Variac. This is
> because at all frequencies at which the main loop resonates its
> impedance is the same. The "gamma match" simply transforms that high

> impedance to 50 ohms. The measurement is frequency independent.
>
> So just set the capacitor an any point. Attach your MFJ analyzer (no
> dipping coil...use it as an antenna analyzer set to
> Z) to the main loop and slowly move the shorting wire on your "gamma
> match". When it is in the right ballpark you will note a sudden dip
> in Z. Switch to SWR and find 1:1 or if you can measure R and X, find
> R=50 ohms and X=0.
>
> Dave, WA6YSO
>

5064. Re: AEA Isoloop motor wanted!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-18 17:20:38 UTC
From: trident_3b
Topic: 5061 Message: 5064

--- In loopantennas@yahoogroups.com, "n5ztw@..." <n5ztw@...> wrote:
>
> The AEA equipment was built in the US. There is a chance the
> motor can be purchased from Mouser or Graingers. Does it
> have any manufactures numbers on it? Even better a company
> name? I expect they used an off the shelf motor and you
> should be able to find one that will work. You may have to
> remove it and make some measurments and visit a catalog or
> two.
> If you find one please post in the files section.
> de N5ZTW

Unfortunately the motor was so badly corroded that I couldn't get any useful information off it so I though I'd ask here! I've measured it, searched the net and considered buying a motor for an MFJ loop which MFJ will sell separately but I thought I'd ask here...

Cheers,
Andrew EI3GSB

5065. Re: How to "grid dip" with mfj259b

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-18 19:49:01 UTC
From: dldorrance
Topic: 5053 Message: 5065

--- In loopantennas@yahoogroups.com, "brucevicknair" <vicknair@...> wrote:
>

>
> A. Attach 259 to loop as an antenna with coax/pl259, cap and gamma
> match untuned
> B. Adjust Z to 50 ohms using the gamma match slide
> C. Switch to > SWR and tune cap for 1:1
>
Hi Bruce,

A. is correct.

B. is correct. B is a "rough tune" of the gamma match. You
will note as you move the slider very close to proper tuning the Z
will take a sudden dive. At that point...

C. Switch the analyzer to SWR and very gingerly nudge the *gamma match
slider* (not the capacitor) to achieve SWR=1:1. This sweet spot may
seem to be very elusive. Patience pays.

The only function of the variable capacitor is to move the frequency
of the loop. By first doing A, B and C above you will always
achieve a perfect SWR no matter where you tune the capacitor.

Once tuned you will want to check the Q of your loop. Find Fo, where
SWR is 1:1. Then move your frequency (alter the variable capacitor)
for SWR of 2:1 and write down the frequency. Then find the other 2:1
SWR point by rotating the capacitor and calculate the difference. The
smaller the difference, the higher the loop Q and hence the greater
the loop efficiency. With small loops performance is all about
reducing resistive losses.

One final point. This reflector has members who build receive only
loops as well as receive-transmit small loops. The advice above might
be considered overkill in a receive-only system.

Dave WA6YSO

5066. Re: How to "grid dip" with mfj259b

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-18 22:05:01 UTC
From: brucevicknair
Topic: 5053 Message: 5066

Dave, Thanks a million, I understand the autoxfmr effect now. Its
pretty much a one time set-up on the gamma, then use the cap.
Bruce KE5KGA

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "brucevicknair" <vicknair@> wrote:
> >
>
> >
> > A. Attach 259 to loop as an antenna with coax/pl259, cap and gamma
> > match untuned
> > B. Adjust Z to 50 ohms using the gamma match slide
> > C. Switch to > SWR and tune cap for 1:1
> >
> Hi Bruce,
>
> A. is correct.
>
> B. is correct. B is a "rough tune" of the gamma match. You
> will note as you move the slider very close to proper tuning the Z
> will take a sudden dive. At that point...
>
> C. Switch the analyzer to SWR and very gingerly nudge the *gamma match
> slider* (not the capacitor) to achieve SWR=1:1. This sweet spot may
> seem to be very elusive. Patience pays.
>
> The only function of the variable capacitor is to move the frequency
> of the loop. By first doing A, B and C above you will always
> achieve a perfect SWR no matter where you tune the capacitor.
>
> Once tuned you will want to check the Q of your loop. Find Fo, where
> SWR is 1:1. Then move your frequency (alter the variable capacitor)
> for SWR of 2:1 and write down the frequency. Then find the other 2:1
> SWR point by rotating the capacitor and calculate the difference. The
> smaller the difference, the higher the loop Q and hence the greater
> the loop efficiency. With small loops performance is all about
> reducing resistive losses.
>
> One final point. This reflector has members who build receive only
> loops as well as receive-transmit small loops. The advice above might
> be considered overkill in a receive-only system.
>
>
> Dave WA6YSO

>

5068. Re: How to "grid dip" with mfj259b

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-19 01:12:43 UTC
From: dldorrance
Topic: 5053 Message: 5068

--- In loopantennas@yahoogroups.com, "brucevicknair" <vicknair@...> wrote:
>
> Dave, Thanks a million, I understand the autoxfmr effect now. Its
> pretty much a one time set-up on the gamma, then use the cap.
> Bruce KE5KGA
>

Excellent, Bruce,

Please let us know how his turns out.

If you are building this small loop to reduce local (near field)
electrostatic noise, then be sure to connect a balun between the loop
and the transmission line, so that the outside of the transmission
line shield does not become part of the antenna.

Dave

5069. Re:AEA Isoloop motor wanted!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-19 03:35:57 UTC
From: David Scobie
Topic: 5061 Message: 5069

Hi, I see that mods.dk has the AEA Isoloop manual, which I just downloaded, and as luck would have it, the diagram is there. It doesn't say what the motor is, but AEA used the ubiquitous but now discontinued Motorola SAA1042 Step Motor Driver chip.
<http://www.mods.dk/downloadmanual.php?RefFil=AEA_Isoloop_Antenna_Manual.zip&radio=>

A little more digging with Google provides a college stepper motor primer (Lab 8) which provides almost the same diagram as the AEA! I guess the design was pretty common!
<http://hibp.ecse.rpi.edu/~connor/education/IEE/labs/Lab_8_Stepper_motor.pdf>

With these two things, it shouldn't be hard to find a 12V 500mA stepper motor which has specs which fall in the range of values that come from the SAA1042.

Regards, VY 73 de va3ae

--
"UNIX is basically a simple operating system, but you have to be a genius to understand the simplicity."
Dennis Ritchie

5070. Re:AEA Isoloop motor wanted!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-19 13:55:07 UTC
From: airchecklover
Topic: 5061 Message: 5070

Hi, I see that mods.dk has the AEA Isoloop manual, which I just
> downloaded, and as luck would have it, the diagram is there. It
doesn't
> say what the motor is, but AEA used the ubiquitous but now
discontinued
> Motorola SAA1042 Step Motor Driver chip.
>
<http://www.mods.dk/downloadmanual.php?RefFil=AEA_Isoloop_Antenna_Manual.zip&radio=>
>
>
> A little more digging with Google provides a college stepper motor
> primer (Lab 8) which provides almost the same diagram as the AEA! I
> guess the design was pretty common!
>
<http://hibp.ecse.rpi.edu/~connor/education/IEE/labs/Lab_8_Stepper_motor.pdf>
>
> With these two things, it shouldn't be hard to find a 12V 500mA
stepper
> motor which has specs which fall in the range of values that come from
> the SAA1042.
>
****

Dave, I admire & have to acknowledge your research. Nice job! :)

5071. Loop antenna tuner problem

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-20 04:11:26 UTC
From: w0bf55
Topic: 5071 Message: 5071

After being off the air for 10 years or so, I put up a big (about 500') loop antenna hung in the trees at our new place in the boonies of northern Minnesota. The loop feeds through the wall of a detached garage to a MFJ 929 Intellituner and choke balun then via coax (about 100') to the hamshack in the basement and an Icom IC 756PRO3. Every thing seemed to be working fine until the tuner failed. According to the tests, a relay was stuck. I had purchased the tuner in November 2007, so I returned it for repair under warranty. UPS delivered it to MFJ on March 3. I just got a letter from MFJ saying they looked at it on March 8 and it would be 4 to 6 weeks before repair and return. Without the tuner, I am off the air on 160 - 40 (I made a 20 m. ground plane). Being inexperienced in some of these companies, I am wondering if this is a typical response time. In a 53 year ham career, this is the first time I have had to return an item for repair. Maybe I have just been lucky. Bruce W0BF

5072. Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 12:04:32 UTC
From: kg4lac
Topic: 5072 Message: 5072

Recently purchased a 381 pf variable capacitor to use when building a MW loop.
Looking at the variable capacitor, with the turning shaft facing me, there are 2 solder connections on the left and 2 solder connections on the right. I thought there would only be 2 connections on the variable capacitor, for the antenna. Sorry if this seems a dumb question, but which connections are usually used for a MW loop?
Thanks.
Kraig

5073. Re: [loopantennas] Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 14:03:27 UTC
From: n5ztw@texasdata.net
Topic: 5072 Message: 5073

Can you post a photo in the photo section for us to look at?
Delbert, N5ZTW

----- Original Message Follows -----
From: "kg4lac" <kg4lac@...>
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Question about variable capacitor
Date: Fri, 21 Mar 2008 12:04:32 -0000

> Recently purchased a 381 pf variable capacitor to use
> when building a MW loop.
> Looking at the variable capacitor, with the turning shaft
> facing me, there are 2 solder connections on the left and
> 2 solder connections on the right. I thought there would
> only be 2 connections on the variable capacitor, for the
> antenna. Sorry if this seems a dumb question, but which
> connections are usually used for a MW loop?
> Thanks.
> Kraig
>
>

5074. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 14:20:42 UTC
From: kg4lac
Topic: 5072 Message: 5074

Thanks for the reply. Yes, I will take and photo and post later.
73,
Kraig

5075. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 14:24:30 UTC
From: kg4lac
Topic: 5072 Message: 5075

Quicker than me taking a picture, please see
http://www.crystalradiosupply.com/index1.html

Mine looks like 381pf Air Variable Capacitor (N50), but is actually
the 381pf Variable Capacitor with 8:1 drive (N50P). The N50 shows the
4 solder points.

73,
Kraig

5076. Re: [loopantennas] Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 16:48:10 UTC
From: Jim Dunstan
Topic: 5072 Message: 5076

At 12:04 PM 3/21/2008 +0000, you wrote:

>Recently purchased a 381 pf variable capacitor to use when building a
>MW loop.
>Looking at the variable capacitor, with the turning shaft facing me,
>there are 2 solder connections on the left and 2 solder connections on
>the right. I thought there would only be 2 connections on the variable
>capacitor, for the antenna. Sorry if this seems a dumb question, but
>which connections are usually used for a MW loop?
>Thanks.
>Kraig

Hi Kraig,

It sounds like your capacitor is a double ... eg ... there are two separate groups of vanes that rotate at the same time when you turn the shaft. The first pair of solder connections are connected to the same thing ... that is the stator vanes of the first capacitor. Likewise the second pair ... eg left and right are connected to the same place ... e.g. the stator vanes of the second capacitor. The other side of the capacitors ... eg the rotor vanes are connected together and are in turn connected to the frame.

If you want to use one of the pair ... one side will be one of the 4 connectors while the other side will be the frame.

However if your capacitor is a single capacitor then the 4 tabs must all be the same .... eg connected to the stator vanes. so simple use any one of the 4 and the frame.

Jim

5077. Another gamma match question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 17:52:05 UTC
From: brucevicknair
Topic: 5077 Message: 5077

I tried tuning up for the first time on my Cu loop and was able to get swr to 1.0 but never at my frequency of interest. I tried changing the tuning cap range. I'm using two line choke baluns in series and the mfj259b is several feet away.

Is there a way to calculate the proper gamma match length?

Is the geometry a factor?

I'm using straight gamma bar(no capacitor) to the sliding contact.
Thanks

5078. Re: Another gamma match question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 19:29:44 UTC
From: dldorrance
Topic: 5077 Message: 5078

Bruce, Sounds like you are "there". If you achieved an SWR of 1:1 *at any frequency*, you should be able to shift the frequency by nudging the variable capacitor. If you unmesh the cap more the resonant frequency of the loop should go up and vice-versa. Let's say you unmesh the cap a tad; you will no longer have a low SWR. Now find the new resonant frequency by raising the frequency of your analyzer until you find the new SWR of 1:1 point, which is your new resonant frequency for the loop.

Once you have set up the gamma match for SWR 1:1 anywhere, don't touch it. Your small loop is good for every frequency tunable with the variable capacitor.

Dave

--- In loopantennas@yahoogroups.com, "brucevicknair" <vicknair@...> wrote:
>
> I tried tuning up for the first time on my Cu loop and was able to get
> swr to 1.0 but never at my frequency of interest. I tried changing the
> tuning cap range. I'm using two line choke baluns in series and the
> mfj259b is several feet away.
>
> Is there a way to calculate the proper gamma match length?
>
> Is the geometry a factor?
>
> I'm using straight gamma bar(no capacitor) to the sliding contact.
> Thanks
>

5079. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 19:46:45 UTC
From: dldorrance
Topic: 5072 Message: 5079

Hi Craig,

It's hard to tell from the photo exactly what you need to do. I suggest you take the capacitor and completely unmesh the plates (turn the thing clockwise as far as it will go. The part that rotates is called the rotor; the part that is fixed is called the stator.

You need to determine which solder tab attaches to the rotor and which tab attaches to the stator. You attach the loop across the two correct terminals and you are good to go.

Dave

--- In loopantennas@yahoogroups.com, "kg4lac" <kg4lac@...> wrote:
>
> Quicker than me taking a picture, please see
> http://www.crystalradiosupply.com/index1.html
>
> Mine looks like 381pf Air Variable Capacitor (N50), but is actually
> the 381pf Variable Capacitor with 8:1 drive (N50P). The N50 shows the
> 4 solder points.
>
> 73,
> Kraig
>

5080. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 22:50:52 UTC
From: kg4lac
Topic: 5072 Message: 5080

Jim,
I believe you got it. The capacitor is a single gang. So, I use one
of the 4 connectors and the frame.
73,
Kraig

5081. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-21 22:51:46 UTC
From: kg4lac
Topic: 5072 Message: 5081

Dave,
Thanks for the information.
73,
Kraig

5082. Re: Another gamma match question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-22 13:17:50 UTC
From: hlslvy
Topic: 5077 Message: 5082

If you rotate the shaft and the thing doesn't tune, you are probably hooked up to the trimmer. Look at the sides of the capacitor. If there is an adjustment screw, the capacitor has a trimmer adjusted by the screw. The terminal on that side will be hooked up to the trimmer, not the main capacitor. Using an ohmmeter or test light, probe from the capacitor stator to find out what terminal to use. You may be able to visually determine that. The rotor will be connected directly to the frame of the capacitor.

Hope this helps.

Hal

--- In loopantennas@yahoogroups.com, "brucevicknair" <vicknair@...> wrote:
>
> I tried tuning up for the first time on my Cu loop and was able to get
> swr to 1.0 but never at my frequency of interest. I tried changing the
> tuning cap range. I'm using two line choke baluns in series and the
> mfj259b is several feet away.
>
> Is there a way to calculate the proper gamma match length?
>
> Is the geometry a factor?
>
> I'm using straight gamma bar(no capacitor) to the sliding contact.
> Thanks
>

5083. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-22 13:40:20 UTC
From: tenorman1952
Topic: 5072 Message: 5083

--- In loopantennas@yahoogroups.com, "kg4lac" <kg4lac@...> wrote:
>
> Recently purchased a 381 pf variable capacitor to use when building a
> MW loop.
> Looking at the variable capacitor, with the turning shaft facing me,
> there are 2 solder connections on the left and 2 solder connections on
> the right. I thought there would only be 2 connections on the variable
> capacitor, for the antenna. Sorry if this seems a dumb question, but
> which connections are usually used for a MW loop?
> Thanks.
> Kraig

Yes, your capacitor is single gang, as the other fellow stated.
Connect to the frame and any of the four tabs. They are all the same.

To attach to the frame use a very short 6-32 screw. Make sure the
screw does not go through and touch the vanes. To make such a short
screw I used a brass round head screw, threaded a nut on all the way,
then (wear safety glasses!) while holding the nut with vise grip pliers
lightly clamped, cut off most of the threads with a Dremel cutoff wheel.

Try the screw, and use however many washers are needed to keep it from
touching the vanes.

I have the same capacitor without the gear drive.

Paul C.
tenorman1952

5084. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-22 21:45:19 UTC
From: dldorrance
Topic: 5072 Message: 5084

Hi Bruce,

On the subject of variable capacitors for small loops, do you intend
to transmit on this loop?

If so I would advise using a butterfly or split stator (or 2 gang)
variable capacitor. This helps mitigate the resistive losses in the
single gang variable capacitor wiper. Also spacing between adjacent
capacitor plates becomes important, as you don't want the adjacent
plates to arc.

Dave

--- In loopantennas@yahoogroups.com, "kg4lac" <kg4lac@...> wrote:
>
> Recently purchased a 381 pf variable capacitor to use when building a
> MW loop.
> Looking at the variable capacitor, with the turning shaft facing me,
> there are 2 solder connections on the left and 2 solder connections on
> the right. I thought there would only be 2 connections on the variable
> capacitor, for the antenna. Sorry if this seems a dumb question, but
> which connections are usually used for a MW loop?
> Thanks.
> Kraig
>

5085. Re: AEA Isoloop motor wanted!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-23 13:31:06 UTC
From: w4rjp
Topic: 5061 Message: 5085

Andrew: I have a functioning 10 to 30mhz AEA Isoloop. Will look
inside today and see if the motor has any information.

Also the manual that is listed on mods.dk is for their first model.
Mine is a later version that uses a flexible strip of alum as the
element.

I also own an MFJ version. Both operate about the same.

73, Bob W4RJP

--- In loopantennas@yahoogroups.com, "trident_3b"
<andrew_martin62@...> wrote:
>
> Hi,
>
> Does anyone know where I can buy a replacement motor for my AEA
Isoloop??
> I bought the antenna last summer but the motor was seized and I'd like
> to replacement and get this antenna on the air!
>
> Cheers,
> Andrew
>

5086. AEA IsoLoop Stepper Motor Specifications

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-23 14:01:45 UTC
From: w4rjp
Topic: 5086 Message: 5086

My loop was down for cleaning, so I took a minute and popped it open.
The motor specifications are:(the loop is circa 1983)

Manufacturer: Applied Motor Products, Inc.
Model Number or S/N: 4017-806
Voltage: 9.2v
Ohms: 38
A/0: .24
S/R: 200

Hope this helps.

73, Bob W4RJP

5087. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-23 19:13:22 UTC
From: kg4lac
Topic: 5072 Message: 5087

Paul,
Thanks for the information.
73,
Kraig

5088. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-23 19:14:22 UTC
From: kg4lac
Topic: 5072 Message: 5088

Reception only.
73,
Kraig

5090. Loop antenna and crystal set.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-24 00:43:40 UTC
From: geo
Topic: 5090 Message: 5090

Edit: I couldn't edit the previous post so I deleted it and republish it.

I'm working on a project and it involves loop antennas. These are the preliminary works.

I've found these are able to receive (in a below-ground situation) radio stations from New Jersey (I'm in Grand Valley, Ontario).

I've also found that tuning the second loop to a similar frequency will help the primary loop capture more of the signal I desire.

I'm amplifying the detected audio with a small guitar amplifier that happens to be on hand but it will operate a small crystal earpiece I own as well.

The loop is rectangular, 110cm X 55cm, windings spaced 1cm apart. Coils are wound of 100 ft. #18 ga speaker wire, tuned with old salvaged radio capacitors I've kept since I was a kid. Taps switched at odd numbered windings to allow different wavelengths.

Detection is just with a 1N34 diode.

5091. Re: [loopantennas] Loop and crystal set

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-24 00:47:47 UTC
From: Jim Dunstan
Topic: 5091 Message: 5091

At 12:15 AM 3/24/2008 +0000, you wrote:

>I'm working on a project and it involves loop antennas. These are the
>preliminary works.
>
>I've found these are able to receive (in a below-ground situation)
>radio stations 80+ km away (straight line distance).

Below ground operation sounds interesting .... I can't even hazard a guess
hi hi

>I've also found that tuning the second loop to a similar frequency
>will help the primary loop capture more of the signal I desire.

Yes, this is of course the way you can 'boost' the signal input to an
ordinary AM broadcast station. the distance/orientation between loops is
important.

>I'm amplifying the detected audio with a small guitar amplifier that
>happens to be on hand but it will operate a small crystal earpiece I
>own as well.

I assume you are using a diode detector (crystal set) .... to the crystal
set fraternity adding the amplifier would be 'cheating' hi hi

>The loop is rectangular, 110cm X 55cm, windings spaced 1cm apart.
>Coils are wound of 100 ft. #18 ga speaker wire, tuned with old
>salvaged radio capacitors I've kept since I was a kid. Taps switched
>at odd numbered windings to allow different wavelengths.

That is a good size loop for MW reception.

>When I get my LC meter (it's in kit form and it's enroute) then I'll
>be able to tune the loop better to hit the shortwaves as well, which
>is my goal.

You certainly won't need 100 ft of wire for SW ... you can tune most of the
HF frequencies with a decent size single turn. However you will have to
use a different coupling system (eg mutual coupling) as most SW receivers
do not use internal loop antennas as do most MW receivers.

Have fun

Jim

5092. More loop stuff

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-24 00:48:51 UTC
From: geo
Topic: 5092 Message: 5092

I've just picked up AM 1060 KYW in Philadelphia on the dual loop setup! Neat!!

5093. Re: Loop and crystal set

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-24 02:25:53 UTC
From: geo
Topic: 5091 Message: 5093

Sorry, I need the amplifier to hear the signals, my wife is deaf and she was making quite a racket this evening vacuuming the kids bedrooms.

Iitially I wanted to pick up SW signals only. My employer makes a proprietary EAS design which I repair and prepare for orders daily and I wanted to learn more about how these things work so I started with 100 ft over 10 turns and have tapped it down. To my surprise I'm getting quite a good selection and performance out of this system!

Eventually I want to set up a transmit/receive situation and see how I can pick up a wave trap (essentially an EAS tag) with far simpler circuitry than these EAS systems contain.

I'm also secretly hoping that I'll come up with my own design for an EAS system I can patent, as well I'm hoping my step-son will develop some curiousity and interest about radio and electronics when he sees this rig in operation.

5094. Re: Question about variable capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-25 21:53:38 UTC
From: bengrant38
Topic: 5072 Message: 5094

--- In loopantennas@yahoogroups.com, "kg4lac" <kg4lac@...> wrote:
>
Solder one lead to any one of the four terminals and the other lead to
the frame.
Ben
> Recently purchased a 381 pf variable capacitor to use when building a
> MW loop.
> Looking at the variable capacitor, with the turning shaft facing me,
> there are 2 solder connections on the left and 2 solder connections on
> the right. I thought there would only be 2 connections on the variable
> capacitor, for the antenna. Sorry if this seems a dumb question, but
> which connections are usually used for a MW loop?
> Thanks.
> Kraig
>

5095. Re: Kaito KA 35 Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-25 23:28:29 UTC
From: bengrant38
Topic: 5027 Message: 5095

--- In loopantennas@yahoogroups.com, "rugelj2002" <rugelj2002@...>
wrote:
>
I have the TG35 from Tquchina on e-bay, $60 shipped. It does work quite
well. On SW I get a better signal with it than with the rod on my
Redsun RP2100. I use it mainly on MW on the RP2100 at night in bed
listening to talk radio. The 2100 is very sensitive, but the TG35 adds
that little extra gain without tuning. It's not going to get signals
that you can't hear without it. With the MW unit plugged in it draws
about 20ma, with the rod, 15ma. I use it about 2 or 3 hours a night and
have to remember to switch it off. It sits just inside a window so it
can charge all day from it's solar charger. The solar charger does not
have enough output to sustain itself. It also can be charged from a
computer USB port. I believe Kaito adds a wall wart charger. I intend
to modify it for external power, maybe from the radio. I've already
chchanged the internal 600ma 2/3 AA size battery pack to a 1000ma AAA
pack. It uses 3 cells.
Hope this helps.
Ben

> I am considering purchase of a Kaito KA-35 Loop Antenna. I have the
> KA-1103 receiver......its great! Has anyone purchased the KA-35?
Can
> you give your opinion? Is it worth the money? Thanks!
>

5096. Anyone Remember "Torus Tuners"?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-29 05:45:30 UTC
From: msznh
Topic: 5096 Message: 5096

There was a retired ham in Maryland that used to hand make an excellent tuned loop that he named the "Torus Tuner". He made 2 versions, one for MW and one for SW. I purchased the SW one and it works great.

He stopped making them a few years ago and looking at the ARRL ham call sign directory I see that he even has let his ham ticket lapse.

Does anyone remember these or perhaps even has one?

Tom

5097. Re: Anyone Remember "Torus Tuners"?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-29 14:55:23 UTC
From: airchecklover
Topic: 5096 Message: 5097

--- In loopantennas@yahoogroups.com, "msznh" <msznh@...> wrote:
>
> There was a retired ham in Maryland that used to hand make an
> excellent tuned loop that he named the "Torus Tuner". He made 2
> versions, one for MW and one for SW. I purchased the SW one and it
> works great.
>
> He stopped making them a few years ago and looking at the ARRL ham
> call sign directory I see that he even has let his ham ticket lapse.
>
> Does anyone remember these or perhaps even has one?
>
> Tom

I've seen these on the web. Even saw a pair for sale on eBay. I
believe after a move out west to help treat his illness, the man
responsible for these has passed on.

Mark

==========

5098. Re: [loopantennas] Anyone Remember "Torus Tuners"?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-29 16:18:28 UTC
From: Paul V Birke PEng
Topic: 5096 Message: 5098

http://www.eham.net/reviews/detail/2857

[Non-text portions of this message have been removed]

5099. Re: [loopantennas] Anyone Remember "Torus Tuners"?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-29 16:42:03 UTC
From: Paul V Birke PEng
Topic: 5096 Message: 5099

http://www.radiointel.com/review-edek.htm

[Non-text portions of this message have been removed]

5100. Re: [loopantennas] Anyone Remember "Torus Tuners"?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-29 18:11:40 UTC
From: Jim Dunstan
Topic: 5096 Message: 5100

At 05:45 AM 3/29/2008 +0000, you wrote:

>There was a retired ham in Maryland that used to hand make an
>excellent tuned loop that he named the "Torus Tuner". He made 2
>versions, one for MW and one for SW. I purchased the SW one and it
>works great.
>
>He stopped making them a few years ago and looking at the ARRL ham
>call sign directory I see that he even has let his ham ticket lapse.
>
>Does anyone remember these or perhaps even has one?
>
>Tom

Hi,

I never owned one of these loops but I have read about them. Apparently he made 2 sizes for MW, one small and one large. The large one was a couple of feet in diameter and looked very much like a black hula hoop with the tuning capacitor mounted in the coupling piece that completed the circle. The hula hoop sat in a wood base and was inductively coupled to the MW receiver. Apparently he also mad a SW version ... but I have not seen and example or read about it.

I am curious how the SW version couples to the receiver as most SW receivers either use a whip antenna or use an external antenna via an antenna connector. You say you have a SW version ... you might let me know how it couples to a SW receiver.

I have built any number of tuned loops and I have one I use regularly for MW that is about the same size as his small loop. I must admit mine look pretty messy compared to Ed's sleek versions.

Jim

5101. Re: Anyone Remember "Torus Tuners"?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-29 18:45:15 UTC
From: msznh
Topic: 5096 Message: 5101

The lead coming from the SW Torus Tuner has a 1/8 in MONO plug on it. It plugs into the 1/8 in jack that appears on most SW portables. I also have made an adaptor consisting of a 1/8 in jack with two leads ending in alligator clips. This is for my portables that don't have an external antenna jack. I connect one lead to the whip and the other to the audio ground on the 1/8 in audio jack that is there for earphones.

Here's a tip concerning something I discovered by accident: The TT presents a HIGH impedance to the radio. This is because the tuned loop actually appears to the radio as a parallel tuned circuit. The TT will work just as well with ONLY ONE lead connected to the whip!! This is because a parallel tuned tank circuit has the same characteristics as a 1/2 wave end fed antenna. I know this works because I use it in this mode all the time. I tune in the station then tune the TT.

I will never part with my TT. I'm sorry to hear that Ed passed on. Years go I talked to him on the phone and he seemed to be a great guy.

Tom

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 05:45 AM 3/29/2008 +0000, you wrote:
>
> >There was a retired ham in Maryland that used to hand make an
> >excellent tuned loop that he named the "Torus Tuner". He made 2
> >versions, one for MW and one for SW. I purchased the SW one and it
> >works great.
> >
> >He stopped making them a few years ago and looking at the ARRL ham
> >call sign directory I see that he even has let his ham ticket lapse.
> >
> >Does anyone remember these or perhaps even has one?
> >
> >Tom
>
>
> Hi,
>
> I never owned one of these loops but I have read about them.
Apparently he
> made 2 sizes for MW, one small and one large. The large one was a
couple
> of feet in diameter and looked very much like a black hula hoop with
the

> tuning capacitor mounted in the coupling piece that completed the
> circle. The hula hoop sat in a wood base and was inductively
coupled to
> the MW receiver. Apparently he also mad a SW version ... but I have
not
> seen and example or read about it.
>
> I am curious how the SW version couples to the receiver as most SW
> receivers either use a whip antenna or use an external antenna via an
> antenna connector. You say you have a SW version ... you might let
me know
> how it couples to a SW receiver.
>
> I have built any number of tuned loops and I have one I use
regularly for
> MW that is about the same size as his small loop. I must admit mine
look
> pretty messy compared to Ed's sleek versions.
>
> Jim
>

5102. Re: [loopantennas] Re: Anyone Remember "Torus Tuners"?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-29 19:13:32 UTC
From: Jim Dunstan
Topic: 5096 Message: 5102

At 06:45 PM 3/29/2008 +0000, you wrote:

>The lead coming from the SW Torus Tuner has a 1/8 in MONO plug on it.
>It plugs into the 1/8 in jack that appears on most SW portables. I
>also have made an adaptor consisting of a 1/8 in jack with two leads
>ending in alligator clips. This is for my portables that don't have
>an external antenna jack. I connect one lead to the whip and the other
>to the audio ground on the 1/8 in audio jack that is there for earphones.
>
>Here's a tip concerning something I discovered by accident: The TT
>presents a HIGH impedance to the radio. This is because the tuned
>loop actually appears to the radio as a parallel tuned circuit. The
>TT will work just as well with ONLY ONE lead connected to the whip!!
>This is because a parallel tuned tank circuit has the same
>characteristics as a 1/2 wave end fed antenna. I know this works
>because I use it in this mode all the time. I tune in the station
>then tune the TT.
>
>I will never part with my TT. I'm sorry to hear that Ed passed on.
>Years go I talked to him on the phone and he seemed to be a great guy.
>
>Tom

Hi Tom,

Very interesting .... you believe (no doubt correctly) that the mono jack is simply connected across the tuned loop .... a high impedance. I have used tuned loops for SW reception and tuned them remotely (about 8-10 ft distance). I located the loop out on the balcony. I used a short length of either 300 ohm twin lead or 450 ohm ladder line between the loop (a single turn 3' in dia.). I coupled the end of the feed line to a link coupled antenna tuner (E-ZEE match circuit). I could use this arrangement to both tune the loop (5-15 mhz) and couple it to the input of the SW receiver.

The improvement in reception comes from the added gain and improvement in the s/n ratio due to high Q of the tuned loop and the location of the loop out on the balcony ... where there seems to be less RFI.

I used this arrangement for several years while living on a 9 flr apartment in a downtown location.

From what you have experienced it would indicate that a simple tuned loop located on the same table as the SW receiver (a park bench when i am travelling) can be tuned at the loop and coupled to the receiver via a single wire to the whip! I am raring to try that this summer.

Jim

5103. Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 00:53:17 UTC
From: dean_0_way
Topic: 5103 Message: 5103

Ok this might seem dumb but ;
Iv'e built two loops for am now ,one simple loop for a cheap radio i have in my office hard wired to radio ,another with a variable cap,mutual coupling for my kaito 2100 .
The question is? can ,or is it possible to make a loop for Fm?
I have'nt seen anything online about this but i would think in theory it would be possible ? Fm is just a different band ,
Ideas???
Dean_0

5104. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 02:36:37 UTC
From: Ken Javor
Topic: 5103 Message: 5104

The loop would have to be one hundred times smaller in diameter than for AM reception, because the wavelength is that much shorter. Unless you specifically needed the selectivity of the tuned loop, there isn¹t much point to it, because an FM whip is so much more efficient than an AM whip of the same length, or the built-in AM wire-wound ferrite rod. And if you are looking for that selectivity, look at the ³Q² you need in the FM band vs. AM. In the AM band, your stations (in North America) are on 10 kHz spacing. So if you are tuning at 1 MHz with say 5 kHz bandwidth, you are looking at a ³Q² of 200. In the FM band, stations are on 200 kHz spacing, so if you have a BW of 100 kHz at 100 MHz, your ³Q² is 1000 so you need to have one tenth the resistance in the FM loop winding than in the AM loop winding. Because your loop circumference is one hundred times smaller, that shouldn¹t be a problem, but also consider the skin depth issue your resistance will go up (on a per unit length of wire basis) by a factor of one hundred. So the skin depth and circumference trends cancel, and that means you will need to use Litz wire with a usable cross-section area that is one tenth that needed in the AM band, to get the selectivity you want in the FM band.

Ken Javor

Phone: (256) 650-5261

From: dean_0_way <dean_0_way@...>
Reply-To: <loopantennas@yahoogroups.com>
Date: Sun, 30 Mar 2008 00:53:17 -0000
To: <loopantennas@yahoogroups.com>
Subject: [loopantennas] Fm question

Ok this might seem dumb but ;
Iv'e built two loops for am now ,one simple loop for a cheap radio i have in my office hard wired to radio ,another with a variable cap,mutual coupling for my kaito 2100 .
The question is? can ,or is it possible to make a loop for Fm?
I have'nt seen anything online about this but i would think in theory it would be possible ? Fm is just a different band ,
Ideas???
Dean_0

[Non-text portions of this message have been removed]

5105. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 02:39:39 UTC
From: Ken Javor
Topic: 5103 Message: 5105

Correction to last statement Litz wire cross-section would need to be ten times what it was in the AM band, not one tenth.

And your tuning cap will be much smaller in value than what you used in the AM band.

Ken Javor

Phone: (256) 650-5261

From: Ken Javor <ken.javor@...>
Reply-To: <loopantennas@yahoogroups.com>
Date: Sat, 29 Mar 2008 21:36:37 -0500
To: <loopantennas@yahoogroups.com>
Conversation: [loopantennas] Fm question
Subject: Re: [loopantennas] Fm question

The loop would have to be one hundred times smaller in diameter than for AM reception, because the wavelength is that much shorter. Unless you specifically needed the selectivity of the tuned loop, there isn¹t much point to it, because an FM whip is so much more efficient than an AM whip of the same length, or the built-in AM wire-wound ferrite rod. And if you are looking for that selectivity, look at the ³Q² you need in the FM band vs. AM. In the AM band, your stations (in North America) are on 10 kHz spacing. So if you are tuning at 1 MHz with say 5 kHz bandwidth, you are looking at a ³Q² of 200. In the FM band, stations are on 200 kHz spacing, so if you have a BW of 100 kHz at 100 MHz, your ³Q² is 1000 so you need to have one tenth the resistance in the FM loop winding than in the AM loop winding. Because your loop circumference is one hundred times smaller, that shouldn¹t be a problem, but also consider the skin depth issue your resistance will go up (on a per unit length of wire basis) by a factor of one hundred. So the skin depth and circumference trends cancel, and that means you will need to use Litz wire with a usable cross-section area that is one tenth that needed in the AM band, to get the selectivity you want in the FM band.

Ken Javor

Phone: (256) 650-5261

From: dean_0_way <dean_0_way@... <mailto:dean_0_way%40yahoo.com> >
Reply-To: <loopantennas@yahoogroups.com
<mailto:loopantennas%40yahoogroups.com> >
Date: Sun, 30 Mar 2008 00:53:17 -0000
To: <loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com> >
Subject: [loopantennas] Fm question

Ok this might seem dumb but ;
Iv'e built two loops for am now ,one simple loop for a cheap radio i have in my office hard wired to radio ,another with a variable cap,mutual coupling for my kaito 2100 .
The question is? can ,or is it possible to make a loop for Fm?
I have'nt seen anything online about this but i would think in theory it would be possible ? Fm is just a different band ,
Ideas???
Dean_0

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5106. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 15:34:09 UTC
From: Jim Dunstan
Topic: 5103 Message: 5106

At 12:53 AM 3/30/2008 +0000, you wrote:

>Ok this might seem dumb but ;
>Iv'e built two loops for am now ,one simple loop for a cheap radio i
>have in my office hard wired to radio ,another with a variable
>cap,mutual coupling for my kaito 2100 .
>The question is? can ,or is it possible to make a loop for Fm?
>I have'nt seen anything online about this but i would think in theory
>it would be possible ? Fm is just a different band ,
>Ideas???
>Dean_0

Hi Dean,

Loop antennas for FM broadcast reception 87-108 mhz are indeed not common. I certainly have not tried to make one. However if you follow normal loop logic a naturally resonant loop designed for the middle of the band would be approximately 3.2 ft in diameter and have a feed point impedance of 50 to 70 ohms. A bit unwieldy, relatively low Q and broadband, with maximum reception broadside to the plane of the loop. You could build and tune a second loop and put it in front or behind the first loop to get added gain and directivity ... even more unwieldy hi hi.

If you want to go to 'small' tuned loop design ... the usual practice is to reduce the loop size by a factor of 10 .... the loop would now be appox. 4 or 5 inches in diam. and would have to be tuned with a small capacitor. It should exhibit high Q characteristics with a sharp null broadside to the plane of the loop. Coupling would be a problem since FM receivers use either a whip antenna or an external antenna input connector. Coupling by mutual inductance would not be feasible. However I would think simply connecting a short wire from one side of the loop to the whip (use an alligator clip) would provide (high impedance) coupling.

It might be an interesting project.

Jim

5107. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 15:54:48 UTC
From: Andy
Topic: 5103 Message: 5107

I have seen simple loop FM antennas used for transmitting. Their advantage (over a horizontal dipole) is they are non-directional. They are not so common anymore as most FM broadcasters have gone to dual- or circularly-polarized antennas.

I really doubt anyone makes an FM antenna with tight selectivity in mind. Most are rather wide and cover the whole FM broadcast band, though transmitting FM antennas are tuned for lowest SWR at the intended frequency. So high Q is not important (indeed, not desirable) and no special wire or material is required.

Ham radio people also use loop antennas at VHF frequencies. Square loops are sometimes called "quads." A "quagi" is a yagi made out of quad loops.

So yes, loops are effective (and preferred by some) even at FM and higher frequencies.

Andy

5108. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 15:57:11 UTC
From: Jim Dunstan
Topic: 5103 Message: 5108

At 12:53 AM 3/30/2008 +0000, you wrote:

>Ok this might seem dumb but ;
>Iv'e built two loops for am now ,one simple loop for a cheap radio i
>have in my office hard wired to radio ,another with a variable
>cap,mutual coupling for my kaito 2100 .
>The question is? can ,or is it possible to make a loop for Fm?
>I have'nt seen anything online about this but i would think in theory
>it would be possible ? Fm is just a different band ,
>Ideas???
>Dean_0

Hi Dean,

Here is a second response .... with some construction ideas. Lets say you have a small receiver with a whip antenna for FM broadcast reception. Start with a wood base just large enough to allow the radio to sit on it. Install a vertical wood dowel about 1 ft high. Build a metal loop 6-8 inches in diameter with a small capacitor at its base ... I will just guess ... 50 pfd ??? This would allow tuning the loop within the range 87 to 108 mhz.

Place the small receiver on the base so that its extended whip comes up in the parallel to the loop .... at the center. You have a small loop 1 ft high on the base ... in front you have the tuning knob and behind the loop you have the vertical whip antenna from your receiver. The loop will couple to the whip by capacitive interaction. You can adjust this by raising and lowering the whip and bringing it closer or farther.

You rotate the whole arrangement base, loop, and radio to take advantage of the directional properties. If the capacitive coupling is insufficient you could solder a short insulated wire to one side of the tuning capacitor and wrap the other end around the whip. In fact the capacitive wire coupling might be better since you could put the whip all the way down which would then accentuate the performance of the loop

It would be interesting to hear how this would perform !!

Jim

5109. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 16:05:56 UTC
From: C. Beijersbergen
Topic: 5103 Message: 5109

In the 2-meter amateur band a frequently used type of antenna is a "quad"or a "cubical quad". It is a square loop with sides of about 20" long. It could be made circular as well. It has a single radiating element or a reflector and/or a director can be added.
The problem is that the FM band is a bit wide for a resonant antenna, but so are all Yagi's that are used very often in the FM band.

Cor Beijersbergen van Henegouwen

[Non-text portions of this message have been removed]

5110. Re: [loopantennas] FM LOOPS on interner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 16:26:33 UTC
From: Paul V Birke PEng
Topic: 5110 Message: 5110

http://www.skywaves.info/index.php?entityType=HTML&id=139

http://www.combotec.com/projects/magloop-70cm/magloop70cm.html

http://www.google.com/patents?id=aqctAAAAEBAJ&printsec=abstract&zoom=4&dq=fm+band+antenna+magnetic+loop#PPA5,M1
see figure 7

patents generally good for 17 years but if you make a single construction for yourself that is ok

best Paul

[Non-text portions of this message have been removed]

5111. Re: FM Loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 18:53:49 UTC
From: John MacKay
Topic: 5111 Message: 5111

Small tv sets often come with a separate small loop for the high bands. I have one here which measures about 8 inches in diameter. I believe that FM broadcasting is on lower frequencies so a tuning capacitor or a larger loop would be in order. VE7AFN.

Special deal for Yahoo! users & friends - No Cost. Get a month of Blockbuster Total Access now

[Non-text portions of this message have been removed]

5112. Re: [loopantennas] Re: FM Loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 20:02:09 UTC
From: Ken Javor
Topic: 5111 Message: 5112

That loop is for uhf reception. If it is eight inches in diam., that is about 20 cm, so about 62.8 cm in circumference. Using lambda/10 as the criteria for max loop wiring length for an electrically small loop at 100 MHz (mid-FM band) you get 30 cm circumference for a single turn. The loop would have to be much smaller than the uhf set-top loop.

Ken Javor

Phone: (256) 650-5261

From: John MacKay <vasaloj@...>
Reply-To: <loopantennas@yahoogroups.com>
Date: Sun, 30 Mar 2008 11:53:49 -0700 (PDT)
To: <loopantennas@yahoogroups.com>
Subject: [loopantennas] Re: FM Loop.

Small tv sets often come with a separate small loop for the high bands. I have one here which measures about 8 inches in diameter. I believe that FM broadcasting is on lower frequencies so a tuning capacitor or a larger loop would be in order. VE7AFN.

-

[Non-text portions of this message have been removed]

5113. Re: Fm loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 21:03:46 UTC
From: Hue Miller
Topic: 5113 Message: 5113

I recall reading somewhere that Litz wire is only worthwhile up
to something like 1200 kHz; if i don't have that figure quite right,
i recall that the frequency definitely was in the MW BC band.
That information was in a text of some sort, not a club or list
posting. I have seen an experimental FM-band loop or two
published in Wireless World magazine. The only advantage
i can recall is that it eliminated need for an external whip antenna.
In the FM band you don't have the problem of stations hundreds
of miles away coming in on the same channel, so you wouldn't
think a directional loop for this band would be so worthwhile.
Occasionally, maybe; as when you're trying to separate some
low power station on the low end, the low power station end, from
some more nearby station on a near frequency. I would think that
in the urban environment, an FM loop might not differentiate so
well as you have reflections of the signal at all kinds of random
polarization. As far as being practically do-able however, maybe so:
the US Army had a loop antenna adaptor for its PRC-6 hand-held
walkie talkie from the 1950s. This operated up to 54 MHz or so.
-Hue Miller

5114. fm ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 21:06:06 UTC
From: dean_0_way
Topic: 5114 Message: 5114

Well some great ideas !
Thanks Paul for the links i'm going to make that simple loop for sure!
I knew i saved that piece of coax for some thing ?
For Jim's idea i'll have to find a cap but i would like to try that one
too !
I really like the strange and wierd stuff ,now i wonder if i could make
a hot antenna out of a piece of 6'' aluminum water pipe? Let's say
about 20 feet ? long... he heh ,,can you say J pole ???

5115. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 21:17:55 UTC
From: aimo ruoho
Topic: 5103 Message: 5115

WELL!

I saw many different Small Active Loops in a near-by Carrefour Store the other day. They were for FM/VHF/UHF/TV. So you can very well use one such Antenna inside your home for FM! Their sizes were about 9 to 10" diameter. Some of them claimed 40 to 45 dB maximum amplification!

I think, after my tests, that these more modern models, many different type small VHF LOOPS, will be O.K. on lower frequences also.

I have 2 older models in my listening room, and they work very well on Medium waves giving even 9+20 dB on 855 kHz Murcia (ab.60 km) and Deutsche Welle 6075kHz 9+5 dB. Even Algiers on 252 kHz is heard well enough (S7+) from the Southern coast of the Mediterranian Sea.

I was using my YAESU FRT-7700 Antenna Tuning Unit in front of my receiver TEN-TEC RX340, not the best ever made, but in my economical situation as a retired pensioneer, good enough.

Of course these may not be good enough antennas on the lower channels, but at least according to my tests good enough for listening to LW, MW and SW stations of the world other than the most weak and rare ones!

To you Jim I would add, that just go ahead and test yourself. Don't be afraid of possible negative utterings of the "experts"! You surely will be able to build one passive Loop of 9" diameter yourself!? Thick copper wire or soft copper tube will be sufficiently good materials. Your 1st product need not be perfect for you to understand the principal idea!

Best Regards and open minds + hearts and attitudes to all folks!
AMI

Jim Dunstan <jdunstan@...> wrote:
At 12:53 AM 3/30/2008 +0000, you wrote:

>Ok this might seem dumb but ;
>Iv'e built two loops for am now ,one simple loop for a cheap radio i
>have in my office hard wired to radio ,another with a variable
>cap,mutual coupling for my kaito 2100 .
>The question is? can ,or is it possible to make a loop for Fm?
>I have'nt seen anything online about this but i would think in theory
>it would be possible ? Fm is just a different band ,
>Ideas???
>Dean_0

Hi Dean,

Loop antennas for FM broadcast reception 87-108 mhz are indeed not common. I certainly have not tried to make one. However if you follow normal loop logic a naturally resonant loop designed for the middle of the

band would be approximately 3.2 ft in diameter and have a feed point impedance of 50 to 70 ohms. A bit unwieldy, relatively low Q and broadband, with maximum reception broadside to the plane of the loop. You could build and tune a second loop and put it in front or behind the first loop to get added gain and directivity ... even more unwieldy hi hi.

If you want to go to 'small' tuned loop design ... the usual practice is to reduce the loop size by a factor of 10 .... the loop would now be appox. 4 or 5 inches in diam. and would have to be tuned with a small capacitor. It should exhibit high Q characteristics with a sharp null broadside to the plane of the loop. Coupling would be a problem since FM receivers use either a whip antenna or an external antenna input connector. Coupling by mutual inductance would not be feasible. However I would think simply connecting a short wire from one side of the loop to the whip (use an alligator clip) would provide (high impedance) coupling.

It might be an interesting project.

Jim

Like movies? Here's a limited-time offer: Blockbuster Total Access for one month at no cost.

[Non-text portions of this message have been removed]

5116. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 21:30:26 UTC
From: aimo ruoho
Topic: 5103 Message: 5116

Sorry/correction to the former:
252 Algiers comes S9+10dB, after I noticed to have left the channel-knob (Band-Selector) to MW, not LW.
A big difference in my scale! The Attenuator on...

aimo ruoho <aimounto@...> wrote:
WELL!

I saw many different Small Active Loops in a near-by Carrefour Store the other day.
They were for FM/VHF/UHF/TV. So you can very well use one such Antenna inside
your home for FM! Their sizes were about 9 to 10" diameter. Some of them claimed 40 to 45 dB maximum amplification!

I think, after my tests, that these more modern models, many different type small VHF LOOPS, will be O.K. on lower frequences also.

I have 2 older models in my listening room, and they work very well on Medium waves giving even 9+20 dB on 855 kHz Murcia (ab.60 km) and Deutsche Welle 6075kHz 9+5 dB. Even Algiers on 252 kHz is heard well enough (S7+) from the Southern coast of the Mediterranian Sea.

I was using my YAESU FRT-7700 Antenna Tuning Unit in front of my receiver TEN-TEC RX340, not the best ever made, but in my economical situation as a retired pensioneer, good enough.

Of course these may not be good enough antennas on the lower channels, but at least according to my tests good enough for listening to LW, MW and SW stations of the world other than the most weak and rare ones!

To you Jim I would add, that just go ahead and test yourself. Don't be afraid of possible negative utterings of the "experts"! You surely will be able to build one passive Loop of 9" diameter yourself!? Thick copper wire or soft copper tube will be sufficiently good materials. Your 1st product need not be perfect for you to understand the principal idea!

Best Regards and open minds + hearts and attitudes to all folks!
AMI

Jim Dunstan <jdunstan@...> wrote:
At 12:53 AM 3/30/2008 +0000, you wrote:

>Ok this might seem dumb but ;
>Iv'e built two loops for am now ,one simple loop for a cheap radio i
>have in my office hard wired to radio ,another with a variable
>cap,mutual coupling for my kaito 2100 .
>The question is? can ,or is it possible to make a loop for Fm?
>I have'nt seen anything online about this but i would think in theory
>it would be possible ? Fm is just a different band ,
>Ideas???

>Dean_0

Hi Dean,

Loop antennas for FM broadcast reception 87-108 mhz are indeed not common. I certainly have not tried to make one. However if you follow normal loop logic a naturally resonant loop designed for the middle of the band would be approximately 3.2 ft in diameter and have a feed point impedance of 50 to 70 ohms. A bit unwieldy, relatively low Q and broadband, with maximum reception broadside to the plane of the loop. You could build and tune a second loop and put it in front or behind the first loop to get added gain and directivity ... even more unwieldy hi hi.

If you want to go to 'small' tuned loop design ... the usual practice is to reduce the loop size by a factor of 10 .... the loop would now be appox. 4 or 5 inches in diam. and would have to be tuned with a small capacitor. It should exhibit high Q characteristics with a sharp null broadside to the plane of the loop. Coupling would be a problem since FM receivers use either a whip antenna or an external antenna input connector. Coupling by mutual inductance would not be feasible. However I would think simply connecting a short wire from one side of the loop to the whip (use an alligator clip) would provide (high impedance) coupling.

It might be an interesting project.

Jim

Like movies? Here's a limited-time offer: Blockbuster Total Access for one month at no cost.

[Non-text portions of this message have been removed]

Like movies? Here's a limited-time offer: Blockbuster Total Access for one month at no cost.

[Non-text portions of this message have been removed]

5117. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 23:36:40 UTC
From: sonicxcove@aol.com
Topic: 5103 Message: 5117

In a message dated 3/30/2008 11:52:57 A.M. Eastern Daylight Time,
Andy.groups@... writes:

Ham radio people also use loop antennas at VHF frequencies. Square loops
are sometimes called "quads." A "quagi" is a yagi made out of quad loops.

So yes, loops are effective (and preferred by some) even at FM and higher
frequencies.

Andy

Some years back I build a UHF TV loop [TV signals both AM and FM
components] using a piece of 12 gage aluminum. The OD was cut
using the lowest frequency of interest and the ID was cut for the highest
frequency of interest. The centers of the circles were offset to give a
wider section at the top with the bottom around ½" which I removed a ½"
section making a gap and drilled two holes in these ends to mount the
antenna wire.

Not only did this antenna work well for UHF TV but I later hooked it to
a 440 MHz ham transceiver and it gave excellent results end fire with
a great gain increase over the stock rubber duckie antenna.

Eric

**********Create a Home Theater Like the Pros. Watch the video on AOL
Home.
(http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aolhom00030000000001)

[Non-text portions of this message have been removed]

5118. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 23:43:07 UTC
From: sonicxcove@aol.com
Topic: 5103 Message: 5118

In a message dated 3/30/2008 12:06:23 P.M. Eastern Daylight Time,
c.beijersbergen@... writes:

In the 2-meter amateur band a frequently used type of antenna is a "quad"or
a "cubical quad". It is a square loop with sides of about 20" long. It could
be made circular as well. It has a single radiating element or a reflector
and/or a director can be added.
The problem is that the FM band is a bit wide for a resonant antenna, but so
are all Yagi's that are used very often in the FM band.

Cor Beijersbergen van Henegouwen

For designing an antenna of this nature find the geometric frequency center.
To do that take the square root of [lowest frequency² x highest frequency²].
This will give the best results.

Eric

**********Create a Home Theater Like the Pros. Watch the video on AOL
Home.
(http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aolhom00030000000001)

[Non-text portions of this message have been removed]

5119. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-30 23:57:27 UTC
From: Paul V Birke PEng
Topic: 5103 Message: 5119

For designing an antenna of this nature find the geometric frequency center.
To do that take the square root of [lowest frequency² x highest frequency²].
This will give the best results.

Eric

Dear Eric

I think you mean SQRT(Low*High)

best
Paul

[Non-text portions of this message have been removed]

5120. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-31 00:08:21 UTC
From: sonicxcove@aol.com
Topic: 5103 Message: 5120

In a message dated 3/30/2008 7:57:33 P.M. Eastern Daylight Time,
nonlinear@... writes:

For designing an antenna of this nature find the geometric frequency
center.
To do that take the square root of [lowest frequency² x highest frequency²].
This will give the best results.

Eric

Dear Eric

I think you mean SQRT(Low*High)

best
Paul

Right you are Paul, amazing that I did not see that!
I was thinking of something else for sure!

Thanks,
My brain must be on hold, or far too much computer repairing
in the last two days, LOL. Finally have that thing running rock
steady and better than new. Now to get a new keyboard for
the laptop and claim that one as my own! Only have seven working
computers here, need more.

Eric

Eric

**********Create a Home Theater Like the Pros. Watch the video on AOL
Home.
(http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aolhom00030000000001)

[Non-text portions of this message have been removed]

5121. Re: AEA IsoLoop Stepper Motor Specifications

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-31 14:39:01 UTC
From: trident_3b
Topic: 5086 Message: 5121

Thanks for all the replies regarding the motor....

Cheers,
Andrew

--- In loopantennas@yahoogroups.com, "w4rjp" <pearsall20@...> wrote:
>
> My loop was down for cleaning, so I took a minute and popped it open.
> The motor specifications are:(the loop is circa 1983)
>
> Manufacturer: Applied Motor Products, Inc.
> Model Number or S/N: 4017-806
> Voltage: 9.2v
> Ohms: 38
> A/0: .24
> S/R: 200
>
> Hope this helps.
>
> 73, Bob W4RJP
>

5122. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-31 17:36:47 UTC
From: Zacharias Liangas
Topic: 5103 Message: 5122

I agree with this

Dear Eric

I think you mean SQRT(Low*High)

best
Paul
Please read my aricle on SINPO at (one line!)
http://zliangas.blogspot.com/2008/02/sinpfemo-better-signal-tech-analysis-by.html
_____
http://zliangas.blogspot.com (radio tech , gadgets, grk ethics)
http://zlgr.multiply.com (radio monitoring site plus audio clips) MAIN SITE
http://www.worldisround.com/articles/302315/ (Litohoro) 321199/Tinos
http://www.flickr.com/photos/zachgr pictures upload
http://www.geocities.com/zliangas
http://www.myspace.com/310100806
http://www.facebook.com/profile.php?id=770974854
http://del.icio.us/gr_geek1
.....
Zacharias Liangas , Thessaloniki Greece
greekdx @ otenet dot gr ---
Pesawat penerima: ICOM R75 , Lowe HF150 , Degen 1102,1103,108,
Tecsun PL200/550, Chibo c300/c979, Yupi 7000
Antenna: 16m hor, 2x16 m V invert, 1m australian loop

5123. Re: [loopantennas] Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-31 22:50:39 UTC
From: sonicxcove@aol.com
Topic: 5103 Message: 5123

Yes, I lost my sense of things on that.
These things happen when you work
for 14 straight hours fixing computers.

Eric

In a message dated 3/31/2008 1:37:08 P.M. Eastern Daylight Time,
greekdx@... writes:

I agree with this

Dear Eric

I think you mean SQRT(Low*High)

best
Paul

**********Create a Home Theater Like the Pros. Watch the video on AOL
Home.
(http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aolhom00030000000001)

[Non-text portions of this message have been removed]

5124. Re: Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-31 04:22:49 UTC
From: revex540
Topic: 5103 Message: 5124

A 'quagi' is a yagi with a quad reflector to give it a higher front to back ratio.
An antenna made from quad loops is just referred to as a quad of X number of elements.

Bob

--- In loopantennas@yahoogroups.com, sonicxcove@... wrote:
>
>
> In a message dated 3/30/2008 11:52:57 A.M. Eastern Daylight Time,
> Andy.groups@... writes:
>
> Ham radio people also use loop antennas at VHF frequencies. Square loops
> are sometimes called "quads." A "quagi" is a yagi made out of quad loops.
>
> So yes, loops are effective (and preferred by some) even at FM and higher
> frequencies.
>
> Andy
>
>
>
> Some years back I build a UHF TV loop [TV signals both AM and FM
> components] using a piece of 12 gage aluminum. The OD was cut
> using the lowest frequency of interest and the ID was cut for the highest
> frequency of interest. The centers of the circles were offset to give a
> wider section at the top with the bottom around ï¿½" which I removed a ï¿½"
> section making a gap and drilled two holes in these ends to mount the
> antenna wire.
>
> Not only did this antenna work well for UHF TV but I later hooked it to
> a 440 MHz ham transceiver and it gave excellent results end fire with
> a great gain increase over the stock rubber duckie antenna.
>
> Eric
>
>

>
> **********Create a Home Theater Like the Pros. Watch the video on
AOL
> Home.
>
(http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aol\
hom00030000000001)
>
>
> [Non-text portions of this message have been removed]
>

5125. Re: Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-31 15:19:36 UTC
From: patfrompagosa
Topic: 5103 Message: 5125

Receiver antenna designs for the 87-108 MHz commercial FM band are available on the web. These include loop designs. FM tuner hobbyists are always slightly tweaking them. I've collected a bunch of URLs, but am providing only a couple below.

Building these antennas is a fairly harmless addiction. Dimensions are typically multiples of, or the same as the folded dipoles made from 300 ohm twinlead that are provided with FM tuners on purchase. Most common are single loop 30" or 60" (approx) squares with either 300-75 ohm twinlead or coax leadins. Connections are variously made at the middle of one edge, or at a corner.

Less common variants add a 1/4 square reflector loop. A popular version can be found at http://www.wryr.org/Antenna_instructions.pdf. Still less common are arrays of more than one square, typically to form a cube.

I'd suggest you consider joining the Yahoo FM Tuner group. Members vary from very experienced engineers to amateur listeners like myself. At any time, you will get helpful advice on any part of FM broadcast receiving. Many members will help you with your antenna questions.

I have never seen any flaming on that group. Two members in particular have extensive antenna experience. Bruce carter AND Brian Beezley.

Bruce has a web page at http://www.mindspring.com/~brucec/bg.htm He discusses antennas extensively there. BTW, His AM loop calculator is at http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

Brian Beezley's page is http://ham-radio.com/k6sti/index.html There, he has provided calculations for a variety of antennas. He also has a simple leadin balun he recommends - at http://ham-radio.com/k6sti/balun.htm

Brian last year published an "accidental design", with superior performance, BUT I lost that exact URL. You can get to the string from http://tech.groups.yahoo.com/group/FMtuners/message/44646 once you join the FM Tuners group.

Hope this helps

Pat

5126. A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-03-31 17:01:14 UTC
From: heinzd777
Topic: 5126 Message: 5126

Dear Gentlemen,

I'd like to build a simple loop antenna for listening to longwave and mediumwave radio stations. I have not much space, so I think of using the same loop for 150 to about 1700 kHz. Is this possible?

What I have is 100 m of antenna wire, 0.7 mm diameter, a variable capacitor from 20 to 1360 pF and two Sony receivers, the ICF-SW77 and the ICF-2001D. On the online-auction monopolist with the four letters I bought a second variable capacitor, 2x350 pF today.

I thought of a wooden square frame of 80x80 cm with inductive coupling of the radio, for this is the most simple, and I don't want to spend too many Euros.

Can you help me?

Thank you!

Heinz from Germany

5127. Re: Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-01 01:39:01 UTC
From: patfrompagosa
Topic: 5103 Message: 5127

This note corrects a term I usedincorrectly jn my earlier post, and also directs you to the Brian Beezley optimized cubical quad design I referred to.

Correction:
For the antenna design at http://www.wryr.org/Antenna_instructions.pdf I mistakenly called the inner square a reflector. Sorry for my amateurish misuse of terms.

Additional information:
I located the URL for Brian Beezley's optimized 88 MHz FM Cubical Quad. It is at http://www.wryr.org/Antenna_instructions.pdf

This antenna consists of a square reflector loop, a slightly larger active loop, and a 1/2 length smaller square in the corner of the active loop. This small loop is critically spaced. The leadin is attached at a critical point between the active large and small loops. The two big loops are also critically spaced from each other. It should not be too hard to build using a PVC pipe or wood frame, But I have never built it. There are probably people on the FM Tuner web that have built one.

5128. Re: [loopantennas] A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-01 02:09:06 UTC
From: Jim Dunstan
Topic: 5126 Message: 5128

At 05:01 PM 3/31/2008 +0000, you wrote:

>Dear Gentlemen,
>
>I'd like to build a simple loop antenna for listening to longwave and
>mediumwave radio stations. I have not much space, so I think of using
>the same loop for 150 to about 1700 kHz. Is this possible?
>
>What I have is 100 m of antenna wire, 0.7 mm diameter, a variable
>capacitor from 20 to 1360 pF and two Sony receivers, the ICF-SW77 and
>the ICF-2001D. On the online-auction monopolist with the four letters
>I bought a second variable capacitor, 2x350 pF today.
>
>I thought of a wooden square frame of 80x80 cm with inductive coupling
>of the radio, for this is the most simple, and I don't want to spend
>too many Euros.
>
>Can you help me?
>
>Thank you!
>
>Heinz from Germany

Hi,

Well yes, that is possible. However, you will almost certainly not get that tuning range with one configuration. You will have to build in some kind of switching. You have plenty of capacitance to play with and certainly plenty of wire. A loop 80 cm square is a good size which should provide reasonable performance. Inductive coupling works vy well and will allow excellent coupling adjustment .... which does effect performance.

As far as switching is concerned there are basically 2 strategies .... start with a fixed capacitance ... eg your 20 to 1360 pf and work it with sufficient inductance to cover the lower portion of the range ... then with the switch ... short out turns to reduce the inductance is one or two steps to cover the higher portion of the range. Conversely, You can start with a smaller capacitance and inductance to cover the high end of the range and then switch in additional capacitance in one or two steps to cover the lower portion of the range.

The easiest way to accomplish the switching is with 'electrical clips' to either short out inductance or add in capacitance. Certainly that is the way to go while you experiment. That capacitor you have 20 to 1360 has a pretty large range. You might try it first ... eg ... use only enough inductance to resonate at the top of the range (1700 khz) with near minimum

capacitance. Then see how low it will go with the maximum 1360 pf. I have heard some loops will cover almost the whole mw band with a single 365 pf capacitor. It should go down below 540 khz ... experiment to see how far.

Jim

5129. Re: [loopantennas] Re: Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-01 02:10:41 UTC
From: sonicxcove@aol.com
Topic: 5103 Message: 5129

A note on quad construction, there are some places online
that have fiberglass spreaders. Back in the old days we used
bamboo. _http://www.mgs4u.com/index.html_ (http://www.mgs4u.com/index.html)
is one that has
these materials and a good list of links for other quad parts.

On their site they have plans for building the quads too.

Eric

In a message dated 3/31/2008 9:39:13 P.M. Eastern Daylight Time,
beaulieupat@... writes:

This antenna consists of a square reflector loop, a slightly larger
active loop, and a 1/2 length smaller square in the corner of the
active loop. This small loop is critically spaced. The leadin is
attached at a critical point between the active large and small
loops. The two big loops are also critically spaced from each other.
It should not be too hard to build using a PVC pipe or wood frame,
But I have never built it. There are probably people on the FM Tuner
web that have built one.

**********Create a Home Theater Like the Pros. Watch the video on AOL
Home.
(http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aolhom00030000000001)

[Non-text portions of this message have been removed]

5130. Re: [loopantennas] Re: Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-01 02:59:15 UTC
From: Jim Dunstan
Topic: 5103 Message: 5130

At 10:10 PM 3/31/2008 -0400, you wrote:

>A note on quad construction, there are some places online
>that have fiberglass spreaders. Back in the old days we used
>bamboo.
>_<http://www.mgs4u.com/index.html_>http://www.mgs4u.com/index.html_
>(http://www.mgs4u.com/index.html)
>is one that has
>these materials and a good list of links for other quad parts.
>
>On their site they have plans for building the quads too.
>
>Eric

Hi Eric,

I built a cubical quad for 20/15 back in the late 50's or early 60's using bamboo ... which was used in shipping carpets. It sat on a guyed 30' TV mast which i rotated with a pipe wrench. It worked DX like you wouldn't believe .... but then that was at the peak of the all time best sunspot cycle hi hi However conditions aside ... the quad was one of the nicest HF antenna I ever used (but then I have had the privilege of using a large rhombic) .... it was quiet, broad band (xmitter liked it) and signals just jumped right out. The problem was it was rather high maintenance.

Jim, VE3CI

[Non-text portions of this message have been removed]

5131. Re: [loopantennas] Re: Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-01 03:29:22 UTC
From: sonicxcove@aol.com
Topic: 5103 Message: 5131

Nice Jim,

Size wise the quads are hard to beat. I love the pipe wrench rotator! After my heart there. I am awaiting some nice weather to see what I can come up with for antennas. I have lots of TV mast and 1000' of polyester rope to hold things steady. Never built an HF quad to date, but plan on that too. I have toyed with them on VHF though. Nice.

By high maintenance was that due to the bamboo or wire breakage? Was not too much of an issue with VHF, but a lot less flexure there.

I have seen some designs where they preload the spreaders with the wire to bow them which eliminates some of the problems. That would add more stress to the wire tough. Having been there let me know what you think.

Last good cycle I was building a Ten-Tec six meter FM transceiver and the instructions for pre-aligning the receiver section called for you to tune into the strongest station that you could find. Found one that sounded to be a local. Shoot, He was in Florida and I am in Ohio. Picture me with this radio with no complete transmit section yet! Glad that is not on film.

Thanks for the post,

Eric --KB8TJR

In a message dated 3/31/2008 10:59:39 P.M. Eastern Daylight Time, jdunstan@... writes:

Hi Eric,

I built a cubical quad for 20/15 back in the late 50's or early 60's using bamboo ... which was used in shipping carpets. It sat on a guyed 30' TV mast which i rotated with a pipe wrench. It worked DX like you wouldn't believe .... but then that was at the peak of the all time best sunspot cycle hi hi However conditions aside ... the quad was one of the nicest HF antenna I ever used (but then I have had the privilege of using a large rhombic) .... it was quiet, broad band (xmitter liked it) and signals just jumped right out. The problem was it was rather high maintenance.

Jim, VE3CI

**********Create a Home Theater Like the Pros. Watch the video on AOL Home.
(http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aolhom00030000000001)

[Non-text portions of this message have been removed]

5132. Re: [loopantennas] Re: Fm question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-01 16:15:52 UTC
From: Jim Dunstan
Topic: 5103 Message: 5132

At 11:29 PM 3/31/2008 -0400, you wrote:

>Nice Jim,
>
>Size wise the quads are hard to beat. I love the pipe wrench
>rotator! After my heart there. I am awaiting some nice weather
>to see what I can come up with for antennas. I have lots of TV
>mast and 1000' of polyester rope to hold things steady. Never
>built an HF quad to date, but plan on that too. I have toyed with
>them on VHF though. Nice.
>
>By high maintenance was that due to the bamboo or wire breakage?
>Was not too much of an issue with VHF, but a lot less flexure there.

Hi,

As with most things when you go big everything is magnified .... a quad for 20m is approx. 17' per side. I arranged the spreaders so they would be on a 45 deg angle to either the vertical or horizontal plane. The distance from the center to each corner is exactly 12'. I tied on small metal fittings to the ends and spread thin flexible braided type copper wire around the 4 corners (approx. 68' total) ... I fed the center of the bottom horizontal portion with 72 ohm balanced line. The 72 ohm balanced line (they don't make it any more as far as I know) came down to the shack and a 1:1 voltage balun (made by Heathkit from air-dux coils).

It was a perfect match ... and the antenna will take any legal level of power you would wish to put to it.

I used approx 6' to 8' for an aluminium boom. I used a second loop as a reflector ... and tuned it with a piece of open wire line for maximum front to back ratio. I later mounted a second set of loops within the first loop for 15 m and fed it from the same feed point with the same feed line. I never noted any deterioration in performance.

The only maintenance problem was ICE .... the antenna was very gud in the wind, but if there should be freezing rain with a build up of ice load the whole thing will droop like a wilted flower. The other problem was general weathering of the bamboo ... eg getting dry and brittle over time. The whole thing is quite light.

The spreaders in this arrangement are not under much tension. I used home brew flanges at each end of the boom to clamp the 4 bamboo poles for each loop. The tricky part is building this thing and then getting it up there. My 30' tv mast was made of 3 pieces that would nest together. I could build and adjust the antenna on the top of the 10' piece then push it up by hand. the bottom of the mast sat in a smooth cup on the base ... and

the guys were attached to rings that allowed the mast to turn. so the only thing holding the antenna from turning was the friction in the cup at the base. The 2' pipe wrench was more than enough to rotate the whole mast/antenna assembly.

The quad worked very well on 20m at 30' height. A friend of mine had a quad on a 60 ft tower (a commercial quad ... GEM quad) and it was exceptional.

Jim, VE3CI

5133. Re: [loopantennas] Re: Cubical Quad Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-01 22:29:38 UTC
From: sonicxcove@aol.com
Topic: 5133 Message: 5133

Jim,

More good stuff, thanks,

One thing that I have thought about for deicing loops is to run a low voltage, low current through them. Would work with the driven element but wiring up the reflector to do so would be a trick. Not too much can be done with the spreaders either.

The fiberglass might be an improvement over the bamboo. I am sure that is debatable too. Bamboo is hard to beat other than the weathering issue that you mentioned.

I am also thinking about a modified loop in the shape of a diamond rather than a square too. That would allow a bit more distance from the ground. Doing so might make the longer spreaders rather unwieldy though ... more thought needed.

Thanks for the construction details too.

Eric -- KB8TJR

In a message dated 4/1/2008 12:19:36 P.M. Eastern Daylight Time, jdunstan@... writes:

<snip>

The only maintenance problem was ICE .... the antenna was very gud in the wind, but if there should be freezing rain with a build up of ice load the whole thing will droop like a wilted flower. The other problem was general weathering of the bamboo ... eg getting dry and brittle over time. The whole thing is quite light.

<snip>

**********Create a Home Theater Like the Pros. Watch the video on AOL Home.
(http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aolhom00030000000001)

[Non-text portions of this message have been removed]

5134. Re: A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-01 23:59:17 UTC
From: Steve
Topic: 5126 Message: 5134

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> ....short out turns to reduce the inductance is one or two steps
> to cover the higher portion of the range.

Won't this significantly lower the Q?

Steve Greenfield

5135. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-02 00:30:21 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 5135

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

5136. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-02 00:30:21 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 5136

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

5137. Re: [loopantennas] Re: A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-02 16:48:55 UTC
From: Jim Dunstan
Topic: 5126 Message: 5137

At 11:59 PM 4/1/2008 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
>Dunstan <jdunstan@...> wrote:
> >
> > ....short out turns to reduce the inductance is one or two steps
> > to cover the higher portion of the range.
>
>Won't this significantly lower the Q?
>
>Steve Greenfield

Hi Steve,

yes, but probably the price you have to pay for the extended tuning range
hi hi.

Jim

[Non-text portions of this message have been removed]

5138. Re: A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-02 20:14:19 UTC
From: heinzd777
Topic: 5126 Message: 5138

First thank you for your answers. My English seems to be
understandable... :-;
I was told too that I wouldn't hear anything with the loop with a
shortcut coil. I think I'd better build two loops!

Heinz

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 11:59 PM 4/1/2008 +0000, you wrote:
>
> >--- In
>
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
> >Dunstan <jdunstan@> wrote:
> > >
> > > ....short out turns to reduce the inductance is one or two steps
> > > to cover the higher portion of the range.
> >
> >Won't this significantly lower the Q?
> >
> >Steve Greenfield
>
> Hi Steve,
>
> yes, but probably the price you have to pay for the extended tuning
range
> hi hi.
>
> Jim
>
>
>
> [Non-text portions of this message have been removed]
>

5139. Re: [loopantennas] Re: Cubical Quad Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-02 22:13:32 UTC
From: Bob Warren
Topic: 5133 Message: 5139

Hi Eric
Don't forget polarization. A cubical quad fed at the bottom is 'horizontal' and fed at the side is 'vertical'. Noise tends to be 'vertical' so you are better to keep the conventional feed point at the bottom.

Bob VK7KRW

On 02/04/2008, sonicxcove@... <sonicxcove@...> wrote:
>
>
> Jim,
>
> More good stuff, thanks,
>
> One thing that I have thought about for deicing loops is to run
> a low voltage, low current through them. Would work with the
> driven element but wiring up the reflector to do so would be a
> trick. Not too much can be done with the spreaders either.
>
> The fiberglass might be an improvement over the bamboo. I am
> sure that is debatable too. Bamboo is hard to beat other than the
> weathering issue that you mentioned.
>
> I am also thinking about a modified loop in the shape of a diamond
> rather than a square too. That would allow a bit more distance from
> the ground. Doing so might make the longer spreaders rather unwieldy
> though ... more thought needed.
>
> Thanks for the construction details too.
>
> Eric -- KB8TJR
>
>
> In a message dated 4/1/2008 12:19:36 P.M. Eastern Daylight Time,
> jdunstan@... <jdunstan%40tbaytel.net> writes:
>
> <snip>
>
> The only maintenance problem was ICE .... the antenna was very gud in the
> wind, but if there should be freezing rain with a build up of ice load the
>
> whole thing will droop like a wilted flower. The other problem was general
>
> weathering of the bamboo ... eg getting dry and brittle over time. The
> whole thing is quite light.

>
> <snip>
>
> **********Create a Home Theater Like the Pros. Watch the video on AOL
> Home.
> (
> http://home.aol.com/diy/home-improvement-eric-stromer?video=15&ncid=aolhom00030000000001
>)
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

5140. Narrowband FM reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-02 23:06:38 UTC
From: Ken Javor
Topic: 5111 Message: 5140

Not directly a loop-antenna related question, but I just lost a portable AM/FM radio that while not particularly sensitive, had high enough FM channel selectivity that it could receive a weak station in the presence of nearby stronger stations. I have been unable to find a replacement with the same selectivity, and now it is difficult or impossible to get the weak channel because the stronger ones are bleeding over. Any suggestions out there? I used to have a Yamaha receiver with adjustable FM bandwidth, but it was hardly portable.

Thank you,

Ken Javor

Phone: (256) 650-5261

[Non-text portions of this message have been removed]

5141. Pipe Wrench Rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-02 22:37:15 UTC
From: palindrome3993
Topic: 5141 Message: 5141

The pipe wrench rotator described by Jim, VE3CI, is an upscale variation of the "armstrong" rotator. Years ago in ham radio circles, turning a mast using only your hands was referred to as an armstrong rotator because it required strong arms, especially when the antenna on top of the mast was large and/or heavy.

I'm not sure if the term still exists today, but my first rotator as a newly-licensed novice in about 1968 was an armstrong. Upon hearing a DX station, I could run from the basement shack to the mast next to the garage and back again in record time.

5142. Re: Narrowband FM reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-03 20:12:10 UTC
From: Bruce Carter
Topic: 5111 Message: 5142

> channel selectivity that it could receive a weak station in the
> presence of

A lot of us use GE Superadio 3's for long distance AM and FM reception. It has a tuned RF stage on FM, which gives it better than usual sensitivity. It also has a ceramic filter in the the FM IF - which can be changed out for a narrower version. I have done so in mine, and can easily separate out adjacent frequencies.

The same type of filter mod can be done on any portable that uses a ceramic filter in the IF, but the performance may not be as good as the GE.

5143. RF Xtals?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-04 02:21:04 UTC
From: geo
Topic: 5143 Message: 5143

I have a number of crystals - all new - that I can make available for anyone who needs some.

The crystals are 3.9, 4.3 and 4.4 MHz.

Alternately if you have any old (1920s, 1930s) QST magazines or other electronic parts for barter (variometers, coils, FETs, older tubes, varactors, PLLs - I run my own small home electronics lab as well so I'll be keeping a number of Xtals), I'd be willing to hear offers.

I like barter over cash, it's just easier I think.

Thanks.

5144. Re: [loopantennas] RF Xtals?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-04 05:26:37 UTC
From: sonicxcove@aol.com
Topic: 5143 Message: 5144

Looking for ...
6.420, 8.620, 9.920, 12.420, 14.420, 16.920, 17.920
20.420, 23.920, 29.920, 30.920, 31.420, 31.920, and 32.420

Eric

In a message dated 4/3/2008 10:21:25 P.M. Eastern Daylight Time,
yaktur@... writes:

I have a number of crystals - all new - that I can make available for
anyone who needs some.

The crystals are 3.9, 4.3 and 4.4 MHz.

Alternately if you have any old (1920s, 1930s) QST magazines or other
electronic parts for barter (variometers, coils, FETs, older tubes,
varactors, PLLs - I run my own small home electronics lab as well so
I'll be keeping a number of Xtals), I'd be willing to hear offers.

I like barter over cash, it's just easier I think.

Thanks.

**********Planning your summer road trip? Check out AOL Travel Guides.
(http://travel.aol.com/travel-guide/united-states?ncid=aoltrv00030000000016)

[Non-text portions of this message have been removed]

5145. Re: A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-06 15:05:58 UTC
From: heinzd777
Topic: 5126 Message: 5145

And now this is my new loop antenna! It only reaches from 140 to 650 kHz, a photo is in the "Miscellaneous" section. Side length of the sqare is 74 cm (19"), it has 25 turns and a capacitor of 20 to 1360 pF.

There will come a second loop for the mediumwave band.

Heinz

5146. Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-06 19:40:46 UTC
From: Ronald Anderson
Topic: 5146 Message: 5146

I am looking for a antenna to use at 14.300 MHz and am thinking I
would
like to try a pair of Delta loops. I need something that gives me
better
ears when trying to receive stations that are on the back side of my
15 element beam. Also would take suggestion on other antennas that
would do the same thing.
Ron - W9RMA

5147. Re: [loopantennas] Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-06 23:29:03 UTC
From: Jim Dunstan
Topic: 5146 Message: 5147

At 07:40 PM 4/6/2008 +0000, you wrote:

>I am looking for a antenna to use at 14.300 MHz and am thinking I
>would
>like to try a pair of Delta loops. I need something that gives me
>better
>ears when trying to receive stations that are on the back side of my
>15 element beam. Also would take suggestion on other antennas that
>would do the same thing.
>Ron - W9RMA

Hi Ron,

Doesn't your beam rotate ?

Jim - VE3CI

5148. Twin Coil antenna in the "Patents" section and combining transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-07 00:28:35 UTC
From: mal1958au
Topic: 5148 Message: 5148

Hi,
I have spent some time reading the different files and a large number of posts within this group.

I would like to build an antenna similar in concept to the Twin Coil antenna in the patents section. I just want it to cover the Broadcast band.

I have read and understood the posts about copyright etc about the patent, so understand the implications.

I do not intend to build the pre-amplifier or the varicap (varactor) section of the design. I just want to wind the coils and use a conventional variable capacitor etc.

However, I am stuck with the combining transformer. The text in the patent is quite obtuse at this point and as I am not "skilled in the art", don't know where to start on how to design the combining transformer.

Has anybody built one of these antenna's and if so, how do you work out what to use for the "combining" transformer ?

Cheers,
Mal (from Oz)

PS : I would appreciate the design principle and the maths etc, as locally (to the US) recommended ferrite cores etc may not be available in Australia where I live.

5149. Re: [loopantennas] Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-07 01:39:16 UTC
From: EDUARDO
Topic: 5146 Message: 5149

Hello Jim,

If you are looking for an antenna only for rx, you can use a loop with armoured amplifier, it is excellent for rx, it operates in the range of 1800 to 30,000 mhz mhz.
Hugging, ha .... See the picture, is the yelow.

Eduardo,
PU2YYP
BRAZIL
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Sunday, April 06, 2008 8:29 PM
Subject: ***SPAM*** Re: [loopantennas] Delta Loop

At 07:40 PM 4/6/2008 +0000, you wrote:

>I am looking for a antenna to use at 14.300 MHz and am thinking I
>would
>like to try a pair of Delta loops. I need something that gives me
>better
>ears when trying to receive stations that are on the back side of my
>15 element beam. Also would take suggestion on other antennas that
>would do the same thing.
>Ron - W9RMA

Hi Ron,

Doesn't your beam rotate ?

Jim - VE3CI

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.22.8/1362 - Release Date: 6/4/2008 11:12

[Non-text portions of this message have been removed]

5150. Re: [loopantennas] Twin Coil antenna in the "Patents" section and combining transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-07 05:38:30 UTC
From: Tony Magon
Topic: 5148 Message: 5150

Hi

You should be abl;e to obtain the equivalents from Neosid here in Sydney
and there are Amidon agents in OZ

73

Tony VK2IC

mal1958au wrote:
>
> Hi,
> I have spent some time reading the different files and a large
> number of posts within this group.
>
> I would like to build an antenna similar in concept to the Twin Coil
> antenna in the patents section. I just want it to cover the
> Broadcast band.
>
> I have read and understood the posts about copyright etc about the
> patent, so understand the implications.
>
> I do not intend to build the pre-amplifier or the varicap (varactor)
> section of the design. I just want to wind the coils and use a
> conventional variable capacitor etc.
>
> However, I am stuck with the combining transformer. The text in
> the patent is quite obtuse at this point and as I am not "skilled in
> the art", don't know where to start on how to design the combining
> transformer.
>
> Has anybody built one of these antenna's and if so, how do you work
> out what to use for the "combining" transformer ?
>
> Cheers,
> Mal (from Oz)
>
> PS : I would appreciate the design principle and the maths etc, as
> locally (to the US) recommended ferrite cores etc may not be available
> in Australia where I live.
>
>

5151. Re: Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-07 13:37:11 UTC
From: yazoo_63
Topic: 5146 Message: 5151

--- In loopantennas@yahoogroups.com, "Ronald Anderson" <w9rma@...>
wrote:
>
> I am looking for a antenna to use at 14.300 MHz and am thinking I
> would
> like to try a pair of Delta loops. I need something that gives me
> better
> ears when trying to receive stations that are on the back side of my
> 15 element beam. Also would take suggestion on other antennas that
> would do the same thing.
> Ron - W9RMA
>

I'm confused here. When you say 15 element beam, i'm assuming that
you're referring to a VHF beam? You're trying to receive stations on
14.300 Mhz on the backside of a VHF beam? Or maybe it was a typo and
you meant to say 5 element beam instead of 15 element?

If i misinterpreted your post, i apologize. But, it sounds a little
confusing the way it was worded.

Barry - N4IJN

5152. Re: [loopantennas] Twin Coil antenna in the "Patents" section and combining transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-07 14:00:32 UTC
From: aimo ruoho
Topic: 5148 Message: 5152

HI!
Have you seen the new photos of the Twin Coil Ferrite AM Antenna sold by C.Crane?
I just added them to the photos of Shortwave-SWL-Antenna@yahoogroups.com, so if you are a member there...
I would have purchased the same ferrite rod from Amidon, but as it costs $US 10 + mailing! I'd bought 4 of more of them, but it would have made my square-formed directive antenna too expencive! So I sent for 8 rods from Lithuania, found them good enough, then purchased 40 more, The eBay man Gintaras Sakenas, LY2KW, claimed, that some body had told him to be useing such rods up to 28 MegaHerz (Mc/s)!
So I've since homebrewed 5 different antennas from them and having plans to test many more... I even used SuperGlue to join two ferrites from their ends! A better signal on LW and MW and directive on lower SW. Two of such parallel - even stronger signals!

Best Regards from Ami

mal1958au <lewis.family5@...> wrote:
Hi,
I have spent some time reading the different files and a large
number of posts within this group.

I would like to build an antenna similar in concept to the Twin Coil
antenna in the patents section. I just want it to cover the
Broadcast band.

I have read and understood the posts about copyright etc about the
patent, so understand the implications.

I do not intend to build the pre-amplifier or the varicap (varactor)
section of the design. I just want to wind the coils and use a
conventional variable capacitor etc.

However, I am stuck with the combining transformer. The text in
the patent is quite obtuse at this point and as I am not "skilled in
the art", don't know where to start on how to design the combining
transformer.

Has anybody built one of these antenna's and if so, how do you work
out what to use for the "combining" transformer ?

Cheers,
Mal (from Oz)

PS : I would appreciate the design principle and the maths etc, as
locally (to the US) recommended ferrite cores etc may not be available
in Australia where I live.

You rock. That's why Blockbuster's offering you one month of Blockbuster Total Access, No Cost.

[Non-text portions of this message have been removed]

5153. Re: ferrite rods from Lithuania on eBay?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-07 20:38:15 UTC
From: aimo ruoho
Topic: 5153 Message: 5153

Hi, all!

The Ferrite Rod seller is found by name: kwtubes in eBay. http://stores.ebay.com/KW-TUBES

I purchased 40 ferrite rods of type 10/200 mm for a total of $US 100.60 post paid to Spain. Item: 380001268208 Large balun ferrite rods 10x200mm. Lot of 40 Quantity 1 Prise $84,60 USD My first "test" purchase was a Lot of 8 rods (Item 190107598527) I also purchased 1 Lot of Hermetic Rotary Switches, 1 lot of Ferrite Magnetic Loops (2 rods), 2 Lots of 2-gang Air Variable Capacitors and 1 Lot of DPDT Power Switches 220VAC/3A//127VAC/5A, Box of 35 (200207029487) for only $US 18,95 with postage and handling. Good enough stuff at least for me!
I paid through PayPal, but the seller will accept other types of payments also.
Very quick and friendly, polite and trustworthy seller.

Best regards from ami

Steve Ratzlaff <steveratz@...> wrote:
Hi Ami,
Do you have the eBay item number or other information, for the Lithuania
ferrite rods you purchased? I'd like to try to buy some.
Thanks,
Steve
Oregon, USA
----- Original Message -----
From: "aimo ruoho"
To:
Sent: Monday, April 07, 2008 7:00 AM
Subject: Re: [loopantennas] Twin Coil antenna in the "Patents" section and
combining transformer

> HI!
> Have you seen the new photos of the Twin Coil Ferrite AM Antenna sold by
> C.Crane?
> I just added them to the photos of Shortwave-SWL-Antenna@yahoogroups.com,
> so if you are a member there...
> I would have purchased the same ferrite rod from Amidon, but as it costs
> $US 10 + mailing!
> I'd bought 4 of more of them, but it would have made my square-formed
> directive antenna too expencive! So I sent for 8 rods from Lithuania,
> found them good enough, then purchased 40 more, The eBay man Gintaras
> Sakenas, LY2KW, claimed, that some body had told him to be useing such
> rods up to 28 MegaHerz (Mc/s)!
> So I've since homebrewed 5 different antennas from them and having plans
> to test many more... I even used SuperGlue to join two ferrites from their
> ends! A better signal on LW and MW and directive on lower SW. Two of such
> parallel - even stronger signals!

>
> Best Regards from Ami

You rock. That's why Blockbuster's offering you one month of Blockbuster Total Access, No Cost.

[Non-text portions of this message have been removed]

5154. Re: [loopantennas] Re: ferrite rods from Lithuania on eBay?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-07 22:05:51 UTC
From: Jay Heyl
Topic: 5153 Message: 5154

On Mon, Apr 7, 2008 at 4:38 PM, aimo ruoho <aimounto@...> wrote:
> Hi, all!
>
> The Ferrite Rod seller is found by name: kwtubes in eBay. http://stores.ebay.com/KW-TUBES

I purchased from kwtubes several years ago. At the time PayPal would not accept non-US merchants so I had to use Western Union or something like that. All told, though, it went far smoother than I expected it to go. Just as you said -- fast, friendly, quality merchandise at a very good price. I would buy from him again without hesitation.

I just wish I had actually gotten around to using the ferrite rods the way I intended.

-- Jay

5155. Re: [loopantennas] Re: ferrite rods from Lithuania on eBay?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-07 22:06:14 UTC
From: Paul V Birke PEng
Topic: 5153 Message: 5155

Very quick and friendly, polite and trustworthy seller.

****

He is all those things, a very good fellow

best
Paul

[Non-text portions of this message have been removed]

5156. loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-08 04:14:43 UTC
From: dean_0_way
Topic: 5156 Message: 5156

Well i finally got around to making my first styro loop ,been saving a Omaha Steak box for a while .It's about 14'by 16' started with 28 turns of 20 awg wire,spaced at 1/8 inch, added a 365 air cap , then trimmed to 21 turns to get it tuned ,tunes from 520 up to about 1560 and does help a tiny bit up to 1620 , this cap is a dual one , now im wondering if i should use both sides ? or would i have to add more turns of wire ? to use both .
And would doing that give me more signal capture.
Only reason i ask is there seems to be conflicting info around ,i remember reading that spacing is not that important ? and some are using different resistance caps ,
I'm not so concerned with 1560 and above just wanted to see if i can make it better?

tell me you thoughts on spacing, and other .

Dean_0

5157. Re: [loopantennas] loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-08 17:28:06 UTC
From: Jim Dunstan
Topic: 5156 Message: 5157

At 04:14 AM 4/8/2008 +0000, you wrote:

>Well i finally got around to making my first styro loop ,been saving a
>Omaha Steak box for a while .It's about 14'by 16' started with 28 turns
>of 20 awg wire,spaced at 1/8 inch, added a 365 air cap , then trimmed
>to 21 turns to get it tuned ,tunes from 520 up to about 1560 and does
>help a tiny bit up to 1620 , this cap is a dual one , now im wondering
>if i should use both sides ? or would i have to add more turns of
>wire ? to use both .

Using both would reduce your high end slightly as the minimum capacitance would now be double (assuming both are the same size). However having double the maximum capacitance the tuning range would then fall below your present minimum of 520 khz (leaving the inductance of the loop as it is). The specific answer to your question is that you would have to remove some inductance not add to it.

>And would doing that give me more signal capture.
>Only reason i ask is there seems to be conflicting info around ,i
>remember reading that spacing is not that important ? and some are
>using different resistance caps ,
>I'm not so concerned with 1560 and above just wanted to see if i can
>make it better?
>
>tell me you thoughts on spacing, and other .

The capture area of your loop is defined by its physical size for the most part, and not its electrical characteristics. After you have decided on the physical dimensions of your loop, "14x16" in your case, you will have closed the issue of capture area. Further design concerns relate to tuning range, circuit Q, and coupling to the radio. Circuit Q seems to be the prime design criteria. You can find lots of reading on the internet dealing with circuit Q. In most general terms high Q is related to characteristics such as 'sharp null', high gain (i use the term loosely), maximum noise reduction (narrow band pass). Design features that contribute to high Q are minimum resistance in the coil and highest quality in the tuning capacitor.

The circuit Q is then compromised when you couple the signal in the loop to your radio .... it becomes a balancing act .... on the one hand keeping your loop signal at its maximum while at the same time draining signal through coupling to your receiver. Some of the experts in this area are crystal radio hobbyists .... although they may not use loops as their primary antenna ... the tuning inductors are quite large and they strive for the same kind of performance. There are some vy interesting crystal radio sites as well that display construction practices directly related to

loop design.

>Dean_0

Jim

5158. Re: [loopantennas] Twin Coil antenna in the "Patents" section and combining transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-08 21:38:02 UTC
From: aimo ruoho
Topic: 5148 Message: 5158

Yes!
I wanted to show those bad photos here also, so you don't need to go to the Shortwave-SWL-etc. at all!
Just find the photos down here at the corresponding cathegory, if you are interested.
73,
ami

aimo ruoho <aimounto@...> wrote:
HI!
Have you seen the new photos of the Twin Coil Ferrite AM Antenna sold by C.Crane?
I just added them to the photos of Shortwave-SWL-Antenna@yahoogroups.com, so if you are a member there...
I would have purchased the same ferrite rod from Amidon, but as it costs $US 10 + mailing! I'd bought 4 of more of them, but it would have made my square-formed directive antenna too expencive! So I sent for 8 rods from Lithuania, found them good enough, then purchased 40 more, The eBay man Gintaras Sakenas, LY2KW, claimed, that some body had told him to be useing such rods up to 28 MegaHerz (Mc/s)!
So I've since homebrewed 5 different antennas from them and having plans to test many more... I even used SuperGlue to join two ferrites from their ends! A better signal on LW and MW and directive on lower SW. Two of such parallel - even stronger signals!

Best Regards from Ami

mal1958au <lewis.family5@...> wrote:
Hi,
I have spent some time reading the different files and a large number of posts within this group.

I would like to build an antenna similar in concept to the Twin Coil antenna in the patents section. I just want it to cover the Broadcast band.

I have read and understood the posts about copyright etc about the patent, so understand the implications.

I do not intend to build the pre-amplifier or the varicap (varactor) section of the design. I just want to wind the coils and use a conventional variable capacitor etc.

However, I am stuck with the combining transformer. The text in the patent is quite obtuse at this point and as I am not "skilled in the art", don't know where to start on how to design the combining transformer.

Has anybody built one of these antenna's and if so, how do you work
out what to use for the "combining" transformer ?

Cheers,
Mal (from Oz)

PS : I would appreciate the design principle and the maths etc, as
locally (to the US) recommended ferrite cores etc may not be available
in Australia where I live.

You rock. That's why Blockbuster's offering you one month of Blockbuster Total Access, No Cost.

[Non-text portions of this message have been removed]

You rock. That's why Blockbuster's offering you one month of Blockbuster Total Access, No Cost.

[Non-text portions of this message have been removed]

5159. Re: Twin Coil antenna in the "Patents" section and combining transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-09 02:30:51 UTC
From: mal1958au
Topic: 5148 Message: 5159

Thanks Aimo (and the group),
As it happens I am also a member of the Shortwave-SWL group, so I was bale to see the pictures.

After doing a bit more reading, I think, I am going to have to learn about coil Q's and bandwidth etc based on ferrite core properties for the combining transformer.

Cheers,
Mal (from Oz)

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Yes!
> I wanted to show those bad photos here also, so you don't need to go to the Shortwave-SWL-etc. at all!
> Just find the photos down here at the corresponding cathegory, if you are interested.
> 73,
> ami
>
> aimo ruoho <aimounto@...> wrote:
>

5160. Re: Twin Coil antenna in the "Patents" section and combining transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-08 22:41:10 UTC
From: Bucky Hydal
Topic: 5148 Message: 5160

Interesting.

Thanks, Ami.

Bucky

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Yes!
> I wanted to show those bad photos here also, so you don't need to
go to the Shortwave-SWL-etc. at all!
> Just find the photos down here at the corresponding cathegory, if
you are interested.
> 73,
> ami
>

5161. Re: Twin Coil antenna in the "Patents" section and combining transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-09 15:11:42 UTC
From: aircheckIover
Topic: 5148 Message: 5161

> Yes!
> I wanted to show those bad photos here also, so you don't need to go to the Shortwave-SWL-etc. at all!
> Just find the photos down here at the corresponding cathegory, if you are interested.
> 73,
> ami

Thanks for the pictures Ami.
How does your home brew ferrites work compared to the CCrane Twin-Ferrite?
How does your BCL loop work compared to other antennas (I have one too - want to know if I can build a better active loop).

Mark

5162. Re: [loopantennas] Re: Twin Coil antenna in the "Patents" section and combining transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-09 23:07:36 UTC
From: aimo ruoho
Topic: 5148 Message: 5162

Thanks for interest, Mark!
At present I only can give you rather good (?) results of the CCrane antenna: 567kHz /kc/s (Murcia): S9 + 50 dB; 855kHz (Murcia): S9 + 55 dB; 1053 kHz (Arabic): S9 + 35 dB; 1539kHz(Elche/Elx): S9 +35 dB.
My Copper tube Loop gives (without any amplification) 567 kHz: S9 + 2dB; 855 kHz: S9 + 5 dB
Ferrite rods give without amplification about S6+AM/MW, but better signals on SW than MW/AM. Signal is usually quite acceptable of quality...

If you mean with the BCL antenna the one, that I built of the Kit from Australia, I will tell some results here: Tipaza, Algeria on 252 kHz, Murcia 855kHz (the battery exhausted, I guess?)
I have to make a decent rod for MW, which really is not of my main interest.
((It may be possible, that I used a wrong type of PVC tube in my prototypes? This grey type possibly includes metal of some kind?I have to buy the suggested red tube instead or use the ferrite rods just covered with paper and tape?))
The Ferrite Magnetic Loop Antennas from Lithuania give a lot better signals on MW. I have to put one of the two, that i received, into a decent box to easier use it as a directive antenna. These rods are covered by coils made of Litz, which I don't have here.
The received results obviously depend on the ATU or Preselector used with? I have to make a lot of further tests, I guess... That will take more time.
Sorry for not found any real DX this time!
Thanks for interest and Best Regards from Ami

aircheckIover <mdh@...> wrote:

> Yes!
> I wanted to show those bad photos here also, so you don't need to go to the Shortwave-SWL-etc. at all!
> Just find the photos down here at the corresponding cathegory, if you are interested.
> 73,
> ami

Thanks for the pictures Ami.
How does your home brew ferrites work compared to the CCrane Twin-Ferrite?
How does your BCL loop work compared to other antennas (I have one too - want to know if I can build a better active loop).

Mark

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5163. variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 15:39:08 UTC
From: dean_0_way
Topic: 5163 Message: 5163

During the process of making some loops for different radio's i keep coming up with variable caps that aren't labeled so i began to wonder if there is a way to find value of these.
I did some looking ,on e.bay etc. for a tester that reads capacitance ,and don't see anything that says for air capacitor .
I know there are many types of caps ,can , coil etc. so i need to know if a digital tester is the way to go or is there some special testor for air caps ?
Seems rather dumb to you experts , but i like to know how things work

Thanks in advance
Dean_0

5164. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 15:53:06 UTC
From: Paul V Birke PEng
Topic: 5163 Message: 5164

a very good device is available from Almost All Digital Electronics

it is a standard many of us use
you can buy assembled or as a kit

http://www.aade.com/lcmeter.htm

"it is like air conditioning, once you have this you wonder how you got along without it"
best
Paul

----- Original Message ----
From: dean_0_way <dean_0_way@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, April 12, 2008 11:39:08 AM
Subject: [loopantennas] variable caps

During the process of making some loops for different radio's i keep
coming up with variable caps that aren't labeled so i began to wonder
if there is a way to find value of these.
I did some looking ,on e.bay etc. for a tester that reads
capacitance ,and don't see anything that says for air capacitor .
I know there are many types of caps ,can , coil etc. so i need to know
if a digital tester is the way to go or is there some special testor
for air caps ?
Seems rather dumb to you experts , but i like to know how things work

Thanks in advance
Dean_0

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

```
#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}

#ygrp-reco {
margin-bottom:20px;padding:0px;}
#ygrp-reco #reco-head {
font-weight:bold;color:#ff7900;}

#reco-grpname{
font-weight:bold;margin-top:10px;}
#reco-category{
font-size:77%;}
#reco-desc{
font-size:77%;}
```

```
#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

[Non-text portions of this message have been removed]

5165. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 18:23:20 UTC
From: Jim Dunstan
Topic: 5163 Message: 5165

At 03:39 PM 4/12/2008 +0000, you wrote:

>During the process of making some loops for different radio's i keep
>coming up with variable caps that aren't labeled so i began to wonder
>if there is a way to find value of these.
>I did some looking ,on e.bay etc. for a tester that reads
>capacitance ,and don't see anything that says for air capacitor .
>I know there are many types of caps ,can , coil etc. so i need to know
>if a digital tester is the way to go or is there some special testor
>for air caps ?
>Seems rather dumb to you experts , but i like to know how things work
>
>Thanks in advance
>Dean_0

><http://groups.yahoo.com/;_ylc=X3oDMTJldWdiZzJyBF9TAzk3MzU5NzE0BGdycElkAzEyODUxOTEwBGdycH
NwSWQDMTcwODM5NjM3OQRzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTIwODAxNDc1Mw-->961fa4.jpg
>
><http://groups.yahoo.com/group/loopantennas/join;_ylc=X3oDMTJnbmVxamFqBF9TAzk3MzU5NzE0BGd
ycElkAzEyODUxOTEwBGdycHNwSWQDMTcwODM5NjM3OQRzZWMDZnRyBHNsawNzdG5ncwRzdGltZQMxMjA4MDE0NzUz>
Change
>settings via the Web (Yahoo! ID required)
>Change settings via email:
><mailto:loopantennas-digest@yahoogroups.com?subject=Email Delivery:
>Digest>Switch delivery to Daily Digest |
><mailto:loopantennas-traditional@yahoogroups.com?subject=Change Delivery
>Format: Traditional>Switch format to Traditional
><http://groups.yahoo.com/group/loopantennas;_ylc=X3oDMTJlMmlodjZjBF9TAzk3MzU5NzE0BGdycElk
AzEyODUxOTEwBGdycHNwSWQDMTcwODM5NjM3OQRzZWMDZnRyBHNsawNocGYEc3RpbWUDMTIwODAxNDc1Mw-->Visit
>Your Group | <http://docs.yahoo.com/info/terms/>Yahoo! Groups Terms of Use
>| <mailto:loopantennas-unsubscribe@yahoogroups.com?subject=>Unsubscribe
>Recent Activity
> * 14
> <http://groups.yahoo.com/group/loopantennas/members;_ylc=X3oDMTJnN2M3cnBlBF9TAzk3MzU5NzE
0BGdycElkAzEyODUxOTEwBGdycHNwSWQDMTcwODM5NjM3OQRzZWMDdnRsBHNsawN2bWJycwRzdGltZQMxMjA4MDE0N
zUz>New
> Members
> * 8
> <http://groups.yahoo.com/group/loopantennas/spnew;_ylc=X3oDMTJnbjcyNHNvBF9TAzk3MzU5NzE0B
GdycElkAzEyODUxOTEwBGdycHNwSWQDMTcwODM5NjM3OQRzZWMDdnRsBHNsawN2cGhvdARzdGltZQMxMjA4MDE0NzU
z>New
> Photos
><http://groups.yahoo.com/group/loopantennas;_ylc=X3oDMTJmM282bmNvBF9TAzk3MzU5NzE0BGdycElk
AzEyODUxOTEwBGdycHNwSWQDMTcwODM5NjM3OQRzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzEyMDgwMTQ3NTM->Visit
>Your Group

>Yahoo! Finance
>
><http://us.ard.yahoo.com/SIG=13oiqnf66/M=493064.12016257.12445664.8674578/D=groups/S=1708396379:NC/Y=YAHOO/EXP=1208021954/L=/B=s3ynA0LaX9Y-/J=1208014754237490/A=4507179/R=0/SIG=12de4rskk/*http://us.rd.yahoo.com/evt=50284/*http://finance.yahoo.com/personal-finance>It's
>Now Personal
>
>Guides, news,
>
>advice & more.
>Yahoo! Groups
>
><http://us.ard.yahoo.com/SIG=13oik9tbe/M=493064.12016262.12445669.8674578/D=groups/S=1708396379:NC/Y=YAHOO/EXP=1208021954/L=/B=tHynA0LaX9Y-/J=1208014754237490/A=5028926/R=0/SIG=11e3tma2a/*http://new.groups.yahoo.com/moderatorcentral>Latest
>product news
>
>Join Mod. Central
>
>stay connected.
>Biz Resources
>
><http://us.ard.yahoo.com/SIG=13o6258jg/M=493064.12016255.12445662.8674578/D=groups/S=1708396379:NC/Y=YAHOO/EXP=1208021954/L=/B=tXynA0LaX9Y-/J=1208014754237490/A=4025321/R=0/SIG=12a352npd/*http://us.rd.yahoo.com/evt=44092/*http://smallbusiness.yahoo.com/r-index>Y!
>Small Business
>
>Articles, tools,
>
>forms, and more.
>.
>962001.jpg
>

[Non-text portions of this message have been removed]

5166. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 18:42:00 UTC
From: Jim Dunstan
Topic: 5163 Message: 5166

At 03:39 PM 4/12/2008 +0000, you wrote:

>During the process of making some loops for different radio's i keep
>coming up with variable caps that aren't labeled so i began to wonder
>if there is a way to find value of these.
>I did some looking ,on e.bay etc. for a tester that reads
>capacitance ,and don't see anything that says for air capacitor .
>I know there are many types of caps ,can , coil etc. so i need to know
>if a digital tester is the way to go or is there some special testor
>for air caps ?
>Seems rather dumb to you experts , but i like to know how things work
>
>Thanks in advance
>Dean_0

Hi,

The best way to test the value of variable capacitors or any pfd value capacitors used in RF circuits is to use standard values of capacitance and inductance. Then you need some kind of device such as a noise bridge and receiver or something like the MFJ antenna analyzer. The objective would be to combine the unknown capacitance with a known value inductance or vis-a-versa. Your noise bridge or antenna analyzer would be used detect resonance at particular frequencies. Then calculations from formulae would be used to determine L or C as the case may be.

However with experience you can eye ball variable capacitors and estimate capacitance, range, voltage capability etc.

Jim

5167. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 20:36:53 UTC
From: aimo ruoho
Topic: 5163 Message: 5167

Hi, Dean_o!
I have the same problem. I have been looking for a multimeter or -tester for both inductance and capacitance, but until now I haven't found a cheap enough unit. They are usually about $US 100, more or less, new.
If someone knows a cheaper one to be sold, I'd be glad to know about it.
Preferably from continent Europe or Asia, because usually mailing costs + customs fee raise the price too high, when purchased from USA...
I saw one or two sold by RadioShack, but for 50 - 70 $US. For over double price mailed to me in Spain, so out of the question!

Good hunting!
Ami

dean_0_way <dean_0_way@...> wrote:
During the process of making some loops for different radio's i keep
coming up with variable caps that aren't labeled so i began to wonder
if there is a way to find value of these.
I did some looking ,on e.bay etc. for a tester that reads
capacitance ,and don't see anything that says for air capacitor .
I know there are many types of caps ,can , coil etc. so i need to know
if a digital tester is the way to go or is there some special testor
for air caps ?
Seems rather dumb to you experts , but i like to know how things work

Thanks in advance
Dean_0

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5168. Capacitance meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 21:17:17 UTC
From: Garth Conover
Topic: 5168 Message: 5168

Specs:

www.bkprecision.com/www/np_specs.asp?m=810C<http://www.bkprecision.com/www/np_specs.asp?m=810C>

$69.00 @:

www.byramlabs.com/product_info.php/products_id/7593<http://www.byramlabs.com/product_info.php/products_id/7593>

[Non-text portions of this message have been removed]

5169. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 21:21:16 UTC
From: dean_0_way
Topic: 5163 Message: 5169

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Hi, Dean_o!
> I have the same problem. I have been looking for a multimeter or -
tester for both inductance and capacitance, but until now I haven't
found a cheap enough unit.

Hi Ami ;
Well here's what i found on e.bay ;
http://cgi.ebay.com/Digital-LCR-Capacitance-Resistance-Meter-Tester-
NEW-
AR_W0QQitemZ170209359165QQihZ007QQcategoryZ25421QQssPageNameZWDVWQQrdZ
1QQcmdZViewItem

or

http://cgi.ebay.com/TENMA-MODEL-72-8155-INDUCTANCE-CAPACITANCE-
METER_W0QQitemZ220222176163QQihZ012QQcategoryZ58277QQssPageNameZWDVWQQ
rdZ1QQcmdZViewItem

or ;
Try searching for (capacitance meter)...there are some for less than
20$ U.S. and about that much shipping to you ,.............. but
what i cant figure out from the techno babble ,is if i can use it on
an air cap?

5170. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 21:26:48 UTC
From: dean_0_way
Topic: 5163 Message: 5170

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>> However with experience you can eye ball variable capacitors and
estimate
> capacitance, range, voltage capability etc.
>
> Jim
>
However that's assuming that i have any estimating , or eye balling
experience ?! he heh .

5171. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 21:42:21 UTC
From: aimo ruoho
Topic: 5163 Message: 5171

Hello again, Dean_o!

I found a business selling those Capacitance Meters: Hongkong and Shanghai Total Co., Ltd.

Happy hunting,

Ami

dean_0_way <dean_0_way@...> wrote:
During the process of making some loops for different radio's i keep
coming up with variable caps that aren't labeled so i began to wonder
if there is a way to find value of these.
I did some looking ,on e.bay etc. for a tester that reads
capacitance ,and don't see anything that says for air capacitor .
I know there are many types of caps ,can , coil etc. so i need to know
if a digital tester is the way to go or is there some special testor
for air caps ?
Seems rather dumb to you experts , but i like to know how things work

Thanks in advance
Dean_0

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5172. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 21:46:45 UTC
From: aimo ruoho
Topic: 5163 Message: 5172

Dean_o!
I tried to read both of the eBay addresses, you gave me, but it just didn't work! No page was found...
Sorry to realize this very common error again - twice!
Ami

dean_0_way <dean_0_way@...> wrote:
--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Hi, Dean_o!
> I have the same problem. I have been looking for a multimeter or -
tester for both inductance and capacitance, but until now I haven't
found a cheap enough unit.

Hi Ami ;
Well here's what i found on e.bay ;
http://cgi.ebay.com/Digital-LCR-Capacitance-Resistance-Meter-Tester-NEW-AR_W0QQitemZ170209359165QQihZ007QQcategoryZ25421QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

or

http://cgi.ebay.com/TENMA-MODEL-72-8155-INDUCTANCE-CAPACITANCE-METER_W0QQitemZ220222176163QQihZ012QQcategoryZ58277QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

or ;
Try searching for (capacitance meter)...there are some for less than 20$ U.S. and about that much shipping to you ,..... but what i cant figure out from the techno babble ,is if i can use it on an air cap?

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5173. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 21:52:44 UTC
From: dean_0_way
Topic: 5163 Message: 5173

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Dean_o!
> I tried to read both of the eBay addresses, you gave me, but it
just didn't work! No page was found...
>

OOPS! try this e.bay item #

220222176163
and
170209359165

i guess cut and paste don't work?

Dean_0

5174. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 21:53:22 UTC
From: aimo ruoho
Topic: 5163 Message: 5174

Capacitor is a capacitor, so why not? Only those +/- capacitors make an exeption.
I may be wrong, though...
By the way, from which address can I find those cheap Capacitance Meters?
I tried to google, but did not find.
Thanks and Best Regards,
Ami
dean_0_way <dean_0_way@...> wrote:
--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Hi, Dean_o!
> I have the same problem. I have been looking for a multimeter or -
tester for both inductance and capacitance, but until now I haven't
found a cheap enough unit.

Hi Ami ;
Well here's what i found on e.bay ;
http://cgi.ebay.com/Digital-LCR-Capacitance-Resistance-Meter-Tester-
NEW-
AR_W0QQitemZ170209359165QQihZ007QQcategoryZ25421QQssPageNameZWDVWQQrdZ
1QQcmdZViewItem

or

http://cgi.ebay.com/TENMA-MODEL-72-8155-INDUCTANCE-CAPACITANCE-
METER_W0QQitemZ220222176163QQihZ012QQcategoryZ58277QQssPageNameZWDVWQQ
rdZ1QQcmdZViewItem

or ;
Try searching for (capacitance meter)...there are some for less than
20$ U.S. and about that much shipping to you ,..... but
what i cant figure out from the techno babble ,is if i can use it on
an air cap?

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5175. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 22:01:51 UTC
From: aimo ruoho
Topic: 5163 Message: 5175

Sorry, but which email address exactly will be written to find those articles?

dean_0_way <dean_0_way@...> wrote: --- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Dean_o!
> I tried to read both of the eBay addresses, you gave me, but it just didn't work! No page was found...
>

OOPS! try this e.bay item #

220222176163
and
170209359165

i guess cut and paste don't work?

Dean_0

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5176. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 22:18:25 UTC
From: dean_0_way
Topic: 5163 Message: 5176

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Sorry, but which email address exactly will be written to find
those articles?
>
> dean_0_way <dean_0_way@...> wrote: --- In
loopantennas@yahoogroups.com, aimo ruoho <aimounto@> wrote:
> >
> > Dean_o!
> > I tried to read both of the eBay addresses, you gave me, but it
> just didn't work! No page was found...
> >
>
> OOPS! try this e.bay item #
>
> 220222176163
> and
> 170209359165
>
> i guess cut and paste don't work?
>
> Dean_0
>
> Go too e. bay main page , then in the search box put the item
numbers .
>
>
>
> _____
> Do You Yahoo!?
> Tired of spam? Yahoo! Mail has the best spam protection around
> http://mail.yahoo.com
>
> [Non-text portions of this message have been removed]
>

5177. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 22:33:42 UTC
From: aimo ruoho
Topic: 5163 Message: 5177

Thanks a lot, Dean_o_way!
I finally found the items, two cheapest were the last two items down there...
I purchased one of them, because I am not a professional.
It will probably fill my needs, I suppose.
Thanks again and Best Regards from:
Ami

dean_0_way <dean_0_way@...> wrote:
--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Sorry, but which email address exactly will be written to find
those articles?
>
> dean_0_way <dean_0_way@...> wrote: --- In
loopantennas@yahoogroups.com, aimo ruoho <aimounto@> wrote:
> >
> > Dean_o!
> > I tried to read both of the eBay addresses, you gave me, but it
> just didn't work! No page was found...
> >
>
> OOPS! try this e.bay item #
>
> 220222176163
> and
> 170209359165
>
> i guess cut and paste don't work?
>
> Dean_0
>
> Go too e. bay main page , then in the search box put the item
numbers .
>
>
>
> _____
> Do You Yahoo!?
> Tired of spam? Yahoo! Mail has the best spam protection around
> http://mail.yahoo.com
>
> [Non-text portions of this message have been removed]
>

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5178. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 22:37:28 UTC
From: Jeff
Topic: 5163 Message: 5178

I've seen photos on E-Bay with a digital capacitance meter displaying
a value when connected to an air variable so I think they would work.

I still would like to hear from someone that has actually done this.

Please & Thanks,

Jeff

dean_0_way wrote:
>
>
> I know there are many types of caps ,can , coil etc. so i need to know
> if a digital tester is the way to go or is there some special testor
> for air caps ?

--
No virus found in this outgoing message.
Checked by AVG.
Version: 7.5.519 / Virus Database: 269.22.12/1374 - Release Date: 4/11/2008 4:59 PM

5179. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 22:51:25 UTC
From: aimo ruoho
Topic: 5163 Message: 5179

Thanks, Paul!
Looks very good to me, but too expencive even as a Kit for me!
I purchased one cheapo from Hongkong via eBay a few minutes ago in the hope, that it will fill my humble needs. It is a LCR bridge meter, so it will show the inductances, capacitances and resistances.
I have to print out your email, thanks!
Best regards again from:
Ami

Paul V Birke PEng <nonlinear@...> wrote:
a very good device is available from Almost All Digital Electronics

it is a standard many of us use
you can buy assembled or as a kit

http://www.aade.com/lcmeter.htm

"it is like air conditioning, once you have this you wonder how you got along without it"
best
Paul

----- Original Message ----
From: dean_0_way <dean_0_way@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, April 12, 2008 11:39:08 AM
Subject: [loopantennas] variable caps

During the process of making some loops for different radio's i keep
coming up with variable caps that aren't labeled so i began to wonder
if there is a way to find value of these.
I did some looking ,on e.bay etc. for a tester that reads
capacitance ,and don't see anything that says for air capacitor .
I know there are many types of caps ,can , coil etc. so i need to know
if a digital tester is the way to go or is there some special testor
for air caps ?
Seems rather dumb to you experts , but i like to know how things work

Thanks in advance
Dean_0

<!--

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{

```
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table {font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea {font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code {font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-text{
font-family:Georgia;
}
#ygrp-text p{
margin:0 0 1em 0;}
#ygrp-tpmsgs{
font-family:Arial;
clear:both;}
#ygrp-vitnav{
padding-top:10px;font-family:Verdana;font-size:77%;margin:0;}
#ygrp-vitnav a{
padding:0 1px;}
#ygrp-actbar{
clear:both;margin:25px 0;white-space:nowrap;color:#666;text-align:right;}
#ygrp-actbar .left{
float:left;white-space:nowrap;}
.bld{font-weight:bold;}
#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}
#ygrp-ft{
font-family:verdana;font-size:77%;border-top:1px solid #666;
padding:5px 0;
}
#ygrp-mlmsg #logo{
padding-bottom:10px;}
```

```
#ygrp-reco {
margin-bottom:20px;padding:0px;}
#ygrp-reco #reco-head {
font-weight:bold;color:#ff7900;}

#reco-grpname{
font-weight:bold;margin-top:10px;}
#reco-category{
font-size:77%;}
#reco-desc{
font-size:77%;}

#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a{
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc{
background-color:#eee;margin-bottom:20px;padding:0 8px;}
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
```

```
margin:0;}
o{font-size:0;}
.MsoNormal{
margin:0 0 0 0;}
#ygrp-text tt{
font-size:120%;}
blockquote{margin:0 0 0 4px;}
.replbq{margin:4;}
-->
```

[Non-text portions of this message have been removed]

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5180. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 23:24:20 UTC
From: Ray Phillips
Topic: 5163 Message: 5180

Dean-0

to a capacitance tester a capacitor is a capacitor and so you can test air caps with the same effectiveness as other kinds. Likewise vacuum caps.

Depending on design, electrolytic caps may pose a problem to certain testers but air caps are definitely NOT electro's - go for it!!

Here's a design idea for your own tester for capacitors in the low range 10 - 600 pf.

Wind a loop that will work roughly in the MW range. Tune it with a fixed capacitor of known value - say 100 pf. Use a low tolerance capacitor.

Using your AM/SW radio, find the resonant frequency of the coil/capacitor combination. (Tune the radio until you get a peak in the noise). This is your reference resonant frequency. From here you can calculate the inductance value of the coil from the formula F(resonance) = 1 / 2 pi sqrt(LC).

Now substitue your known capacitor with the unknown capacitor and find the resonant frequency again. By subsituting the known inductance of the coil into the resonance formula you can derive the unknown capacitance.

For air-variable capacitors, find the resonance when the capacitor plates are fully meshed and then fully unmeshed; this will allow you to calculate the range of the capacitor.

Any guys new to electronics please heed the words of a guy who has been in the business for over 50 years. Electronics is maths!! Learn how to transpose formulas, how to calculate small and large numbers using indeces and the basics of trigonometry (sine, cosine, tangent). You can look the individual formulas up on the 'net but you need to understand how to manipulate them. Your success rate will be far higher if you can do the math before putting the work to the forge.

Ray
vk5fyar

> --- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>>
>> Hi, Dean_o!
>> I have the same problem. I have been looking for a multimeter or -
> tester for both inductance and capacitance, but until now I haven't
> found a cheap enough unit.
>
>

> Hi Ami ;
> Well here's what i found on e.bay ;
> http://cgi.ebay.com/Digital-LCR-Capacitance-Resistance-Meter-Tester-
> NEW-
> AR_W0QQitemZ170209359165QQihZ007QQcategoryZ25421QQssPageNameZWDVWQQrdZ
> 1QQcmdZViewItem
>
> or
>
> http://cgi.ebay.com/TENMA-MODEL-72-8155-INDUCTANCE-CAPACITANCE-
> METER_W0QQitemZ220222176163QQihZ012QQcategoryZ58277QQssPageNameZWDVWQQ
> rdZ1QQcmdZViewItem
>
> or ;
> Try searching for (capacitance meter)...there are some for less than
> 20$ U.S. and about that much shipping to you ,..... but
> what i cant figure out from the techno babble ,is if i can use it on
> an air cap?
>
>

All the best,
Ray

5181. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-12 23:54:21 UTC
From: aimo ruoho
Topic: 5163 Message: 5181

Thanks for also my question being answered by you, Ray!
It helps a lot to be sure to know, that probably also those cheapo LCR Meters made in China will be able to show the start-, in-between- and end-capacitances of variable capacitors. I am also glad about the fact, that from now on I'll be able to build more exact coils, because I can measure their inductances with the cheapo, too.
Less than $US 20.00 post paid to Spain really won't be too much money at this time of cheap Dollars in Euros...(1 Euro=1.57$$)
Best Regards,
Ami

Ray Phillips <ray@...> wrote:
Dean-0

to a capacitance tester a capacitor is a capacitor and so you can test air caps with the same effectiveness as other kinds. Likewise vacuum caps.

Depending on design, electrolytic caps may pose a problem to certain testers but air caps are definitely NOT electro's - go for it!!

Here's a design idea for your own tester for capacitors in the low range 10 - 600 pf.

Wind a loop that will work roughly in the MW range. Tune it with a fixed capacitor of known value - say 100 pf. Use a low tolerance capacitor.

Using your AM/SW radio, find the resonant frequency of the coil/capacitor combination. (Tune the radio until you get a peak in the noise). This is your reference resonant frequency. From here you can calculate the inductance value of the coil from the formula F(resonance) = 1 / 2 pi sqrt(LC).

Now substitue your known capacitor with the unknown capacitor and find the resonant frequency again. By subsituting the known inductance of the coil into the resonance formula you can derive the unknown capacitance.

For air-variable capacitors, find the resonance when the capacitor plates are fully meshed and then fully unmeshed; this will allow you to calculate the range of the capacitor.

Any guys new to electronics please heed the words of a guy who has been in the business for over 50 years. Electronics is maths!! Learn how to transpose formulas, how to calculate small and large numbers using indeces and the basics of trigonometry (sine, cosine, tangent). You can look the individual formulas up on the 'net but you need to understand how to manipulate them. Your success rate will be far higher if you can do the math before putting the work to the forge.

Ray
vk5fyar

> --- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>>
>> Hi, Dean_o!
>> I have the same problem. I have been looking for a multimeter or -
> tester for both inductance and capacitance, but until now I haven't
> found a cheap enough unit.
>
>
> Hi Ami ;
> Well here's what i found on e.bay ;
> http://cgi.ebay.com/Digital-LCR-Capacitance-Resistance-Meter-Tester-
> NEW-
> AR_W0QQitemZ170209359165QQihZ007QQcategoryZ25421QQssPageNameZWDVWQQrdZ
> 1QQcmdZViewItem
>
> or
>
> http://cgi.ebay.com/TENMA-MODEL-72-8155-INDUCTANCE-CAPACITANCE-
> METER_W0QQitemZ2202221761630QQihZ012QQcategoryZ58277QQssPageNameZWDVWQQ
> rdZ1QQcmdZViewItem
>
> or ;
> Try searching for (capacitance meter)...there are some for less than
> 20$ U.S. and about that much shipping to you ,..... but
> what i cant figure out from the techno babble ,is if i can use it on
> an air cap?
>
>

All the best,
Ray

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

[Non-text portions of this message have been removed]

5183. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 01:00:41 UTC
From: dean_0_way
Topic: 5163 Message: 5183

> Any guys new to electronics please heed the words of a guy who has been in
> the business for over 50 years. Electronics is maths!! Learn how to
> transpose formulas, how to calculate small and large numbers using indeces
> and the basics of trigonometry (sine, cosine, tangent).

Err Umm after a long time away from radio stuff i think i'm in over my head . I hates math! o well i'll have to try and stumble along ?

Thanks for the answer all!
Ami i got one from e. bay today too . glad i could help

Dean_0
turns slowly and walks away scratching head.............

5184. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 01:18:26 UTC
From: Jim Dunstan
Topic: 5163 Message: 5184

At 08:54 AM 4/13/2008 +0930, you wrote:

>Dean-0
>
>t
>
>Any guys new to electronics please heed the words of a guy who has been in
>the business for over 50 years. Electronics is maths!! Learn how to
>transpose formulas, how to calculate small and large numbers using indeces
>and the basics of trigonometry (sine, cosine, tangent). You can look the
>individual formulas up on the 'net but you need to understand how to
>manipulate them. Your success rate will be far higher if you can do the
>math before putting the work to the forge.
>
>Ray
>vk5fyar

I couldn't agree more. Any capacity tester worth its weight in salt uses a simply resonance check against know value inductors. The calibrated dial or readout simply does the calculation for you. Unless you are in a situation where you need to do hundreds of calculations I would (and have) spent my money on devices like the antenna analyzer. I also have switch boxes with know values of capacitance and inductance. All you need to do is hook the unkown capacitance in series with known inductors and check the frequency of resonance. Then punch the values into your calculator and voila! you have the answer.

But the analyzer can be used in many other useful ways other than simply checking capacitors.

Jim, VE3CI

5185. Re: [loopantennas] Re: variable caps (and cheap Hong Kong LCR meter)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 01:34:51 UTC
From: Steve Ratzlaff
Topic: 5185 Message: 5185

I looked at that inexpensive LCR meter from Hong Kong, on eBay (item 160226853854). It will work great for measuring large and small values of capacitance, and will do the job for something like an air variable capacitor, however it won't work at all for measuring small values of inductance, like loop antennas. Note that the smallest scale is 2 millihenry (full scale reading). Small values of microhenry inductance, such as loop antennas have, won't accurately be measured. Notice the picture shows the meter measuring a 12 Henry old iron core choke. This meter will work well when measuring such large values of inductance; anything over about 500 millihenries will read fairly accurately. I have a similar B&K LCR digital meter--it won't accurately read anything under about 500 millihenries. To accurately read small values of inductance you need a meter like the aade.com LC meter, which has already been mentioned as being very suitable both for small inductors and capacitors.
73,
Steve

----- Original Message -----
From: "aimo ruoho" <aimounto@...>
To: <loopantennas@yahoogroups.com>
Sent: Saturday, April 12, 2008 4:54 PM
Subject: Re: [loopantennas] Re: variable caps

> Thanks for also my question being answered by you, Ray!
> It helps a lot to be sure to know, that probably also those cheapo LCR
> Meters made in China will be able to show the start-, in-between- and
> end-capacitances of variable capacitors. I am also glad about the fact,
> that from now on I'll be able to build more exact coils, because I can
> measure their inductances with the cheapo, too.
> Less than $US 20.00 post paid to Spain really won't be too much money at
> this time of cheap Dollars in Euros...(1 Euro=1.57$$)
> Best Regards,
> Ami
>

5186. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 04:42:19 UTC
From: sonicxcove@aol.com
Topic: 5163 Message: 5186

In a message dated 4/12/2008 11:53:24 A.M. Eastern Daylight Time,
nonlinear@... writes:

a very good device is available from Almost All Digital Electronics

it is a standard many of us use
you can buy assembled or as a kit

http://www.aade.com/lcmeter.htm

"it is like air conditioning, once you have this you wonder how you got
along without it"
best
Paul

Might have to get one. Looks like a very popular unit with all the people
making add ons and adaptors for it.

E

**********It's Tax Time! Get tips, forms and advice on AOL Money &
Finance. (http://money.aol.com/tax?NCID=aolcmp00300000002850)

[Non-text portions of this message have been removed]

5187. Re:variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 15:53:01 UTC
From: Steve Baker
Topic: 5163 Message: 5187

Can read down to 1pF on the 2nF scale and its only
$24.95!

http://www.web-tronics.com/ourbelowcomu.html

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

5188. Re: [loopantennas] Re:variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 16:10:48 UTC
From: Chris Trask
Topic: 5163 Message: 5188

```
>
> Can read down to 1pF on the 2nF scale and its only
> $24.95!
>
> http://www.web-tronics.com/ourbelowcomu.html
>
```

For a little more money you can get an equally good digital L/C meter:

http://webtronics.stores.yahoo.net/digcapandint.html

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5189. Re:variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 17:22:20 UTC
From: Steve
Topic: 5163 Message: 5189

Build one with a couple of 555 timers.

http://groups.yahoo.com/group/loopantennas/files/UsefulTestEquipment/

Steve Greenfield

5190. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 22:35:18 UTC
From: Ray Phillips
Topic: 5163 Message: 5190

I hates maths too. In my last year of schooling (year 11), I got the lowest maths score in my year.

However, it is a useful tool for radio and I have forced myself to come to grips with the electronic necesities.

Ray

>> Any guys new to electronics please heed the words of a guy who has
> been in
>> the business for over 50 years. Electronics is maths!! Learn how to
>> transpose formulas, how to calculate small and large numbers using
> indeces
>> and the basics of trigonometry (sine, cosine, tangent).
>
> Err Umm after a long time away from radio stuff i think i'm in over my
> head . I hates math! o well i'll have to try and stumble along ?
>
>
> Thanks for the answer all!
> Ami i got one from e. bay today too . glad i could help
>
> Dean_0
> turns slowly and walks away scratching head.............
>
>

All the best,
Ray

5191. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-13 23:30:31 UTC
From: Aimo Unto Olavi RUOHO
Topic: 5163 Message: 5191

I am not sure, if the following story is true:
"There was an electronics engineer, who was very bright to design complicated electronics scemes, but was totally unable to put together a simple crystal receiver."
And, when a professional electrician died, there was written the following text on his gravestone: "Paljon tinasit - paljon pilasit!" ("You tinned (soldered) a lot and ruined a lot!")

Mathematics is a very useful scientific field, but often theory and practice are too far from each other... What is beneficial and practical for one individual, is far away from another person's interests and abilities. Still the latter may invent new things, even in electronics, by just experimenting the "hard" way, if he has a burning zeal, but not much education or understanding of theory.
But, ofcource, mathematic ingenuity coupled with superb skills of making things with own hands is something to admire, even if a rather rare quality.
Just my thoughts...
Best Regards from:
Ami

-- In loopantennas@yahoogroups.com, "Ray Phillips" <ray@...> wrote:
>
> I hates maths too. In my last year of schooling (year 11), I got the
> lowest maths score in my year.
>
> However, it is a useful tool for radio and I have forced myself to come to
> grips with the electronic necesities.
>
> Ray
>
> >> Any guys new to electronics please heed the words of a guy who has
> > been in
> >> the business for over 50 years. Electronics is maths!! Learn how to
> >> transpose formulas, how to calculate small and large numbers using
> > indeces
> >> and the basics of trigonometry (sine, cosine, tangent).
> >
> > Err Umm after a long time away from radio stuff i think i'm in over my

> > head . I hates math! o well i'll have to try and stumble along ?
> >
> >
> > Thanks for the answer all!
> > Ami i got one from e. bay today too . glad i could help
> >
> > Dean_0
> > turns slowly and walks away scratching head.............
> >
> >
>
>
>
> All the best,
> Ray
>

5192. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 00:31:35 UTC
From: gandalfg8@aol.com
Topic: 5163 Message: 5192

In a message dated 14/04/2008 00:30:48 GMT Daylight Time, aimounto@...
writes:

I am not sure, if the following story is true:
"There was an electronics engineer, who was very bright to design
complicated electronics scemes, but was totally unable to put
together a simple crystal receiver."
And, when a professional electrician died, there was written the
following text on his gravestone: "Paljon tinasit - paljon pilasit!"
("You tinned (soldered) a lot and ruined a lot!")

Nope it's not true, and even if it was it wouldn't matter a shit...it's
still ye load of old bollocks!
I too built a simple crystal receiver, but that was 45 years ago, so what?
And, yes, I can still remember it today, but it's now of very little value.

Mathematics is a very useful scientific field, but often theory and
practice are too far from each other... What is beneficial and
practical for one individual, is far away from another person's
interests and abilities. Still the latter may invent new things, even
in electronics, by just experimenting the "hard" way, if he has a
burning zeal, but not much education or understanding of theory.
But, ofcource, mathematic ingenuity coupled with superb skills of
making things with own hands is something to admire, even if a rather
rare quality.
Just my thoughts...
Best Regards from:
Ami

This too is much ye load of old bollocks, and much beloved by the uneducated.

These hypotheses, calling them theories would be giving them too much
credence, would suggest that the zealous, but ignorant, experimenter will succeed
despite his ignorance.
Unfortunately, if he doesn't know what he's looking for to start with, he
sure as fuck won't know when he's found it!!

Sorry Ami, I'm a great believer in experimentation but get really pissed off
when it's suggested that theory and practice are quite so far apart.
The best, and the luckiest, experimenters, often know an awful lot before
they start.
For some reason this group seems to attract as many burks and also rans as
the gotta have a gold mains lead audio gits but please don't make a virtue out

of ignorance.

regards

Nigel
GM8PZR

5193. variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 03:02:39 UTC
From: dean_0_way
Topic: 5163 Message: 5193

Thank goodnes !!! for an un-educated man that invented the light bulb ,radio , and many other useful things that we use every day . After many attepmts to perfect the light bulb had failed , he was reported to say ....well that is another way not to make a light bulb?

I went to high school with a fellow that could do calculus with ease but didn't want to take a bath more than once a month ?
Ignorance is Not the abscence of knowledge, it is the , rejection of knowledge .

Education is no substitute for knowledge ,some of the smartest people in this world believe that food comes from a grocery store ? that there is man made global warming , evolution ,and that freedom is possible without conflict .

If my lack of knowledge offends you ? Tuff! joining this group is my window to knowledge about radio's and loop antennas , if we seem to talk about things that you already understand , Good for you ! I never claimed to know it all ? but i'm trying to learn as i go .

Thank you all! for the answers to my question ,
If you have ever been in the Armed services THANK YOU !

Dean_0

5194. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 04:55:15 UTC
From: Paul Norman
Topic: 5163 Message: 5194

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> Thank goodnes !!! for an un-educated man that invented the light
> bulb ,radio , and many other useful things that we use every day .
> After many attepmts to perfect the light bulb had failed , he was
> reported to say ....well that is another way not to make a light bulb?
> now it all ? but i'm trying to learn as i go .

Edison was essentially self-taught, with his two passions being reading and experimenting. That's a FAR cry from being "uneducated"! And his Menlo Park Lab, where most of the inventions attributed to Edison were developed, was LOADED with 'braniacs'. Math? He made up for his lack of math by hiring a mathematician.

"Because of all his new inventions, people started calling Edison the "Wizard of Menlo Park." He said that "if [he] was a wizard at anything, it was surrounding [himself] with the best." Edison chose assistants he thought knew more about a subject than he did. For example, he hired a mathematician because he had never learned math.": http://www.gelighting.com/na/home_lighting/gela/students/history_bio_edison.htm

I'm not sure what "evolution", "global warming", and other such far-right bugaboos are doing in this discussion, but I seriously doubt that those whackos would have felt fully at ease with Edison. He is quoted with: "Religion is all bunk!"

Regards from the Left Coast, Paul Norman

5195. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 05:11:29 UTC
From: dean_0_way
Topic: 5163 Message: 5195

--- In loopantennas@yahoogroups.com, "Paul Norman" <pnorman314@...>
wrote:
>
He made up
> for his lack of math by hiring a mathematician.
>
> but I seriously doubt
> that those whackos would have felt fully at ease with Edison. He is
> quoted with: "Religion is all bunk!"
>
> Regards from the Left Coast, Paul Norman
>
you Sir , have just proved my point

5196. Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 06:29:41 UTC
From: Paul Norman
Topic: 5163 Message: 5196

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Paul Norman" <pnorman314@>
> wrote:
> >
> He made up
> > for his lack of math by hiring a mathematician.
> >
> > but I seriously doubt
> > that those whackos would have felt fully at ease with Edison. He is
> > quoted with: "Religion is all bunk!"
> >
> > Regards from the Left Coast, Paul Norman
> >
> you Sir , have just proved my point [????????]

You may have [unwittingly] illustrated your own "point" [chuckle!]

Regards from the Left Coast, Paul Norman

5197. Re: [loopantennas] variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 09:27:47 UTC
From: gandalfg8@aol.com
Topic: 5163 Message: 5197

In a message dated 14/04/2008 04:03:12 GMT Daylight Time,
dean_0_way@... writes:

Education is no substitute for knowledge ,some of the smartest people
in this world believe that food comes from a grocery store ? that
there is man made global warming , evolution ,and that freedom is
possible without conflict .

You misunderstood my point, and may be confusing "education" with the
attending of school or college.
Knowledge should be an outcome of education, and I include self education
and experience in that, whether it be from study or from learning as one goes
along.
If you know nothing about a subject to start with, and lack the tools that
will help you understand it, that doesn't stop you learning but it can make it
much more of a struggle, depending on how far you want to go with it.

Generally though, the assumption that "experience" alone is automatically
enough to achieve anything is still a load of old bullshit.
Experience still needs to be paired with having the ability and brains to
learn from that experience.
If you need to build 100 square wheels to convince yourself that square
wheels aren't very efficient that might suggest you're not learning very much
from your experiences with square wheels..

The old idea that the man who invented the light bulb was really
"uneducated" is again a load of old whatsits.

If my lack of knowledge offends you ? Tuff! joining this group is
my window to knowledge about radio's and loop antennas , if we seem
to talk about things that you already understand , Good for you ! I
never claimed to know it all ? but i'm trying to learn as i go .

Of course it doesn't offend me, and "learning as we go" is all any of us do,
but having the right tools makes it easier, and knowing at least some of the
maths is a very useful tool, as is having the intelligence to understand it.

There's plenty of radio enthusiasts who enjoy the hobby without having a
maths or electronics background, do you think I'm suggesting they shouldn't?

You shouldn't be quite so sensitive and ready to take things personally, my
reply wasn't to you and didn't even mention you.

I would hope I didn't offend Ami either but I do get a bit wound up, not that you would have noticed:-), with comments such as--
"
Still the latter may invent new things, even in electronics, by just experimenting the "hard" way, if he has a burning zeal, but not much education or understanding of theory" --

No doubt it's true up to a point, but if this zealot is to invent anything worthwhile he needs the brains to learn from his experiments, which means by the time he does invent something worthwhile he can no longer be said to lack education or an understanding of the theory, at least in the sense of its practical consequences, hence the argument fails:-)

BTW Ami, many thanks for the tip re the Lithuanian ferrite rods, mine are on their way:-)

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5198. Big Wheel Antenna for VHF 6 meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 13:14:07 UTC
From: mantermeadows
Topic: 5198 Message: 5198

I'm searching for plans to build a 6 meter Big Wheel. These are sometimes called cloverleafs. I don't find that the big wheel has been discussed on this forum. It consists of three full wave loops fed in phase from one central point in the center and the three loops are fanned out at 120 degrees from each other. It is an omni-directional horizontaly polorized antenna and typicaly has about 2 or 3 dB gain over a dipole. It's great for SSB work where you don't want to keep swinging a beam around to hear everyone in the roundtable. Does anyone have some contruction plans or know of a link to this project?

Gary
KC8UD

5199. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 22:37:51 UTC
From: Ray Phillips
Topic: 5163 Message: 5199

Guys,

I am truly sorry that a comment I made started a tete a tete.

I was merely trying to pass on my experience from struggling for years
because I had to do things the hard way due to lack of a very useful set
of tools.

Ray

> --- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>>
>> --- In loopantennas@yahoogroups.com, "Paul Norman" <pnorman314@>
>> wrote:
>> >
>> He made up
>> > for his lack of math by hiring a mathematician.
>> >
>> > but I seriously doubt
>> > that those whackos would have felt fully at ease with Edison. He is
>> > quoted with: "Religion is all bunk!"
>> >
>> > Regards from the Left Coast, Paul Norman
>> >
>> you Sir , have just proved my point [????????]
>
>
>
> You may have [unwittingly] illustrated your own "point" [chuckle!]
>
> Regards from the Left Coast, Paul Norman
>
>
>
>
>
>

All the best,
Ray

5200. Re: [loopantennas] Re: variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 23:31:44 UTC
From: aimo ruoho
Topic: 5163 Message: 5200

I am sorry!
I have a very peculiar way to make myself so badly misunderstood!
I never even emagined, that ignorance is better than knowledge.
Did someone read my emails too hastily again?
It might be so, that some people want to see something, that doesn't exist, because what they read or hear in a hurry doesn't please them?
That's the main problem, when we have different backgrounds. (I only have 14 years of official general education, so obviously that is not enough?)
Finland is internationally admired of having a very high standard of schooling system. Schooling experts from many European countries as well as from the whole world want to know, how we do it, and make excursions to Finland to learn and study our system... I understand, if this knowlwedge is not a possession of all people?
I admit, that many times I have managed to write down something, that is not too pleasant to people, who are proud of their understanding, but have very low self control?
So I have to apologise again?
No bad feelings after reading these lines, I hope?

Ami

gandalfg8@... wrote:
In a message dated 14/04/2008 00:30:48 GMT Daylight Time, aimounto@...
writes:

I am not sure, if the following story is true:
"There was an electronics engineer, who was very bright to design
complicated electronics scemes, but was totally unable to put
together a simple crystal receiver."
And, when a professional electrician died, there was written the
following text on his gravestone: "Paljon tinasit - paljon pilasit!"
("You tinned (soldered) a lot and ruined a lot!")

Nope it's not true, and even if it was it wouldn't matter a shit...it's
still ye load of old bollocks!
I too built a simple crystal receiver, but that was 45 years ago, so what?
And, yes, I can still remember it today, but it's now of very little value.

Mathematics is a very useful scientific field, but often theory and
practice are too far from each other... What is beneficial and
practical for one individual, is far away from another person's
interests and abilities. Still the latter may invent new things, even
in electronics, by just experimenting the "hard" way, if he has a
burning zeal, but not much education or understanding of theory.
But, ofcource, mathematic ingenuity coupled with superb skills of

making things with own hands is something to admire, even if a rather
rare quality.
Just my thoughts...
Best Regards from:
Ami

This too is much ye load of old bollocks, and much beloved by the uneducated.

These hypotheses, calling them theories would be giving them too much
credence, would suggest that the zealous, but ignorant, experimenter will succeed
despite his ignorance.
Unfortunately, if he doesn't know what he's looking for to start with, he
sure as fuck won't know when he's found it!!

Sorry Ami, I'm a great believer in experimentation but get really pissed off
when it's suggested that theory and practice are quite so far apart.
The best, and the luckiest, experimenters, often know an awful lot before
they start.
For some reason this group seems to attract as many burks and also rans as
the gotta have a gold mains lead audio gits but please don't make a virtue out
of ignorance.

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5201. Re: Big Wheel Antenna for VHF 6 meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-14 23:36:26 UTC
From: revex540
Topic: 5198 Message: 5201

Hi Gary
I have all the construction details. Email me direct and I will scan the article for you.
vk7krw@...

Regards
Bob VK7KRW

--- In loopantennas@yahoogroups.com, "mantermeadows" <beartrack1@...> wrote:
>
> I'm searching for plans to build a 6 meter Big Wheel. These are
> sometimes called cloverleafs. I don't find that the big wheel has been
> discussed on this forum. It consists of three full wave loops fed in
> phase from one central point in the center and the three loops are
> fanned out at 120 degrees from each other. It is an omni-directional
> horizontaly polorized antenna and typicaly has about 2 or 3 dB gain
> over a dipole. It's great for SSB work where you don't want to keep
> swinging a beam around to hear everyone in the roundtable. Does anyone
> have some contruction plans or know of a link to this project?
>
> Gary
> KC8UD
>

5202. 3a. FERNACOM

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-15 10:49:43 UTC
From: EDUARDO
Topic: 5202 Message: 5202

Bom Dia Amigos,

j? est? dispon?vel para venda os ingressos da 3a. Fernacom,

visite o site www.radiodx.qsl.br e veja como fazer!

Atenciosamente,

Eduardo

[Non-text portions of this message have been removed]

5203. Re: 3a. FERNACOM

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-15 20:27:37 UTC
From: huelbeag
Topic: 5202 Message: 5203

Hi group,

Eduardo unintentionally CC'ed the portuguese message bellow to this group.

Just to inform you, the message mentions the most important brazilian
ham and SWL fair. It will take place in Indaiatuba, near Sao Paulo
between July 25 to 27 2008. We invite you to visit us at the fair if
you, by chance, will be visiting Brazil these days.

More is available (sorry, only in portuguese) at:
http://www.fenarcom.com.br/

ZZ3HAG Huelbe
Porto Alegre, RS
Brazil

--- In loopantennas@yahoogroups.com, "EDUARDO" <adcas@...> wrote:
>
>
>
>
> Bom Dia Amigos,
>
> já está disponível para venda os ingressos da 3a. Fernacom,
>
> visite o site www.radiodx.qsl.br e veja como fazer!
>
> Atenciosamente,
>
>
>
> Eduardo
>
>
> [Non-text portions of this message have been removed]
>

5204. Fw: [antenneX Broadcast] LB Cebik W4RNL - SK

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-23 07:16:26 UTC
From: C. Beijersbergen
Topic: 5204 Message: 5204

I received this yesterday.
L.B.Cebik contributed to the SWL a lot of work on the subject of the design of antennas.
You can find it on www.cebik.com

Cor Beijersbergen van Henegouwen

To the Announcement List:

==========
Folks:

This is the saddest announcement we have had to make:

It was discovered this morning that LB Cebik, W4RNL
had passed away.

He was a friend to us all and will leave behind
a great void. His beloved wife, Jean passed several
years before and he missed her greatly.

He was my friend and associate for 10+ years and I
shall always remember him for his warmth and kindness.

A tribute to this "kind and gentle giant" shall
appear in my column in the next issue of antenneX.

Jack L. Stone, Publisher
antenneX Online Magazine
http://www.antennex.com
jack@...

Broadcast mailing list
Broadcast@...
http://lists.antennex.com/mailman/listinfo/broadcast
Unsubscribe, send to:
broadcast-leave@...

[Non-text portions of this message have been removed]

5205. Fwd: Well-in-business!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-24 22:42:17 UTC
From: aimo ruoho
Topic: 5205 Message: 5205

Hello, folks!

I sent the following email to the English dealer, sales@...

Note: forwarded message attached.

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5207. Re: [shortwave-radio] IC-R75 Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-25 15:46:08 UTC
From: aimo ruoho
Topic: 5207 Message: 5207

Thank you for your so kind and gentle email(s), Richards!
By the way, I haven't heard anything from you for a looong time!

I hope, that you are in good health?

Yes, I finally gave up, sort of "gave my little-finger to the devil", because I am a very anxious-to-know-person.
Yesterday my mailman brought to me - finally - the "WOLDS-BEST-WELLBROOK-ANTENNA, WELLBROOK ALA 100M!
I think, that it is very expencive!!!!!!!!!!!!!!!!!!!!
But it is a really good antenna amplifier. If I only were living in a better place...
I just wonder, what could be heard on a lonly island without electricity, using as power source a car-battery? Or on top of those Spanish mountins?
What I did as a preliminary test, was connecting the amplifier with my 2.5 m x 2.5 m coaxial loop on my northern wall in my listening room. I'm going to test it with my 1.5 m x 1.5 m loop on my western window-wall this evening, if time (wife) will allow...

All, that is written in the Passport to World Band Radio-book, was true! Except, that I really had no difficulties else than using a led-torch and kneeling to find and reach the coaxial-ends of the loops on my walls behind/under my radio- and computer-tables. So many wires and cables and connections in my room! (Keeps the 70-year-old limber!)

The ALA 100M Amplifier is probably a stronger version of the plain 100 1st version, because it amplifies the radio signals in an unexpected way?
Also it gives a wonderfully good S/NR. The signal is not only strong and clear, but also pure.
This toy will probably give me many ours of interesting listening
Last night I heard 4905 kHz Radio Chad in French language so nice with S9 - S9+20dB, that I'd like to turn to it more often to learn more French.
There was also on 5995 kHz a transmission from Moldavia, which I happened to hear for the 1st time in my life.
The Arab world opened itself wide open on Medium wave channel in their own language, which is one of my new hobbies... They are going to conquer the radio world with the Chinese and others little by little, as the western world is diminishing and terminating their foreign services! Stupidly enough!

Thanks for setting the mark for me with your bold example, Richards, by telling about your ALA 100M. (I still have no contact with the original producer, because I used the sales@... only, which is another person, if I understood it right.)

Best Regards from Ami,
Aimo Ruoho.
Richards <jruing@...> wrote:
Good Day Aimo -- I am sorry you have had poor luck
communicating with the man at Wellbrook. He was very
helpful to me and answered my several e-mail messages -

both before and after I purchased the product. It was a
very good experience for me.

The reason he wants your credit card number spread out
over multiple messages is to give better security and
to help protect your privacy. That is a nice thing, and
not an inconvenience, to me.

I agree PayPal is very convenient, but it costs the seller
money to use it - it is free to buyers. Also, PayPal is
not without problems for sellers and buyers, and some sellers
have decided its problems are not worth the price and that
cancels out the convenience to them. It is much better for
buyers than for sellers.

I recommend a glass of good red wine, a hunk of good
bread, and some sunshine. Maybe some lamb stew...
That should help you feel better.

Happy trails my friend. /// Richards ///
==========

aimo ruoho wrote:
> So, my dear friend Richards!
>
> Are you suggesting, that I have to raise my hands up and purchase one of those marvellous Wellbrook ALA 100M Active Directice Loop Antennas?
> You see, I've been waiting to receive enough information of real DX results from people listening to Broadcasting from far-away local low-power stations, the so-called "domestic" transmitters, but haven't seen any as yet!
> I emailed to the sales@... yesterday asking questions about "the one and only". To-day they answered, telling me to either email to them in 2/3 emails my credit card particulars or pay a personal telephone call to their number. Not too user-friendly situation to buy something so many people want! The holy British concervative Tradition seems to be more appreciated than service!
> For three (3) years ago I tried to buy a Wellbrook Loop, but received no answer from the so
> widely appreciated person, who is producing and selling them!
> So, is it really worth putting so much money to benefit such non-friendly persons' pocket?
> Why does he not trust the so much appreciated PayPal? Again the old-fashioned British tradition? Where lies the common practical wisdom? Are we not living on the 21st century yet? Laziness? Mistrust?
> What ever may be the reason not to be more effective commercially these days?
>
> Any way, best regards from a totally frustrated person trying to live his dreams.
> Ami
>
>
>
>

>
>
> Richards <jruing@...> wrote:
> Another possibility, depending upon your threshold for
> economic pain -> The Wellbrook loop antennas.
>
> I use the ALA 100M medium to large aperture loop antenna and it works
> very well. I use it in conjunction with my short wave radios, and
> also with my amateur radio/ham transceiver. Sometimes, it works
> better on receive than my ham transmitting antennas, so I split my rig
> between transmitting on one antenna, and listening on the Wellbrook
> loop antenna. It is just a slight bit noisier than my amateur
> transmitting antennas, but, then, the signal is sufficiently strong
> compared to the noise (signal:noise S/N level) that I can hear things
> on it that the others do not pull in as well.
>
> Although some say these smaller Wellbrook loop antennas have good
> signal to noise ratio, the say they have a slightly weaker signal
> overall (as compared to an random/long wire) -- BUT this particular
> loop antenna uses a much larger loop, and this gives it much higher
> gain which equals the signal I used to get from a 74 foot long
> random/long. In fact, I took my long wire down in favor of amateur
> transmitting antennas, and the loop is my main the reception antenna,
> I don't really miss the other one. It's that good.
>
> Just MY take....
>
> Happy trails and 73. ---- Richards - K8JHR ----
> ==
>
> Richards wrote:
>> Good day -- of those that you suggest, I would only pick
>
> ==
>
>
>
>
>
> ---------------------------------
> You rock. That's why Blockbuster's offering you one month of Blockbuster Total Access, No
Cost.
>
> [Non-text portions of this message have been removed]
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>

>
>
>

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5208. Re: http://68.142.20

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-26 15:10:39 UTC
From: Steve
Topic: 5206 Message: 5208

What is this?

Steve Greenfield

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> http://68.142

5209. math and stuff

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-26 17:34:31 UTC
From: dean_0_way
Topic: 5209 Message: 5209

Just found my copy of a handy little book that i put someplace to
remember where i put it?
After my capacitance tester came i had to figure out what all those
symbols meant .
Anyway it's called a (pocket Ref) by Thomas J.Glover ,you should find
it at a hardware store ,mostly for builders , but has an electronics
section with math formula's and even capacitor-resistor color codes !~
I suppose there is better more detailed reference out there but for
now this is all i need .

Dean_0

post your fav,s i may need a more complete book later ?

5210. Re: [loopantennas] Re: http://68.142.20

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-26 18:23:17 UTC
From: aimo ruoho
Topic: 5206 Message: 5210

I am sorry, but I really don't understand.
I tried to send a replay of my former email to this address, but din't manage to do it right.
I don't know, what happened to my email.
Sorry again.
Aimo

Steve <alienrelics@...> wrote:
What is this?

Steve Greenfield

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> http://68.142

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5211. Re: math and stuff

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-26 18:45:57 UTC
From: Paul Norman
Topic: 5209 Message: 5211

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> Just found my copy of a handy little book that i put someplace to
> remember where i put it?
> After my capacitance tester came i had to figure out what all those
> symbols meant .
> Anyway it's called a (pocket Ref) by Thomas J.Glover ,you should find
> it at a hardware store ,mostly for builders , but has an electronics
> section with math formula's and even capacitor-resistor color codes !~
> I suppose there is better more detailed reference out there but for
> now this is all i need .
>
> Dean_0
>
>

I have in my PDA [Sony TH-55], several excellent programs that might be of value for such reference usage. In particular, I have a NEAT resistor color code program which works both ways. Since the display is in full color, it's particularly useful There's also the familiar Ohms Law wheel. And like so many excellent programs running on the Palm OS, it's FREE. My smartphone [Treo 700p] also uses the Palm OS, so I'll put it there too.

If you have a PDA or smartphone that's always at hand, check out the internet for such programs. Here's one of many good sites: http://www.handango.com/

Regards, Paul Norman

5212. New loop tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-28 23:25:39 UTC
From: Tom
Topic: 5212 Message: 5212

Hi loop fans,

I've replaced my loop tuner.

It was a 1500 watt MFJ-998 auto tuner with remote, 4:1 balun.

Now I'm using a 1500 watt Ameritron, ATR-30 with an internal, 1:1 balun.
The ATR-30 is a manual tuner and better at matching my loop to my amplifier
at 900 watts output.

See the revised diagram of my loop antenna with tuner at:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2&m=f&o=0

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

5213. I'm new and I want to build an antenna for SW listening

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-30 03:44:43 UTC
From: snakeblackvegas
Topic: 5213 Message: 5213

I got a Panasonic RF 2200 and I want to start listening to SW broadcasts. Right now I have a hard time even hearing the atomic clock time broadcasts and I can sometimes hear a religious station or two. I want more! I need an antenna.

I used to sit up all night when I was a kid tuning though the static on an old Philco floor standing AM radio, listening for far away broadcasts and watching the green eye. I was in Michigan and would listen to Larry Glic on WBZ Boston. I want to search for some goodness again in short wave listening.

I live in a ground floor apartment so no outside antennas. I live in the South Western US now and the external wall and windows, including a large sliding glass door all face South West.

I looked through the files here and on the SWL group group and saw, well, lots of stuff. I admit I am confused.

I can build anything you kind folks could describe to me, but I can't fill my apartment with strange constructions either.

I saw the gamey leg loop using the existing aluminum window frame and it seems interesting, and pretty easy too but will I be able to pick up all the 3.9 to 28MHz range? I saw a lot of other stuff too though and I don't know what to do.

I'll build or buy (shudder) whatever will do the job as long as you kind and knowledgeable folks can agree on what I need. So help a brotha, and spoon feed this noob a good antenna design so I can search through the static all night long again like I did when I was a little kid.

5214. Re: I'm new and I want to build an antenna for SW listening

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-30 14:20:03 UTC
From: gadzooks.mike
Topic: 5213 Message: 5214

Maybe look into something like these kits. Lots of fun to build, and will help you in your specific situation.

http://www.elexp.com/kit_aca1.htm
http://www.uoguelph.ca/~antoon/circ/AA7/activant2.html
http://www.northcountryradio.com/Kitpages/actant.htm

I built one of the north country kits and it works pretty good! It works so good that my nephew "appropriated" it for his use :)

--- In loopantennas@yahoogroups.com, "snakeblackvegas" <jodoo@...> wrote:
>
> I got a Panasonic RF 2200 and I want to start listening to SW
> broadcasts. Right now I have a hard time even hearing the atomic clock
> time broadcasts and I can sometimes hear a religious station or two. I
> want more! I need an antenna.
>
> I used to sit up all night when I was a kid tuning though the static
> on an old Philco floor standing AM radio, listening for far away
> broadcasts and watching the green eye. I was in Michigan and would listen
> to Larry Glic on WBZ Boston. I want to search for some goodness again
> in short wave listening.
>
> I live in a ground floor apartment so no outside antennas. I live in
> the South Western US now and the external wall and windows, including
> a large sliding glass door all face South West.
>
> I looked through the files here and on the SWL group group and saw,
> well, lots of stuff. I admit I am confused.
>
> I can build anything you kind folks could describe to me, but I can't
> fill my apartment with strange constructions either.
>
> I saw the gamey leg loop using the existing aluminum window frame and
> it seems interesting, and pretty easy too but will I be able to pick
> up all the 3.9 to 28MHz range? I saw a lot of other stuff too though
> and I don't know what to do.
>

> I'll build or buy (shudder) whatever will do the job as long as you
> kind and knowledgeable folks can agree on what I need. So help a
> brotha, and spoon feed this noob a good antenna design so I can
search
> through the static all night long again like I did when I was a
little
> kid.
>

5215. Re: [loopantennas] I'm new and I want to build an antenna for SW listening

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-30 15:09:22 UTC
From: Jim Dunstan
Topic: 5213 Message: 5215

At 03:44 AM 4/30/2008 +0000, you wrote:

>I got a Panasonic RF 2200 and I want to start listening to SW
>broadcasts. Right now I have a hard time even hearing the atomic clock
>time broadcasts and I can sometimes hear a religious station or two. I
>want more! I need an antenna.
>
>I used to sit up all night when I was a kid tuning though the static
>on an old Philco floor standing AM radio, listening for far away
>broadcasts and watching the green eye. I was in Michigan and would listen
>to Larry Glic on WBZ Boston. I want to search for some goodness again
>in short wave listening.
>
>I live in a ground floor apartment so no outside antennas. I live in
>the South Western US now and the external wall and windows, including
>a large sliding glass door all face South West.
>
>I looked through the files here and on the SWL group group and saw,
>well, lots of stuff. I admit I am confused.
>
>I can build anything you kind folks could describe to me, but I can't
>fill my apartment with strange constructions either.
>
>I saw the gamey leg loop using the existing aluminum window frame and
>it seems interesting, and pretty easy too but will I be able to pick
>up all the 3.9 to 28MHz range? I saw a lot of other stuff too though
>and I don't know what to do.
>
>I'll build or buy (shudder) whatever will do the job as long as you
>kind and knowledgeable folks can agree on what I need. So help a
>brotha, and spoon feed this noob a good antenna design so I can search
>through the static all night long again like I did when I was a little
>kid.

Hi,

I am not familiar with the Panasonic RF 2200 other than seeing pictures. I assume it is possible to connect an external antenna for SW (other than the built-in whip). I assume the problem is that the RFI (noise) overwhelms the desired signals. You can confirm this by taking your receiver to a quiet location (like a park table) and check out reception with your built-in whip. If reception is adequate then you can be assured the receiver is capable .... and the problem is the receiving environment in your apartment.

The solution to a noisy receiving environment is to either put your antenna outside where it is quieter and carefully couple the antenna to the receiver via a shielded cable or to use an antenna that is selective so that the signal to noise ratio is improved. A tuned loop antenna is selective (e.g. has a narrow bandwidth which increases the desired signal while reducing the broadband RFI). Such antennas have sharp nulls ... which allow it to be oriented so that the most offending direction for RFI can be nulled.

First determine your receiver is capable of reasonable SW reception ... eg take it to a quiet place for evaluation. It is possible to provide an external RF amplifier to perk up your receiver performance. However everything I mentioned above still holds ... Providing an external broadband RF amplifier will amplify both the desired signals and the undesired RFI (noise) by the same amount. In fact the increased RF input due to the external amplifier may add to the problem by introducing front end overload leading to distortion.

Steve Greenfield has a web site that discusses building simple coax tuned loops for SW reception.

Jim

5216. Re: [loopantennas] I'm new and I want to build an antenna for SW listening

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-04-30 17:59:18 UTC
From: Jim Dunstan
Topic: 5213 Message: 5216

At 11:09 AM 4/30/2008 -0400, you wrote:

>At 03:44 AM 4/30/2008 +0000, you wrote:
>
> >I got a Panasonic RF 2200 and I want to start listening to SW
> >broadcasts. Right now I have a hard time even hearing the atomic clock
> >time broadcasts and I can sometimes hear a religious station or two. I
> >want more! I need an antenna.
> >
> >I used to sit up all night when I was a kid tuning though the static
> >on an old Philco floor standing AM radio, listening for far away
> >broadcasts and watching the green eye. I was in Michigan and would listen
> >to Larry Glic on WBZ Boston. I want to search for some goodness again
> >in short wave listening.
> >
> >I live in a ground floor apartment so no outside antennas. I live in
> >the South Western US now and the external wall and windows, including
> >a large sliding glass door all face South West.
> >
> >I looked through the files here and on the SWL group group and saw,
> >well, lots of stuff. I admit I am confused.
> >
> >I can build anything you kind folks could describe to me, but I can't
> >fill my apartment with strange constructions either.
> >
> >I saw the gamey leg loop using the existing aluminum window frame and
> >it seems interesting, and pretty easy too but will I be able to pick
> >up all the 3.9 to 28MHz range? I saw a lot of other stuff too though
> >and I don't know what to do.
> >
> >I'll build or buy (shudder) whatever will do the job as long as you
> >kind and knowledgeable folks can agree on what I need. So help a
> >brotha, and spoon feed this noob a good antenna design so I can search
> >through the static all night long again like I did when I was a little
> >kid.
>
>Hi,
>
>I am not familiar with the Panasonic RF 2200 other than seeing pictures. I
>assume it is possible to connect an external antenna for SW (other than the
>built-in whip). I assume the problem is that the RFI (noise) overwhelms
>the desired signals. You can confirm this by taking your receiver to a
>quiet location (like a park table) and check out reception with your
>built-in whip. If reception is adequate then you can be assured the
>receiver is capable .... and the problem is the receiving environment in

>your apartment.
>
>The solution to a noisy receiving environment is to either put your antenna
>outside where it is quieter and carefully couple the antenna to the
>receiver via a shielded cable or to use an antenna that is selective so
>that the signal to noise ratio is improved. A tuned loop antenna is
>selective (e.g. has a narrow bandwidth which increases the desired signal
>while reducing the broadband RFI). Such antennas have sharp nulls ...
>which allow it to be oriented so that the most offending direction for RFI
>can be nulled.
>
>First determine your receiver is capable of reasonable SW reception ... eg
>take it to a quiet place for evaluation. It is possible to provide an
>external RF amplifier to perk up your receiver performance. However
>everything I mentioned above still holds ... Providing an external
>broadband RF amplifier will amplify both the desired signals and the
>undesired RFI (noise) by the same amount. In fact the increased RF input
>due to the external amplifier may add to the problem by introducing front
>end overload leading to distortion.
>
>Steve Greenfield has a web site that discusses building simple coax tuned
>loops for SW reception.
>
>Jim

P.S. http://www.kr1st.com/swlloop.htm shows a simple receiving loop. I
have used a similar arrangement while living in a large apartment
block. It is a great improvement over the built in whip. It increases
signal strength and reduces off frequency noise with a substantial
improvement in S/N ratio.

Jim

5217. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-01 20:58:46 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 5217

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

5218. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-01 20:58:46 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 5218

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

5219. Connecting My Selec-A-Tenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-01 16:08:32 UTC
From: logically_spock
Topic: 5219 Message: 5219

I want to hook up my Select-A-Tenna for MW up to my
Palstar R30. It has no ferrite rod inside so I need to use a "couple
loop" or try to pry open the antenna and hook up a direct feed to the
50-70 ohm S239 connect or the high impeadence long wire in the back of
the radio.

Thanks

5220. Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-02 02:42:10 UTC
From: na_no_tu_be
Topic: 4914 Message: 5220

Hi

I am on may way to build the Complementary Push-PullAmplifiers and i have a few questions regarding this amplifier.

Can i use the 2N2907A and the 2N2222A ? " Those (A) version are more available here" or it is better to stay with 2n2907 and the 2n2222.

I am a little bit surprise to see those to-92 for the Push-Pull output! Is the to-18 "metal case" a better choice for his power dissipation ?
Regardless the power dissipation, there is some indication to not use metal case transistor for the Push-Pull output?

Regarding those " Ivan board ", there is a ground plane on the other side and who make these prototype boards ?

Thanks in advance for your collaboration and excuse my English.

Gillis from Montréal

5221. Re: [loopantennas] Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-03 17:01:21 UTC
From: Chris Trask
Topic: 4914 Message: 5221

>
> I am on may way to build the Complementary Push-PullAmplifiers and i
> have a few questions regarding this amplifier.
>
> Can i use the 2N2907A and the 2N2222A ? " Those (A) version are more
> available here" or it is better to stay with 2n2907 and the 2n2222.
>

The amplifier you're asking about is the one that I designed. Yes, you
can use the "A" versions. They have slightly better performance.

>
> I am a little bit surprise to see those to-92 for the Push-Pull
> output! Is the to-18 "metal case" a better choice for his power
> dissipation ?
>

If you feel the need, you can use the metal ones and attach heat
radiators. I didn't noice any adverse heating in the ones I made.

>
> Regardless the power dissipation, there is some indication to not use
> metal case transistor for the Push-Pull output?
>

You can use the metal (TO-18) ones just as well as the plastic (TO-92)
versions. The metal ones are more difficult to obtain and usually cost much
more than the plastic ones. You can also use the PN2222/A and PN2907/A,
which are the Fairchild TO-92 equivalents.

>
> Regarding those " Ivan board ", there is a ground plane on the other
> side and who make these prototype boards ?
>

Yes, it has a solid ground plane on the reverse side. You can obtain
the Ivan board material from:

http://www.circuitspecialists.com/prod.itml/icOid/3985

Chris

```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
```

oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5222. Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-03 23:36:10 UTC
From: na_no_tu_be
Topic: 4914 Message: 5222

Hi Chris.

First of all, thanks to take the time to answer my questions and to make this design available.

Do you have any ideas what can be the noise figure of both version of your Push-Pull Amplifiers.

I am curious to see if the one with only one transistor connected to the input is less noisy than the one with two transistors connected to the input ?

73

Gillis

> > I am on may way to build the Complementary Push-PullAmplifiers and i
> > have a few questions regarding this amplifier.
> >
> > Can i use the 2N2907A and the 2N2222A ? " Those (A) version are more
> > available here" or it is better to stay with 2n2907 and the 2n2222.
> >
>
> The amplifier you're asking about is the one that I designed. Yes, you
> can use the "A" versions. They have slightly better performance.
>
> >
> > I am a little bit surprise to see those to-92 for the Push-Pull
> > output! Is the to-18 "metal case" a better choice for his power
> > dissipation ?
> >
>
> If you feel the need, you can use the metal ones and attach heat
> radiators. I didn't noice any adverse heating in the ones I made.
>
> >
> > Regardless the power dissipation, there is some indication to not use
> > metal case transistor for the Push-Pull output?
> >
>
> You can use the metal (TO-18) ones just as well as the plastic

(TO-92)
> versions. The metal ones are more difficult to obtain and usually
cost much
> more than the plastic ones. You can also use the PN2222/A and
PN2907/A,
> which are the Fairchild TO-92 equivalents.
>
> >
> > Regarding those " Ivan board ", there is a ground plane on the
other
> > side and who make these prototype boards ?
> >
>
> Yes, it has a solid ground plane on the reverse side. You can
obtain
> the Ivan board material from:
>
> http://www.circuitspecialists.com/prod.itml/icOid/3985
>
>
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '.
http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

5223. Re: [loopantennas] Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-05 23:07:30 UTC
From: Chris Trask
Topic: 4914 Message: 5223

```
>
> Do you have any ideas what can be the noise figure of both version of
> your Push-Pull Amplifiers.
>
```

It will be in the vicinity of 4-5dB.

```
>
> I am curious to see if the one with only one transistor connected to
> the input is less noisy than the one with two transistors connected
> to the input ?
>
```

They should both have approximately the same gain and NF. The advantage to the complementary JFET input stage is the improved distortion performance.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5224. Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-06 14:32:35 UTC
From: jdh1812
Topic: 5224 Message: 5224

Howdy all. My name is John and I just joined the group. Although I'm new to the group, I'm not new to loop antennas, or antennas for that matter.

I've been a licensed ham since 1986 and my current call is AB4MS. I love to experiment with loops and find the box framed, tuned loop to be a thing of beauty, both electrically and aesthetically! I know, I'm weird.

I added some photos of a MW BC loop I built a few years ago in case anyone is interested.

http://ph.groups.yahoo.com/group/loopantennas/photos/browse/ec46

My next project is to build a broad banded loop for VLF/LF with a roll off around 500 KHz. I would like to get similar results to a Wellbrook loop if I can.

Look forward to reading all the words of wisdom that I know flow across these lists! ;)

73
John

5225. Re: Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-07 12:27:33 UTC
From: kg4lac
Topic: 5224 Message: 5225

John,
Welcome to the group.

Does your homebrew loop cover 530 to 1710 kHz?

Able to post plans, construction details?

Thanks and 73,
Kraig, KG4LAC

5226. Re: [loopantennas] Re: Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-07 18:24:06 UTC
From: John Hoopes
Topic: 5224 Message: 5226

Hi Kraig. Yes, the loop covers all of the AM band and 160 meters as well. I have an alligator clip that I use to tap different turns depending on what band I'm interested in.

If you go to the photo section, under "John's Corner", you will see a couple of pics and there is also a simple schematic with the design details. The only thing it might need to make it better would be a low noise pre-amp.

The loop uses 1/4 turn link/inductive coupling so it maintains good symmetry and has deep nulls for noise rejection.

It's nothing earth shattering, just something I threw together in an afternoon but it seems to work well so I'm happy with it.

In the planning stages right now are plans to build the "Mother of all Loops" that will cover VLF/LF. I'm looking forward to building this loop and will be pulling out all the stops! :)

Regards,
John

kg4lac <kg4lac@...> wrote: John,
Welcome to the group.

Does your homebrew loop cover 530 to 1710 kHz?

Able to post plans, construction details?

Thanks and 73,
Kraig, KG4LAC

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5227. Re: [loopantennas] Re: Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-07 19:54:12 UTC
From: aimo ruoho
Topic: 5224 Message: 5227

John, thank you!
How about a loop for SW above 1.6 MHz up to 10 MHz or so?
Would it be directive?
Aimo

John Hoopes <jdh1812@...> wrote:
Hi Kraig. Yes, the loop covers all of the AM band and 160 meters as well. I have an alligator clip that I use to tap different turns depending on what band I'm interested in.

If you go to the photo section, under "John's Corner", you will see a couple of pics and there is also a simple schematic with the design details. The only thing it might need to make it better would be a low noise pre-amp.

The loop uses 1/4 turn link/inductive coupling so it maintains good symmetry and has deep nulls for noise rejection.

It's nothing earth shattering, just something I threw together in an afternoon but it seems to work well so I'm happy with it.

In the planning stages right now are plans to build the "Mother of all Loops" that will cover VLF/LF. I'm looking forward to building this loop and will be pulling out all the stops! :)

Regards,
John

kg4lac <kg4lac@...> wrote: John,
Welcome to the group.

Does your homebrew loop cover 530 to 1710 kHz?

Able to post plans, construction details?

Thanks and 73,
Kraig, KG4LAC

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5228. Re: [loopantennas] Re: Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-08 05:01:39 UTC
From: John Hoopes
Topic: 5224 Message: 5228

Hi Aimo. Once signals get sky borne then directivity goes out the window. The main advantage then becmes nulling out the noise.

John

aimo ruoho <aimounto@...> wrote:
John, thank you!
How about a loop for SW above 1.6 MHz up to 10 MHz or so?
Would it be directive?
Aimo

John Hoopes <jdh1812@...> wrote:
Hi Kraig. Yes, the loop covers all of the AM band and 160 meters as well. I have an alligator clip that I use to tap different turns depending on what band I'm interested in.

If you go to the photo section, under "John's Corner", you will see a couple of pics and there is also a simple schematic with the design details. The only thing it might need to make it better would be a low noise pre-amp.

The loop uses 1/4 turn link/inductive coupling so it maintains good symmetry and has deep nulls for noise rejection.

It's nothing earth shattering, just something I threw together in an afternoon but it seems to work well so I'm happy with it.

In the planning stages right now are plans to build the "Mother of all Loops" that will cover VLF/LF. I'm looking forward to building this loop and will be pulling out all the stops! :)

Regards,
John

kg4lac <kg4lac@...> wrote: John,
Welcome to the group.

Does your homebrew loop cover 530 to 1710 kHz?

Able to post plans, construction details?

Thanks and 73,
Kraig, KG4LAC

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5229. Loop Configuration Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-08 14:38:47 UTC
From: Jason
Topic: 5229 Message: 5229

I seem to be having a problem with a loop install at my new house. Hoping someone can help out:

Here are the details:

a) 272' of stranded 12 gauge wire in a relatively rectangular shape.

b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a tree.

c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one end and connects to a HI-Q 4:1 Balun on the other end.

d) From the 4:1 Balun a coax run goes into my shack on a Kenwood TS480SAT rig. (auto tuner)

I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters tune at certain locations) Audio and SWR are perfect.

However, I cannot tune any higher than 3.800 on 75/80 meters. I have cut down the ladder line and no change. When I cut down the ladder line I tuned in the other bands perfectly. Ladder line sits at about 93 feet in length now. I tried cutting down further and I ended up taking out all the bands, so I reached the limit I believe. I put back the last piece I cut and now back to where I was.

I thought maybe the hardware store made a mistake and my 12 gauge wire was short. So I added 25 feet to it in the middle. It actually made 75/80 meters worse, as it didn't want to tune above 3.700. So I reverted back.

Any thoughts on what is happening? I seem to be stuck at 3.800. I don't know if this frequency, exactly, is telling me something? Any suggestions would be greatly appreciated!

5230. Re: Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-08 15:33:38 UTC
From: yrmh1
Topic: 5224 Message: 5230

> In the planning stages right now are plans to build the "Mother of all Loops" that will cover VLF/LF. I'm looking forward to building this loop and will be pulling out all the stops! :)

That's funny you should mention such a plan. I too have been contemplating/dreaming of a similar loop project which I affectionately refer to as "The Attic Monster" loop, placed in the attic of course! I have yet to build my first pedestrian loop though, and must do this before embarking on any more amibitious loop projects. I'd really like to hear more details about your monster loop design, plans, etc. Please keep us posted, thanks.

Rich

5231. Re: [loopantennas] Loop Configuration Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-08 22:56:26 UTC
From: gandalfg8@aol.com
Topic: 5229 Message: 5231

In a message dated 08/05/2008 23:49:18 GMT Daylight Time, jlauzer@...
writes:

Any thoughts on what is happening? I seem to be stuck at 3.800. I
don't know if this frequency, exactly, is telling me something? Any
suggestions would be greatly appreciated!

Probably a silly question, but seeing as how 3.8 MHz is the band limit in
the UK at least this couldn't be a tuner restriction by any chance?

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5232. Re: [loopantennas] Loop Configuration Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-09 00:27:00 UTC
From: resopkr@aol.com
Topic: 5229 Message: 5232

Jason,

How long is your coax run into the shack? Maybe you are having some nulls in the tuning?? I find it interesting that you can tune 160 but not 75/80. If your coax run into the shack is too long you are going to have some losses. It shouldn't be over 15 feet maximum, but I'm not sure if that is a contributing factor to your tuning issues.

-----Original Message-----
From: Jason <jlauzer@...>
To: loopantennas@yahoogroups.com
Sent: Thu, 8 May 2008 10:38 am
Subject: [loopantennas] Loop Configuration Question

I seem to be having a problem with a loop install at my new house.

Hoping someone can help out:

Here are the details:

a) 272' of stranded 12 gauge wire in a relatively rectangular shape.

b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a

tree.

c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one

end and connects to a HI-Q 4:1 Balun on the other end.

d) From the 4:1 Balun a coax run goes into my shack on a Kenwood

TS480SAT rig. (auto tuner)

I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters

tune at certain locations) Audio and SWR are perfect.

However, I cannot tune any higher than 3.800 on 75/80 meters. I have

cut down the ladder line and no change. When I cut down the ladder

line I tuned in the other bands perfectly. Ladder line sits at about

93 feet in length now. I tried cutting down further and I ended up

taking out all the bands, so I reached the limit I believe. I put back

the last piece I cut and now back to where I was.

I thought maybe the hardware store made a mistake and my 12 gauge wire

was short. So I added 25 feet to it in the middle. It actually made 75/80 meters worse, as it didn't want to tune above 3.700. So I reverted back.

Any thoughts on what is happening? I seem to be stuck at 3.800. I don't know if this frequency, exactly, is telling me something? Any suggestions would be greatly appreciated!

[Non-text portions of this message have been removed]

5233. Re: [loopantennas] Re: Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-09 00:40:42 UTC
From: John Hoopes
Topic: 5224 Message: 5233

Hi Rich,

Let's put it this way, it will be on a frame that will have 4 lawnmower (tractor type) wheels so I can move it around the yard when cutting grass plus be able to store it during the summer months! hehe.

John

yrmh1 <meyer.richard.s@...> wrote:
> In the planning stages right now are plans to build the "Mother of all Loops" that will cover VLF/LF. I'm looking forward to building this loop and will be pulling out all the stops! :)

That's funny you should mention such a plan. I too have been contemplating/dreaming of a similar loop project which I affectionately refer to as "The Attic Monster" loop, placed in the attic of course! I have yet to build my first pedestrian loop though, and must do this before embarking on any more amibitious loop projects. I'd really like to hear more details about your monster loop design, plans, etc.
Please keep us posted, thanks.

Rich

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5234. Re: [loopantennas] Loop Configuration Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-09 07:35:16 UTC
From: Tom
Topic: 5229 Message: 5234

Hi Jason and the Group,

I'm using a 250 foot loop, but with a 1:1 current balun, which is conveniently located inside my ATR-30 manual tuner. My 4:1, external balun does not work well with my tuner and loop.

The ATR-30 is a C-L-C, T-match configuration with the 1:1 current balun on the output of the tuner. See these diagrams:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2&m=f&o=0
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=3&m=f&o=0

Cheers.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: Jason
To: loopantennas@yahoogroups.com
Sent: Thursday, May 08, 2008 7:38 AM
Subject: [loopantennas] Loop Configuration Question

I seem to be having a problem with a loop install at my new house. Hoping someone can help out:

Here are the details:

a) 272' of stranded 12 gauge wire in a relatively rectangular shape.

b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a tree.

c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one end and connects to a HI-Q 4:1 Balun on the other end.

d) From the 4:1 Balun a coax run goes into my shack on a Kenwood TS480SAT rig. (auto tuner)

I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters tune at certain locations) Audio and SWR are perfect.

However, I cannot tune any higher than 3.800 on 75/80 meters. I have cut down the ladder line and no change. When I cut down the ladder line I tuned in the other bands perfectly. Ladder line sits at about 93 feet in length now. I tried cutting down further and I ended up taking out all the bands, so I reached the limit I believe. I put back the last piece I cut and now back to where I was.

I thought maybe the hardware store made a mistake and my 12 gauge wire was short. So I added 25 feet to it in the middle. It actually made 75/80 meters worse, as it didn't want to tune above 3.700. So I reverted back.

Any thoughts on what is happening? I seem to be stuck at 3.800. I don't know if this frequency, exactly, is telling me something? Any suggestions would be greatly appreciated!

[Non-text portions of this message have been removed]

5235. Re: [loopantennas] Loop Configuration Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-09 12:42:56 UTC
From: John Hoopes
Topic: 5229 Message: 5235

Hi Jason,

I would shorten the loop to around 250 feet which is closer to a full wave on 3.8 MHz (468/F*2) and feed the loop directly with coax or use a 1:1 balun. Feed point Z of a full wave is somewhere around 100 ohms and you're increasing what your tuner sees by a factor of 4, that might be a tad much for your tuner to handle.

Good luck with whatever you decide. It's all about experimenting!

73
John - AB4MS

Jason <jlauzer@...> wrote: I seem to be having a problem with a loop install at my new house.
Hoping someone can help out:

Here are the details:

a) 272' of stranded 12 gauge wire in a relatively rectangular shape.

b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a tree.

c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one end and connects to a HI-Q 4:1 Balun on the other end.

d) From the 4:1 Balun a coax run goes into my shack on a Kenwood TS480SAT rig. (auto tuner)

I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters tune at certain locations) Audio and SWR are perfect.

However, I cannot tune any higher than 3.800 on 75/80 meters. I have cut down the ladder line and no change. When I cut down the ladder line I tuned in the other bands perfectly. Ladder line sits at about 93 feet in length now. I tried cutting down further and I ended up taking out all the bands, so I reached the limit I believe. I put back the last piece I cut and now back to where I was.

I thought maybe the hardware store made a mistake and my 12 gauge wire was short. So I added 25 feet to it in the middle. It actually made 75/80 meters worse, as it didn't want to tune above 3.700. So I reverted back.

Any thoughts on what is happening? I seem to be stuck at 3.800. I don't know if this frequency, exactly, is telling me something? Any suggestions would be greatly appreciated!

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5236. Re: Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-09 19:06:41 UTC
From: yrmh1
Topic: 5224 Message: 5236

> Let's put it this way, it will be on a frame that will have 4 lawnmower (tractor type) wheels so I can move it around the yard when cutting grass plus be able to store it during the summer months! hehe.

Wow, thats sounds like a great start! Perhaps you could add an electric motor, steering mechanism, and remote control servos to allow "custom positional tuning" from inside the house eh? That might deserve a patent of some kind...

5237. Re: [loopantennas] Loop Configuration Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-09 23:25:29 UTC
From: Bob Warren
Topic: 5229 Message: 5237

The loop can MUST be fed in one corner for it to act as a multiband antenna.
It must be more than one wavelength on the lowest frequency.

Bob VK7KRW

2008/5/9 John Hoopes <jdh1812@...>:

> Hi Jason,
>
> I would shorten the loop to around 250 feet which is closer to a full wave
> on 3.8 MHz (468/F*2) and feed the loop directly with coax or use a 1:1
> balun. Feed point Z of a full wave is somewhere around 100 ohms and you're
> increasing what your tuner sees by a factor of 4, that might be a tad much
> for your tuner to handle.
>
> Good luck with whatever you decide. It's all about experimenting!
>
> 73
> John - AB4MS
>
> Jason <jlauzer@... <jlauzer%40gmail.com>> wrote: I seem to be having
> a problem with a loop install at my new house.
> Hoping someone can help out:
>
> Here are the details:
>
> a) 272' of stranded 12 gauge wire in a relatively rectangular shape.
>
> b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a
> tree.
>
> c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one
> end and connects to a HI-Q 4:1 Balun on the other end.
>
> d) From the 4:1 Balun a coax run goes into my shack on a Kenwood
> TS480SAT rig. (auto tuner)
>
> I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters
> tune at certain locations) Audio and SWR are perfect.
>
> However, I cannot tune any higher than 3.800 on 75/80 meters. I have
> cut down the ladder line and no change. When I cut down the ladder
> line I tuned in the other bands perfectly. Ladder line sits at about
> 93 feet in length now. I tried cutting down further and I ended up
> taking out all the bands, so I reached the limit I believe. I put back
> the last piece I cut and now back to where I was.

>
> I thought maybe the hardware store made a mistake and my 12 gauge wire
> was short. So I added 25 feet to it in the middle. It actually made
> 75/80 meters worse, as it didn't want to tune above 3.700. So I
> reverted back.
>
> Any thoughts on what is happening? I seem to be stuck at 3.800. I
> don't know if this frequency, exactly, is telling me something? Any
> suggestions would be greatly appreciated!
>
>
>
>
>
> ---
> Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it
> now.
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

5238. Re: [loopantennas] Re: Newbee here!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-10 15:27:44 UTC
From: John Hoopes
Topic: 5224 Message: 5238

I thought about a couple of electric servos for azimuth and elevation, I'm still debating that.

We'll see.

John

yrmh1 <meyer.richard.s@...> wrote:
> Let's put it this way, it will be on a frame that will have 4 lawnmower (tractor type) wheels so I can move it around the yard when cutting grass plus be able to store it during the summer months! hehe.

Wow, thats sounds like a great start! Perhaps you could add an electric motor, steering mechanism, and remote control servos to allow "custom positional tuning" from inside the house eh? That might deserve a patent of some kind...

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

[Non-text portions of this message have been removed]

5239. Re: [loopantennas] Loop Configuration Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-10 17:34:44 UTC
From: Jim Dunstan
Topic: 5229 Message: 5239

At 11:25 PM 5/9/2008 +0000, you wrote:

>The loop can MUST be fed in one corner for it to act as a multiband antenna.
>It must be more than one wavelength on the lowest frequency.
>
>Bob VK7KRW

Hi Bob,

Just curious, why do you say a loop 'MUST' be fed at a corner in order to act as a multi band antenna ?

In general, a loop of any circumference is going to present the same load impedance to any particular frequency regardless where you place the feed point around the circumference.

If the loop is supported in a horizontal fashion the usual practice is to provide the feed point near the support closest to the shack, and in the case a rectangular/square configuration it would be a corner as it is much easier to support the feed line and prevent 'sagging'. Such an antenna will work well from the fundamental frequency (1 wavelength) and up. In terms of performance (load impedance or radiation pattern) there will be little difference regardless where that point might be.

However, if the loop is configured in a vertical orientation and a substantial distance above ground the load impedance again remains the same regardless where you feed the loop. However when fed in the middle of the side vs middle of the bottom the polarization tends to be vertical and horizontal respectively. If the vertically oriented loop is brought close to ground as in a Delta Loop the feed point is almost always near the bottom. The antenna will also work multiband with little noticeable difference in load ability where you feed it at its lower portion. However radiation pattern and performance improves if fed at one of the bottom corners ... experimentation shows this performance peaks when the feed point is moved up a little higher from the lower triangle corner.

Now I have never tried feeding a Delta loop at the top corner .... but I don't expect it will be much different from the point of view of loading. Performance though might be interesting.

Jim, VE3CI

5240. Re: [loopantennas] Loop Configuration Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-11 05:23:21 UTC
From: Bob Warren
Topic: 5229 Message: 5240

Hi Jim
Thanks for your comments, you are correct.

I went back to my wire antenna handbook and the article states it MAY be fed in the corner not 'must' be.
In hindsight I fed mine in the corner because it was convenient but that was a long time ago.

Bob VK7KRW

2008/5/10 Jim Dunstan <jdunstan@...>:

> At 11:25 PM 5/9/2008 +0000, you wrote:
>
> >The loop can MUST be fed in one corner for it to act as a multiband
> antenna.
> >It must be more than one wavelength on the lowest frequency.
> >
> >Bob VK7KRW
>
> Hi Bob,
>
> Just curious, why do you say a loop 'MUST' be fed at a corner in order to
> act as a multi band antenna ?
>
> In general, a loop of any circumference is going to present the same load
> impedance to any particular frequency regardless where you place the feed
> point around the circumference.
>
> If the loop is supported in a horizontal fashion the usual practice is to
> provide the feed point near the support closest to the shack, and in the
> case a rectangular/square configuration it would be a corner as it is much
> easier to support the feed line and prevent 'sagging'. Such an antenna
> will work well from the fundamental frequency (1 wavelength) and up. In
> terms of performance (load impedance or radiation pattern) there will be
> little difference regardless where that point might be.
>
> However, if the loop is configured in a vertical orientation and a
> substantial distance above ground the load impedance again remains the same
>
> regardless where you feed the loop. However when fed in the middle of the
> side vs middle of the bottom the polarization tends to be vertical and
> horizontal respectively. If the vertically oriented loop is brought close
> to ground as in a Delta Loop the feed point is almost always near the
> bottom. The antenna will also work multiband with little noticeable
> difference in load ability where you feed it at its lower portion. However

> radiation pattern and performance improves if fed at one of the bottom
> corners ... experimentation shows this performance peaks when the feed
> point is moved up a little higher from the lower triangle corner.
>
> Now I have never tried feeding a Delta loop at the top corner .... but I
> don't expect it will be much different from the point of view of
> loading. Performance though might be interesting.
>
> Jim, VE3CI
>
>
>

[Non-text portions of this message have been removed]

5241. 621Khz loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-11 07:38:26 UTC
From: Hugh
Topic: 5241 Message: 5241

Newby in here but know about RF; antennas etc...
Has anyone built a 6' or so loop for AM broadcast? I'm looking to
recieve 621Khz Radio National from Melbourne 350Km away. I'd like to
compare notes on what I have already done.
Hugh .. Ex VK3Z.. call long ago.

5242. Re: 621Khz loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-11 15:06:43 UTC
From: tenorman1952
Topic: 5241 Message: 5242

--- In loopantennas@yahoogroups.com, "Hugh" <quuilpy@...> wrote:
>
> Newby in here but know about RF; antennas etc...
> Has anyone built a 6' or so loop for AM broadcast? I'm looking to
> recieve 621Khz Radio National from Melbourne 350Km away. I'd like to
> compare notes on what I have already done.
> Hugh .. Ex VK3Z.. call long ago.

There is an interesting loop demo on Youtube. The same fellow, I
think NZ'er, demonstrates a 2' loop and a 4' loop. He says the 4'
loop was not any better performer than the 2' loop, or not as much
better as he had expected.

http://youtube.com/watch?v=QpGXECoY6zg 2' loop pt 1

http://youtube.com/watch?v=6HRZcTL15ZA 2' loop pt 2

http://youtube.com/watch?v=HXQeZxeCJ2c 4' loop

I wonder where the point of dimishing returns actually is.

Paul C.

5243. Re: 621Khz loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-11 15:37:02 UTC
From: airchecklover
Topic: 5241 Message: 5243

--- In loopantennas@yahoogroups.com, "Hugh" <quuilpy@...> wrote:
>
> Newby in here but know about RF; antennas etc...
> Has anyone built a 6' or so loop for AM broadcast? I'm looking to
> recieve 621Khz Radio National from Melbourne 350Km away. I'd like to
> compare notes on what I have already done.
> Hugh .. Ex VK3Z.. call long ago.

Hugh; 6 foot loop for AM? Overly large and gangly, IMHO. I built a loop w/ 3.5ft effective radius and compared it to my trusty 2ft diameter loop. Yes, a little more gain. But such a monster antenna compared to the two footer. And seriously, only a few dB gain - only useful during daytime DX. At night every frequency is "too alive" to see any benefit from the larger loop. 2 ft loop uses 15 turns and a 12 to 365pf tuning cap. The large loop - 12 turns w/ similar tuning cap.

Hope that helps,

Mark

5244. Re: [loopantennas] 621Khz loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-11 15:46:56 UTC
From: Jim Dunstan
Topic: 5241 Message: 5244

At 07:38 AM 5/11/2008 +0000, you wrote:

>Newby in here but know about RF; antennas etc...
>Has anyone built a 6' or so loop for AM broadcast? I'm looking to
>recieve 621Khz Radio National from Melbourne 350Km away. I'd like to
>compare notes on what I have already done.
>Hugh .. Ex VK3Z.. call long ago.

Hi,

I have inadvertently tuned a 20m quad loop (30' in the air) to the MW band and recall it was an excellent antenna even though it was not resonant. I fed the loop with a balanced feed line and experimented by adding capacitance to the end of the feed line to obtain resonance. Performance improved dramatically with resonance. However the loop was built and used for Ham radio and I only recall that one experiment.

Since then I have built a number of much smaller tuned loops for MW broadcast reception. I live in a relatively isolated community which had only one MW broadcast transmitter on 580khz (it went off the air this year) which now makes it a great location for MW dx listening hi. There are a number of MW stations about the same distance ... e.g. 250 to 450 km. Now that I have no local QRM I can also use a long wire to assist. However the long wire is not effective unless it is used in conjunction with a high Q tuned loop which acts as an efficient antenna tuner.

However if your listening environment has local MW QRM (local stations close to 621khz) the long wire is not a good idea. My most effective small tuned loop was only 2.5' square. However it was able to provide good reception of stations at 560khz and 610khz both 300km distance with my local station pounding away on 580khz. With the local station now defunct I can listen to these stations with a smaller loop that I keep on the table out on the deck. The loop is only about 15" square. I couple it to a sensitive AM receiver (with an internal ferrite loop antenna) by mutual induction.

If your environment is such that a long wire antenna out in clear is a possibility and local QRM close to 621khz is absent you can use it by connecting the end of the wire to one side of the small tuned loop. You must provide a ground connection to the other side of the tuned loop. The ground doesn't have to actually be connected to ground ... I found a short length of wire laid out on the ground to be sufficient. Couple the small loop to your sensitive receiver with mutual induction.

If your environment doesn't allow this strategy a larger tuned loop will be adequate ... however a 6' probably would be overkill. Try 3' and i am sure you will find it adequate.

Let us know how you make out.

Jim, VE3CI

5245. da loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-11 17:35:27 UTC
From: ka7nwq
Topic: 5245 Message: 5245

Thanks to all of you for your previous replys on my questions regarding the big loop antenna. Things have changed and I have been blessed with opportunity to fulfill 2 of my dreams. #1 is being able to have enough land at my disposal to put up any antenna that I desire. The close 2nd is dog training. Anyway, I want to be able to have a 160 meter loop and feed it with ladder line. My thought is to support the loop on all 4 sides with 50 feet of cyclone fence posts, stuck together and guyed with dacron rope. I have plenty of room for this monster, but my questions are.....what will my supports do to the performance of the antenna (should I use the fence post approach, wood or pvc around the fence post as an insulator) and should I feed this with 450 ohm or homemade open wire line. If homemade, then what should the spaceing be? My tuner is the MFJ 974HB going to a Icom PRO 3 running 100 watts for now. As far as the feed line length goes, well, it can be as far away from the house as it needs. Thanks again for your reply

Scott
KA7NWQ

5246. Re: [loopantennas] da loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-11 18:15:46 UTC
From: Jim Dunstan
Topic: 5245 Message: 5246

At 05:35 PM 5/11/2008 +0000, you wrote:

>Thanks to all of you for your previous replys on my questions regarding
>the big loop antenna. Things have changed and I have been blessed with
>opportunity to fulfill 2 of my dreams. #1 is being able to have enough
>land at my disposal to put up any antenna that I desire. The close 2nd
>is dog training. Anyway, I want to be able to have a 160 meter loop
>and feed it with ladder line. My thought is to support the loop on all
>4 sides with 50 feet of cyclone fence posts, stuck together and guyed
>with dacron rope. I have plenty of room for this monster, but my
>questions are.......what will my supports do to the performance of the
>antenna (should I use the fence post approach, wood or pvc around the
>fence post as an insulator) and should I feed this with 450 ohm or
>homemade open wire line. If homemade, then what should the spaceing
>be? My tuner is the MFJ 974HB going to a Icom PRO 3 running 100 watts
>for now. As far as the feed line length goes, well, it can be as far
>away from the house as it needs. Thanks again for your reply
>
>Scott
>KA7NWQ

In my opinion and experience there is no detectable difference in performance between those antennas supported by metal or non metal supports. The general rule for HF antennas is "as high and as in the clear as possible". The difference between 'most' commercial balanced feed-line and home made balanced feed line is its performance during wet weather. In almost all cases an antenna fed with balanced feed line will be carrying power with some level of SWR. The result is that the antenna/feed-line system is 'tuned', and water on the feed line de-tunes the system. For amateur purposes I have not found this to be a problem ... a small 'tweek' of the antenna tuner knob and it is 're-tuned' with no detectable difference in performance.

The reason most commercial balanced line is susceptible to wet-weather de-tuning is due to the use of the molded plastic insulation used for structure/support .... which makes it much easier to use. Non-susceptible line uses a more delicate construction that represents a minimum of material between the parallel wires. If you are construction a high power remote station this is what you want ... e.g. tune it and forget it hi hi.

Jim, VE3CI

5247. Re: [loopantennas] da loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-11 17:42:06 UTC
From: fraz1
Topic: 5245 Message: 5247

Scott,

I don't think you'll see a any significant impact form the metal poles; probably none at all.

The homebrew ladder line "may" provide a broader SWR than commercial 450 ohm line. But, given you're balanced tuner, I'd opt for the 450 ohm commercial window line. W7FG offers "real" open line around 600 ohms for a good price.

Put it up, and have fun.

73 John K4NP www.k4np.net
----- Original Message -----
From: ka7nwq
To: loopantennas@yahoogroups.com
Sent: Sunday, May 11, 2008 12:35 PM
Subject: [loopantennas] da loop

Thanks to all of you for your previous replys on my questions regarding the big loop antenna. Things have changed and I have been blessed with opportunity to fulfill 2 of my dreams. #1 is being able to have enough land at my disposal to put up any antenna that I desire. The close 2nd is dog training. Anyway, I want to be able to have a 160 meter loop and feed it with ladder line. My thought is to support the loop on all 4 sides with 50 feet of cyclone fence posts, stuck together and guyed with dacron rope. I have plenty of room for this monster, but my questions are.....what will my supports do to the performance of the antenna (should I use the fence post approach, wood or pvc around the fence post as an insulator) and should I feed this with 450 ohm or homemade open wire line. If homemade, then what should the spaceing be? My tuner is the MFJ 974HB going to a Icom PRO 3 running 100 watts for now. As far as the feed line length goes, well, it can be as far away from the house as it needs. Thanks again for your reply

Scott
KA7NWQ

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 269.23.15/1426 - Release Date: 5/10/2008 11:12 AM

[Non-text portions of this message have been removed]

5248. Re: 621Khz loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-12 12:18:09 UTC
From: noswadplease
Topic: 5241 Message: 5248

Check out photos of my loop on page two of photos. It is 4 1/2ft. sq. I saw a photo of someones loop and modeled it from that. Using a regular tv antenna tripod it stands almost 10 ft. I added the section on the front later. I get phenomenal results. I pick up all the local medium wave signals very well and also pick up thru 12,000+ hz foregn radio signals. It wss easy to build. the hardest part was stringing the 12Ga. wire. It has withstood 65 mph winds with no problem. Good Luck with yours Ed Dawson

5249. 621Khz loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-13 07:44:09 UTC
From: Hugh
Topic: 5241 Message: 5249

Thanks guys, I'm fired with enthusiasm.
Mark, I said 6' 'cause it would fit thru a doorway and maybe I could make one as a peculiar kind of shadow cabinet on the wall with radio in one nook. I have an external one going that is 10' 5 sided made from fibreglass electric fence 1/2" rods and tv ribbon, but it is a bit floppy. Fed unbalanced top coupled 33pf to the AM side of a car radio. works fine,and surprise it rejects the electric fence splatter that shows up with wire antennas. Daytime 621 clear as a bell and no apparent overloading at night.
Liked the utube Paul, I'm looking for clear listening tho, low noise.
Ed, your beasty shows coax eminating from your tuner - How are you coupling into the loop?
... Hugh

5250. Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 06:53:19 UTC
From: Tom
Topic: 5250 Message: 5250

Hi loop fans,

Has anyone tried reversing the connections of a loop
antenna.....especially a transmitting loop? See:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=4

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

5251. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 12:00:42 UTC
From: Barry Bankston
Topic: 5250 Message: 5251

If the radiation pattern of a loop is a bi-directional, figure-eight pattern, then i can't see how reversing the connections would have any effect on the antenna.

I could be wrong, though.

Barry ... N4IJN

Tom <tgleeman@...> wrote:
Hi loop fans,

Has anyone tried reversing the connections of a loop
antenna.....especially a transmitting loop? See:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=4

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5252. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 12:08:01 UTC
From: C. Beijersbergen
Topic: 5250 Message: 5252

IMHO there could only be a notionable difference if this antenna were to be used together with another antenna and a phaser. Because the phase of this antenna signal would be reversed it would influence the directivity of the combination.

Cor Beijersbergen van Henegouwen

[Non-text portions of this message have been removed]

5253. loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 08:39:35 UTC
From: ke5htb
Topic: 5253 Message: 5253

I have a place to make a BIG loop for my HF radio.
I am looking to use for 160-10 or 6/2m even if possible.

I have aprox a 50x100x50x100 spot to place some #12 up in air.

What I am looking for in help is length and any suggestions on do's
and Don'ts for this style of loop.

they will be mounted in corners at prob. 20' to start on metal poles
and a pully system.
fed to radio tuner with 450 ladderline all the way to tuner.
from all the reading I have done figured this was best way.tuner does
have bal in it and it will handle 300 w (MFJ-269) also have plenty
more yard for length on the 100' if needed can add another 25 to 30 ft
more if needed.

is there a calculator for HF lengths and not 1 of these all tech
programs that gives me 200 things and none means a thing to a new guy
like myself.
I will be xmit max 110w for now but later on would like to boost that
up also. so I like o consider that in the initial setups so i dont
have to make a whole new setup later on.

I have read alot and laid this out on paper but still not 100% sure on
length of the total wire. I know 300 feet will work but is it a proper
length to start out with and would I need to trim it and such.

Also have not found much info on how to tune a loop or for that matter
what freq to tune it to for the most bang for my buck. it does not
have to be a 160m but be nice to have that ability.
prefer 1 wire in air so not to piss neighbors off with a crap load of
wires running around and such.

next concern is RFI to folks around me. would you suggest a filter or
anything like this to help if needed.
this is a small town and not everyone has cable and I really dont
wanna fight on my hands if I can do something 1st time over waiting.
at least the FCC and anyone else cant say I didnt do all I could do to
fix my end and to be proper setup.

ok I will start with this message see where it takes me and then ask
more as I go. I will be building this antenna middle of June 2008 in
S. TX so need a good solid antenna for hurricane season and the bad
weather they get alot of.

I do have dual band j-pole and a 6m par loop so if wire cant do those
bands its ok. just be easier on 1 antenna is all.

thanks for any and all suggestions and if anyone has a pic or 2 of
such a setup I would love to see the connections and feed side to radio.

Fred
ke5htb

5254. Re: loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 14:31:16 UTC
From: Richard Zolla
Topic: 5253 Message: 5254

For some really good info Google "WH2T Loop".

Rick N6NKN

--- In loopantennas@yahoogroups.com, "ke5htb" <ke5htb@...> wrote:
>
> I have a place to make a BIG loop for my HF radio.
> I am looking to use for 160-10 or 6/2m even if possible.
>
> I have aprox a 50x100x50x100 spot to place some #12 up in air.
>
> What I am looking for in help is length and any suggestions on do's
> and Don'ts for this style of loop.
>
> they will be mounted in corners at prob. 20' to start on metal poles
> and a pully system.
> fed to radio tuner with 450 ladderline all the way to tuner.
> from all the reading I have done figured this was best way.tuner
does
> have bal in it and it will handle 300 w (MFJ-269) also have plenty
> more yard for length on the 100' if needed can add another 25 to 30
ft
> more if needed.
>
> is there a calculator for HF lengths and not 1 of these all tech
> programs that gives me 200 things and none means a thing to a new
guy
> like myself.
> I will be xmit max 110w for now but later on would like to boost
that
> up also. so I like o consider that in the initial setups so i dont
> have to make a whole new setup later on.
>
> I have read alot and laid this out on paper but still not 100% sure
on
> length of the total wire. I know 300 feet will work but is it a
proper
> length to start out with and would I need to trim it and such.
>
> Also have not found much info on how to tune a loop or for that
matter
> what freq to tune it to for the most bang for my buck. it does not
> have to be a 160m but be nice to have that ability.
> prefer 1 wire in air so not to piss neighbors off with a crap load
of

> wires running around and such.
>
> next concern is RFI to folks around me. would you suggest a filter
or
> anything like this to help if needed.
> this is a small town and not everyone has cable and I really dont
> wanna fight on my hands if I can do something 1st time over waiting.
> at least the FCC and anyone else cant say I didnt do all I could do
to
> fix my end and to be proper setup.
>
> ok I will start with this message see where it takes me and then ask
> more as I go. I will be building this antenna middle of June 2008
in
> S. TX so need a good solid antenna for hurricane season and the bad
> weather they get alot of.
>
> I do have dual band j-pole and a 6m par loop so if wire cant do
those
> bands its ok. just be easier on 1 antenna is all.
>
> thanks for any and all suggestions and if anyone has a pic or 2 of
> such a setup I would love to see the connections and feed side to
radio.
>
>
> Fred
> ke5htb
>

5255. Re: [loopantennas] loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 15:25:31 UTC
From: John Hoopes
Topic: 5253 Message: 5255

For true multi band operation an antenna has to be non-resonant or have one heck of a good tuner. Tuning out the high reactance at even multiples of a wavelength is difficult to do.

What I have used in the past is a non-resonant loop. Basically you design the loop at the lowest frequency of operation by using the formula 1005/F and install a 600 ohm resistor in the center of the loop, opposite of the feed. Use a 600 or 450 ohm ladder line and feed with your tuner. Some power will be lost in the resistor but it will tune slick willy on any frequency up to and including two meters.

John

ke5htb <ke5htb@...> wrote: I have a place to make a BIG loop for my HF radio.
I am looking to use for 160-10 or 6/2m even if possible.

I have aprox a 50x100x50x100 spot to place some #12 up in air.

What I am looking for in help is length and any suggestions on do's
and Don'ts for this style of loop.

they will be mounted in corners at prob. 20' to start on metal poles
and a pully system.
fed to radio tuner with 450 ladderline all the way to tuner.
from all the reading I have done figured this was best way.tuner does
have bal in it and it will handle 300 w (MFJ-269) also have plenty
more yard for length on the 100' if needed can add another 25 to 30 ft
more if needed.

is there a calculator for HF lengths and not 1 of these all tech
programs that gives me 200 things and none means a thing to a new guy
like myself.
I will be xmit max 110w for now but later on would like to boost that
up also. so I like o consider that in the initial setups so i dont
have to make a whole new setup later on.

I have read alot and laid this out on paper but still not 100% sure on
length of the total wire. I know 300 feet will work but is it a proper
length to start out with and would I need to trim it and such.

Also have not found much info on how to tune a loop or for that matter
what freq to tune it to for the most bang for my buck. it does not
have to be a 160m but be nice to have that ability.
prefer 1 wire in air so not to piss neighbors off with a crap load of
wires running around and such.

next concern is RFI to folks around me. would you suggest a filter or
anything like this to help if needed.
this is a small town and not everyone has cable and I really dont

wanna fight on my hands if I can do something 1st time over waiting.
at least the FCC and anyone else cant say I didnt do all I could do to
fix my end and to be proper setup.

ok I will start with this message see where it takes me and then ask
more as I go. I will be building this antenna middle of June 2008 in
S. TX so need a good solid antenna for hurricane season and the bad
weather they get alot of.

I do have dual band j-pole and a 6m par loop so if wire cant do those
bands its ok. just be easier on 1 antenna is all.

thanks for any and all suggestions and if anyone has a pic or 2 of
such a setup I would love to see the connections and feed side to radio.

Fred
ke5htb

[Non-text portions of this message have been removed]

5256. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 15:39:29 UTC
From: Jim Dunstan
Topic: 5250 Message: 5256

At 11:53 PM 5/13/2008 -0700, you wrote:

>Hi loop fans,
>
>Has anyone tried reversing the connections of a loop
>antenna.....especially a transmitting loop? See:
><http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=4>http://ph.groups.yaho
o.com/group/loopantennas/photos/view/199f?b=4
>
>Cheers.
>
>Tom
>KE6YNH, 73
>San Diego, CA

Hi Tom,

I am sure in hooking up all the different loops I have experimented with I
must have reversed the connections a couple of times hi hi. But, by virtue
of the antenna and the feed line being 'balanced' there is no significance
to reversing the connections.

Jim, VE3CI

[Non-text portions of this message have been removed]

5257. Re: [loopantennas] loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 16:11:41 UTC
From: Jim Dunstan
Topic: 5253 Message: 5257

At 08:39 AM 5/14/2008 +0000, you wrote:

>I have a place to make a BIG loop for my HF radio.
>I am looking to use for 160-10 or 6/2m even if possible.
>
>I have aprox a 50x100x50x100 spot to place some #12 up in air.
>
>What I am looking for in help is length and any suggestions on do's
>and Don'ts for this style of loop.
>
>they will be mounted in corners at prob. 20' to start on metal poles
>and a pully system.
>fed to radio tuner with 450 ladderline all the way to tuner.
>from all the reading I have done figured this was best way.tuner does
>have bal in it and it will handle 300 w (MFJ-269) also have plenty
>more yard for length on the 100' if needed can add another 25 to 30 ft
>more if needed.

Hi,

The simple formula I have used to calculate the circumference of a full size loop (full size means naturally resonant at the frequency of choice) is 1004/f (mhz). The loop is naturally resonant at one frequency ... the frequency at which the circumference equals 1 wavelength. If you want the loop to be useable on more than one band the practice is to make it naturally resonant at the lowest frequency you use and then tune it (using your antenna tuner and feed line) to the higher frequencies. You mention you have 300' available for the loop. This size will accommodate a naturally resonant frequency in the 80m band.

If you started with natural resonance at say .... 3750khz the loop diameter would be 1004/3.75 or 267'. If you want to start at 160m, say 1.9mhz then the circumference would have to be 1004/1.9 or 528'.

It doesn't mean it won't be useable at 160m but it will be tricky to load/tune ... especially with power.

>is there a calculator for HF lengths and not 1 of these all tech
>programs that gives me 200 things and none means a thing to a new guy
>like myself.
>I will be xmit max 110w for now but later on would like to boost that
>up also. so I like o consider that in the initial setups so i dont
>have to make a whole new setup later on.
>
>I have read alot and laid this out on paper but still not 100% sure on
>length of the total wire. I know 300 feet will work but is it a proper

>length to start out with and would I need to trim it and such.
>
>Also have not found much info on how to tune a loop or for that matter
>what freq to tune it to for the most bang for my buck. it does not
>have to be a 160m but be nice to have that ability.
>prefer 1 wire in air so not to piss neighbors off with a crap load of
>wires running around and such.

Almost all horizontal (skywire) loops are a single wire. Building such a loop with 2 or more turns is technically possible but would not make it any better except perhaps easier to load at a lower frequency. As pointed out above if you have sufficient room for a loop with a fundamental or base natural resonance at 80m. You would have to feed it with a balanced line if you wish to use it on higher frequencies (multi-band 40-20-15-10m) and an antenna tuner.

>next concern is RFI to folks around me. would you suggest a filter or
>anything like this to help if needed.
>this is a small town and not everyone has cable and I really dont
>wanna fight on my hands if I can do something 1st time over waiting.
>at least the FCC and anyone else cant say I didnt do all I could do to
>fix my end and to be proper setup.

If you are using a modern transceiver then there will be adequate filtering of harmonics. If you have concerns about the equipment you can purchase what is called a low pass filter LPF ... but they aren't used much these days with modern gear. However this all depends on your radio feeding the antenna tuner with a 1:1 SWR. In other words the tuner/feed line/antenna combination represents 50 ohms resistive, the load for which all modern radios are designed. After this, concerns of TVI etc will be related to how much power your run. A perfectly clean station may not cause RFI at 5 to 100w ... but cause problems when you run 300watts. No fault of the radio gear.

Jim, VE3CI

5258. Re: [loopantennas] loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 16:47:23 UTC
From: Jim Dunstan
Topic: 5253 Message: 5258

At 08:25 AM 5/14/2008 -0700, you wrote:

>For true multi band operation an antenna has to be non-resonant or have
>one heck of a good tuner. Tuning out the high reactance at even multiples
>of a wavelength is difficult to do.
>
>What I have used in the past is a non-resonant loop. Basically you design
>the loop at the lowest frequency of operation by using the formula 1005/F
>and install a 600 ohm resistor in the center of the loop, opposite of the
>feed. Use a 600 or 450 ohm ladder line and feed with your tuner. Some
>power will be lost in the resistor but it will tune slick willy on any
>frequency up to and including two meters.
>
>John

Hi John,

I am not sure what significance the word 'TRUE' has in differentiating one multi-band antenna system from another hi hi. There are many ways to skin a cat ... so to speak ... and designing an antenna with resistive termination is one way. Don't get me wrong ... I love terminated antennas .... and one of my all time favorite antennas was a terminated horizontal loop as you describe ... except it was quite a bit longer than 1005/3.8m. It was in fact diamond shaped ... making it a rhombic. Very directional and not very rotatable hi hi. But being in the Arctic all stations were South including the fellow I used to work in the Antarctic hi hi.

However, an un terminated horizontal loop resonant at 160 or 80 mtr bands works very well (and efficiently) on harmonic amateur bands. You are correct that it almost never works (loads) 100% on all frequencies on all bands, especially even multiples, with a given height and feed line/tuner combination. With a little tinkering all bands/frequencies of choice are usually not too difficult to achieve.

One of the problems/advantages of 'TRUE' multi band terminated antennas is the added directional properties.

Just as an aside, many years ago, there was a company that marketed a 'multi-band' coupling device for dipoles (they advertised in QST magazine). Their device was finally exposed to be a simple resistive (dummy load) with 2 external connections for the dipole hi hi. Users swore by them !! There are terminated antennas and then there are TERMINATED antennas hi hi.

Jim, VE3CI

5259. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 17:43:58 UTC
From: Andy
Topic: 5250 Message: 5259

> IMHO there could only be a notionable difference if this antenna were to
> be used together with another antenna and a phaser.

There might also be a difference if it were fed with coax, or otherwise not nicely balanced, so that the feedline becomes a second radiating structure.

Andy

5260. Re: [loopantennas] loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 18:25:44 UTC
From: John Hoopes
Topic: 5253 Message: 5260

Jim,

I'm not sure what kind of power the antenna would take at the even multiple frequencies. Sure, you could get it to load (possibly) with a tuner but most of the power would go heating the components of your tuner (instead of the resistor) not to mention the RF dancing around everywhere!

If I were to build a full wave loop for 160, I would probably make it horizontal and feed it with coax vs ladder (like the WH2T, AKA skyhook in the ARRL Handbook) The feed point is going to be somewhere around 100 ohms, or a 2:1 VSWR at that frequency. It should also load well on the odd order frequencies with a tuner.

Here's another idea, you could combine two loops with one feed. Have a 160 and 80 meter loop connected to the same feed point and suspend them the same way. That should take care of the even/odd - voltage/current feed problems. I've never tried it but I think it would work up through 10 meters.

John - AB4MS

Jim Dunstan <jdunstan@...> wrote: At 08:25 AM 5/14/2008 -0700, you wrote:

>For true multi band operation an antenna has to be non-resonant or have
>one heck of a good tuner. Tuning out the high reactance at even multiples
>of a wavelength is difficult to do.
>
>What I have used in the past is a non-resonant loop. Basically you design
>the loop at the lowest frequency of operation by using the formula 1005/F
>and install a 600 ohm resistor in the center of the loop, opposite of the
>feed. Use a 600 or 450 ohm ladder line and feed with your tuner. Some
>power will be lost in the resistor but it will tune slick willy on any
>frequency up to and including two meters.
>
>John

Hi John,

I am not sure what significance the word 'TRUE' has in differentiating one multi-band antenna system from another hi hi. There are many ways to skin a cat ... so to speak ... and designing an antenna with resistive termination is one way. Don't get me wrong ... I love terminated antennas .... and one of my all time favorite antennas was a terminated horizontal loop as you describe ... except it was quite a bit longer than 1005/3.8m. It was in fact diamond shaped ... making it a rhombic. Very directional and not very rotatable hi hi. But being in the Arctic all stations were South including the fellow I used to work in the Antarctic hi hi.

However, an un terminated horizontal loop resonant at 160 or 80 mtr bands works very well (and efficiently) on harmonic amateur bands. You are correct that it almost never works (loads) 100% on all frequencies on all bands, especially even multiples, with a given height and feed line/tuner combination. With a little tinkering all bands/frequencies of choice are usually not too difficult to achieve.

One of the problems/advantages of 'TRUE' multi band terminated antennas is the added directional properties.

Just as an aside, many years ago, there was a company that marketed a 'multi-band' coupling device for dipoles (they advertised in QST magazine). Their device was finally exposed to be a simple resistive (dummy load) with 2 external connections for the dipole hi hi. Users swore by them !! There are terminated antennas and then there are TERMINATED antennas hi hi.

Jim, VE3CI

[Non-text portions of this message have been removed]

5261. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 18:37:05 UTC
From: Jim Dunstan
Topic: 5250 Message: 5261

At 01:43 PM 5/14/2008 -0400, you wrote:

> > IMHO there could only be a notionable difference if this antenna were to
> > be used together with another antenna and a phaser.
>
>There might also be a difference if it were fed with coax, or otherwise not
>nicely balanced, so that the feedline becomes a second radiating structure.
>
>Andy

I don't think so .... there would be no difference from the point of view of the impedance of the antenna as seen by the coax. You are correct in that direct connection of coax would allow antenna current to appear on the outside of the coax shield (in effect creating another element from the feed point to ground). This vertical radiation would interact with the antenna radiation causing a distortion of the normal horizontal loop radiation (not always undesirable). However, the characteristics of the feed line radiation would not change by reversing the connection at the feed point.

I know that signals from a bidirectional loop (vertically oriented) can be mixed with signals from a near by vertical antenna (sense antenna) to provide a means of detecting which is the true direction of the station being nulled. I may be wrong, but I don't believe the connection at the loop will change the relationship with the sense antenna.

Jim

5262. Re: [loopantennas] loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 19:30:20 UTC
From: Jim Dunstan
Topic: 5253 Message: 5262

At 11:25 AM 5/14/2008 -0700, you wrote:

>Jim,
>
>I'm not sure what kind of power the antenna would take at the even
>multiple frequencies. Sure, you could get it to load (possibly) with a
>tuner but most of the power would go heating the components of your tuner
>(instead of the resistor) not to mention the RF dancing around everywhere!

You are exactly making the point ... the problem in feeding a loop (or a dipole for that matter) on even harmonics is not that they won't work ..... but that the voltages produced make it difficult to use high power ... by high power I mean 100w or more. It is much easier to tame the feed point impedance if the tuner can be located right at the feed point. Otherwise great care is required to dress the feed/tuning system to avoid damage to components. The damage is due to high voltage, not power consumption. If you find the best combination, provide a good tuner, and operate with reasonable power the antenna system is efficient but always in danger of burning at 'key points'. An antenna system might be quite efficient and easily fed at QRP level of power, touchy at 100W, and all but impossible at 1000W.

You have the same problem trying to feed a 'short' antenna ... eg. feeding a 20m dipole on 40m. Putting in tuning stubs will linear load the 20m dipole and it works great on 40m ... but then it is difficult to feed it on 20m as it becomes a full wave dipole !! you can't win hi hi. But it is possible and it also makes an excellent antenna ... with the same feed proviso's. e.g. high voltage dangers. However, putting an automatic antenna tuner at the feed point eliminates the problem and a 20m dipole works great on 40m ... even without the linear loading stubs. A simple relay switch at the feed point that switches the stubs in and out of the circuit turns the 20m dipole into an excellent 40m antenna.

I have also used your other suggestion .... using concentric loops or parallel dipoles on the same feed line ... I guess the perfect 'everything' antenna just doesn't exist hi hi.

Jim, VE3CI

5263. Re: [loopantennas] loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 20:44:07 UTC
From: John Hoopes
Topic: 5253 Message: 5263

Isn't that the truth. When I had my "big" yard I solved the problem with an antenna for every band, but alas, I've lost my yard and I'm down to a 104' wire for listening only. :(

John - AB4MS

Jim Dunstan <jdunstan@...> wrote: At 11:25 AM 5/14/2008 -0700, you wrote:

I guess the perfect 'everything' antenna just doesn't exist hi hi.

Jim, VE3CI

[Non-text portions of this message have been removed]

5264. Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-14 22:51:17 UTC
From: na_no_tu_be
Topic: 4914 Message: 5264

Hi Chris.

I am back from a 2 weeks business trip and i am taking a look at the push-pull amplifier schematic.
Tell me that this amplifier run on 12V, because there is no value assigne to the Vcc . I would like to use it with my mobile setup that run on 12V .

Thanks again .

Gillis

> I just completed testing a pair of complementary push-pull circuits for
> use with active amplifiers using commonly available parts, and the results
> were pleasantly surprising. With a 2N2222 and a 2N2907 pair as the output
> devices, the OIP2 and OIP3 were measured (not estimated) as being +68.5dBm
> and +44.25dBm, respectively. The details of all this plus much more can be
> found at:
>
> http://www.home.earthlink.net/~christrask/Complementary Push-Pull
> Amplifiers.pdf
>
> which is also available at the more convenient TinyURL of:
>
> http://tinyurl.com/2gkndh
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '.

http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

5265. Re: loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-15 00:38:08 UTC
From: ke5htb
Topic: 5253 Message: 5265

--- In loopantennas@yahoogroups.com, "ke5htb" <ke5htb@...> wrote:
>
> I have a place to make a BIG loop for my HF radio.
> I am looking to use for 160-10 or 6/2m even if possible.
>
> I have aprox a 50x100x50x100 spot to place some #12 up in air.
>
> What I am looking for in help is length and any suggestions on do's
> and Don'ts for this style of loop.
>
> they will be mounted in corners at prob. 20' to start on metal poles
> and a pully system.
> fed to radio tuner with 450 ladderline all the way to tuner.
> from all the reading I have done figured this was best way.tuner does
> have bal in it and it will handle 300 w (MFJ-269) also have plenty
> more yard for length on the 100' if needed can add another 25 to 30 ft
> more if needed.
>
> is there a calculator for HF lengths and not 1 of these all tech
> programs that gives me 200 things and none means a thing to a new guy
> like myself.
> I will be xmit max 110w for now but later on would like to boost that
> up also. so I like o consider that in the initial setups so i dont
> have to make a whole new setup later on.
>
> I have read alot and laid this out on paper but still not 100% sure on
> length of the total wire. I know 300 feet will work but is it a proper
> length to start out with and would I need to trim it and such.
>
> Also have not found much info on how to tune a loop or for that matter
> what freq to tune it to for the most bang for my buck. it does not
> have to be a 160m but be nice to have that ability.
> prefer 1 wire in air so not to piss neighbors off with a crap load of
> wires running around and such.
>
> next concern is RFI to folks around me. would you suggest a filter or
> anything like this to help if needed.
> this is a small town and not everyone has cable and I really dont
> wanna fight on my hands if I can do something 1st time over waiting.
> at least the FCC and anyone else cant say I didnt do all I could do to
> fix my end and to be proper setup.
>
> ok I will start with this message see where it takes me and then ask
> more as I go. I will be building this antenna middle of June 2008 in
> S. TX so need a good solid antenna for hurricane season and the bad

> weather they get alot of.
>
> I do have dual band j-pole and a 6m par loop so if wire cant do those
> bands its ok. just be easier on 1 antenna is all.
>
> thanks for any and all suggestions and if anyone has a pic or 2 of
> such a setup I would love to see the connections and feed side to radio.
>
>
> Fred
> ke5htb
>

forgot to mention i am using a Kenwood 570d for this loop. 100ws wont
have an amp for awhile if I get 1 at all. I may be 1 of the lucky 1's
and 100w will work fine and do allot .

and thanks for the replies I have been reading allot more today . the
resistor idea was nice and will be looked at after install. if it dont
work so good without 1 Its a good thing to try ..thanks !!

I will go with an 80m and work from there I don't have 500+feet to
install a 160m so why push my luck.

Unless somebody can recommend a different all band antenna I still
think the loop be my best bet for my lot and radio. I also have tuner
in radio. it would be great if I can use it alone and not the MFJ tuner.
I am not really happy with MFJ tumer but its what I could afford at
this point.
now next ?? is a balun for the antenna to go from 450 ladderline to
rg-213 ?/ will 1 be needed. the coax will be just maybe max 10 feet if
that long to go from window to radio or the ladderline will come all
the way to tuner and then to radio . use the built in balun.
I am concerned with heat also as a few have mentioned already.
would you recommend a seperate balun and not use the 1 inside tuner.
(it dont look all that great of balun.)

thanks for the suggestions and ideas. we will know more in 2 weeks
after I move into the house. its 500 mile trip to house so it be a few
weeks maybe before loop goes online but it will be online. can always
make it into a longwire later if needed.

5266. Re: [loopantennas] Re: loop help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-15 02:03:46 UTC
From: John Hoopes
Topic: 5253 Message: 5266

Fred,

Build the loop at a full wave and feed it from the tuner with a 50 ohm coax. RG-213 is very good or RG-58 if your only running a 100 watts. Forget the balun and ladder line. If you want to use a balun, use a 1:1 at the feed point of the loop.

John - AB4MS

ke5htb <ke5htb@...> wrote:
--- In loopantennas@yahoogroups.com, "ke5htb" <ke5htb@...> wrote:
>
> I have a place to make a BIG loop for my HF radio.
> I am looking to use for 160-10 or 6/2m even if possible.
>
> I have aprox a 50x100x50x100 spot to place some #12 up in air.
>
> What I am looking for in help is length and any suggestions on do's
> and Don'ts for this style of loop.
>
> they will be mounted in corners at prob. 20' to start on metal poles
> and a pully system.
> fed to radio tuner with 450 ladderline all the way to tuner.
> from all the reading I have done figured this was best way.tuner does
> have bal in it and it will handle 300 w (MFJ-269) also have plenty
> more yard for length on the 100' if needed can add another 25 to 30 ft
> more if needed.
>
> is there a calculator for HF lengths and not 1 of these all tech
> programs that gives me 200 things and none means a thing to a new guy
> like myself.
> I will be xmit max 110w for now but later on would like to boost that
> up also. so I like o consider that in the initial setups so i dont
> have to make a whole new setup later on.
>
> I have read alot and laid this out on paper but still not 100% sure on
> length of the total wire. I know 300 feet will work but is it a proper
> length to start out with and would I need to trim it and such.
>
> Also have not found much info on how to tune a loop or for that matter
> what freq to tune it to for the most bang for my buck. it does not
> have to be a 160m but be nice to have that ability.
> prefer 1 wire in air so not to piss neighbors off with a crap load of
> wires running around and such.
>
> next concern is RFI to folks around me. would you suggest a filter or
> anything like this to help if needed.

> this is a small town and not everyone has cable and I really dont
> wanna fight on my hands if I can do something 1st time over waiting.
> at least the FCC and anyone else cant say I didnt do all I could do to
> fix my end and to be proper setup.
>
> ok I will start with this message see where it takes me and then ask
> more as I go. I will be building this antenna middle of June 2008 in
> S. TX so need a good solid antenna for hurricane season and the bad
> weather they get alot of.
>
> I do have dual band j-pole and a 6m par loop so if wire cant do those
> bands its ok. just be easier on 1 antenna is all.
>
> thanks for any and all suggestions and if anyone has a pic or 2 of
> such a setup I would love to see the connections and feed side to radio.
>
>
> Fred
> ke5htb
>

forgot to mention i am using a Kenwood 570d for this loop. 100ws wont
have an amp for awhile if I get 1 at all. I may be 1 of the lucky 1's
and 100w will work fine and do allot .

and thanks for the replies I have been reading allot more today . the
resistor idea was nice and will be looked at after install. if it dont
work so good without 1 Its a good thing to try ..thanks !!

I will go with an 80m and work from there I don't have 500+feet to
install a 160m so why push my luck.

Unless somebody can recommend a different all band antenna I still
think the loop be my best bet for my lot and radio. I also have tuner
in radio. it would be great if I can use it alone and not the MFJ tuner.
I am not really happy with MFJ tumer but its what I could afford at
this point.
now next ?? is a balun for the antenna to go from 450 ladderline to
rg-213 ?/ will 1 be needed. the coax will be just maybe max 10 feet if
that long to go from window to radio or the ladderline will come all
the way to tuner and then to radio . use the built in balun.
I am concerned with heat also as a few have mentioned already.
would you recommend a seperate balun and not use the 1 inside tuner.
(it dont look all that great of balun.)

thanks for the suggestions and ideas. we will know more in 2 weeks
after I move into the house. its 500 mile trip to house so it be a few
weeks maybe before loop goes online but it will be online. can always
make it into a longwire later if needed.

[Non-text portions of this message have been removed]

5267. Re: [loopantennas] Bouncing Emails On Yahoogroups

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-15 05:04:52 UTC
From: tom.9.2006
Topic: 5250 Message: 5267

Barry....Your loop list email just went into the bulk file. I am having increasing difficulties with this on all my yahoo accounts, with both person to person email and yahoogroups. Many important emails go to the bulk and I don't see them for days later. Many recipients never get my emails. Does anyone know the cause of this? For Barry's email is it perhaps because he has "bank" in his last name? Is that a key word that indicates to yahoo that it may be a fraudlent email? If so, that's ridiculous, because it means that if my bank or credit card company emails me something PER MY REQUEST, than I'll never get it. What causes these sorts of problems and why do they seem to be increasing, is it part of yahoo groups's war on spam? It would seem that Yahoo-Groups would want its members to receive all of the messages...and not throw them into the bulk folder...
Anyway, whatever... -Tom

--- Barry Bankston <bankstonb@...> wrote:

> If the radiation pattern of a loop is a
> bi-directional, figure-eight pattern, then i
> can't see how reversing the connections would
> have any effect on the antenna.
>
> I could be wrong, though.
>
> Barry ... N4IJN
>
> Tom <tgleeman@...> wrote:
> Hi loop fans,
>
> Has anyone tried reversing the connections of a
> loop
> antenna.....especially a transmitting
> loop? See:
>
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=4
>
> Cheers.
>
> Tom

> KE6YNH, 73
> San Diego, CA
>
> [Non-text portions of this message have been
> removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been
> removed]
>
>

_____
E-MAIL NOTICE WARNING! Unsolicited e-mail is not confidential, because I will read it. If you send e-mail that I have not asked you to send, you will be sending info that I will read, although nobody else will read it. If you are concerned about confidentiality, please do not send confidential info. 12/27/06

5268. Re: [loopantennas] Bouncing Emails On Yahoogroups

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-15 05:14:10 UTC
From: Jay Heyl
Topic: 5250 Message: 5268

On Thu, May 15, 2008 at 1:04 AM, tom.9.2006 <indigotalkradio@...>
wrote:

>
> emails. Does anyone know the cause of this? For
> Barry's email is it perhaps because he has "bank"
> in his last name? Is that a key word that
>

I'm sure the actual rules are quite complicated. I know one thing they do examine is the ratio of new lines to quoted lines. If there's a big quote with just a couple new lines, for some reason they think that's suspicious and will mark it as spam. It doesn't happen all the time, but I've heard it can be an issue.

I use Gmail and it will occasionally put something completely innocuous in the spam folder. Fortunately, it looks like I've finally got it trained fairly well. I haven't had to move anything out of spam in a couple months.

-- Jay

[Non-text portions of this message have been removed]

5269. Re: [loopantennas] Bouncing Emails On Yahoogroups

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-15 08:22:02 UTC
From: tom.9.2006
Topic: 5250 Message: 5269

Interesting! That may explain why people on
CRAIGS LIST rarely respond to me. I quote the
entire CRAIGS LIST entry on my email, some of
which can be quite lengthy, and then write at the
top, "Hi! I'm interested in that apartment,
radio, or whatever....give me a call at this
number...."

And, it does seem that in the spam folder there
are a lot of messages with words pertaining to
financial, banking, vacation, travel, lifestyle,
products for human pleasure, etc.
This, to me, seems like a "violation" (well,
sort-of) of Freedom of Speech. I don't mind
getting advertising, even if it is unacceptable
or potentially offensive. I just delete it,
unread. That's one issue I'm a Libertarian on.
HA HA HA HA

-Tom the unpredictable self-thinking
contrarian...

And, following what you said I deleted most of yr
post...

> I'm sure the actual rules are quite
> complicated. I know one thing they do
> examine is the ratio of new lines to quoted
> lines. If there's a big quote
> with just a couple new lines, for some reason
> they think that's suspicious
> and will mark it as spam. It doesn't happen all
> the time,

5270. Re: [loopantennas] Bouncing Emails On Yahoogroups

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-15 08:49:37 UTC
From: gandalfg8@aol.com
Topic: 5250 Message: 5270

In a message dated 15/05/2008 09:22:23 GMT Daylight Time,
indigotalkradio@... writes:

This, to me, seems like a "violation" (well,
sort-of) of Freedom of Speech. I don't mind
getting advertising, even if it is unacceptable
or potentially offensive. I just delete it,
unread.

In that case, why don't you just turn off the Yahoo spam protection?

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5271. Re: [loopantennas] Bouncing Emails On Yahoogroups

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-15 09:25:11 UTC
From: Jim Dunstan
Topic: 5250 Message: 5271

At 10:04 PM 5/14/2008 -0700, you wrote:

>Barry....Your loop list email just went into the
>bulk file. I am having increasing difficulties
>with this on all my yahoo accounts, with both
>person to person email and yahoogroups. Many
>important emails go to the bulk and I don't see
>them for days later. Many recipients never get my
>emails. Does anyone know the cause of this? For
>Barry's email is it perhaps because he has "bank"
>in his last name? Is that a key word that
>indicates to yahoo that it may be a fraudlent
>email? If so, that's ridiculous, because it means
>that if my bank or credit card company emails me
>something PER MY REQUEST, than I'll never get it.
>What causes these sorts of problems and why do
>they seem to be increasing, is it part of yahoo
>groups's war on spam? It would seem that
>Yahoo-Groups would want its members to receive
>all of the messages...and not throw them into the
>bulk folder...
>Anyway, whatever... -Tom

Hi Tom,

Well I never heard of a 2 way spam filter hi hi. Most internet service providers ISP's provide spam filters that use various algorithms to filter out unwanted mail (in coming). They all provide an 'off-on' switch and usually a variable filter adjustment .... eg ... from filter only messages containing !@#$% to non get through. In addition they usually (ISP's) carry virus detection as well (a good thing). This explains why a lot of your incoming mail ends up in the 'bulk' file. However I don't think your ISP also filters the outgoing mail !! At least I am not aware of that kind of feature.

To solve the problem of your incoming mail going to 'bulk' simply turn down or turn off your ISP spam control. In my case I use only the first (lowest) filter setting. I check the 'bulk' file from time to time to make sure nothing good gets stopped. As a result my in box always has a few unwanted messages (i never open anything I don't recognize) which I delete.

However, if your outgoing mail never gets anywhere .... I would say that is an ethereal problem .... best dealt with by a Shaman. Hi Hi

Jim

5272. Re: [loopantennas] Re: Complementary Push-Pull Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-15 19:13:32 UTC
From: Chris Trask
Topic: 4914 Message: 5272

Gillis,
Yes, it was designed to run off 12V. I'll have to make note of that when I do an update on that later on.

-----Original Message-----
>From: na_no_tu_be <souchet@...>
>Sent: May 14, 2008 6:51 PM
>To: loopantennas@yahoogroups.com
>Subject: [loopantennas] Re: Complementary Push-Pull Amplifiers
>
>Hi Chris.
>
>I am back from a 2 weeks business trip and i am taking a look at the
>push-pull amplifier schematic.
>Tell me that this amplifier run on 12V, because there is no value
>assigne to the Vcc . I would like to use it with my mobile setup
>that run on 12V .
>
>Thanks again .
>
>Gillis
>
>
>> I just completed testing a pair of complementary push-pull
>circuits for
>> use with active amplifiers using commonly available parts, and the
>results
>> were pleasantly surprising. With a 2N2222 and a 2N2907 pair as the
>output
>> devices, the OIP2 and OIP3 were measured (not estimated) as being
>+68.5dBm
>> and +44.25dBm, respectively. The details of all this plus much
>more can be
>> found at:
>>
>> http://www.home.earthlink.net/~christrask/Complementary Push-Pull
>> Amplifiers.pdf
>>
>> which is also available at the more convenient TinyURL of:
>>
>> http://tinyurl.com/2gkndh
>>
>> Chris
>>
>> ,----------------------. High Performance Mixers and

>> / What's all this \ Amplifiers for RF Communications
>> / extinct stuff, anyhow? /
>> \ _______,--------------' Chris Trask / N7ZWY
>> _ |/ Principal Engineer
>> oo\ Sonoran Radio Research
>> (__)\ _ P.O. Box 25240
>> \ \ .' `. Tempe, Arizona 85285-5240
>> \ \ / \
>> \ '" \ IEEE Senior Member #40274515
>> . ( ) \
>> '-|)__| :. \ Email: christrask@...
>> | | | | \ '.
>http://www.home.earthlink.net/~christrask
>> c__; c__; '-..'>.__
>>
>> Graphics by Loek Frederiks
>>
>
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5273. Live In Apartment Need Help With LW Reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-17 02:20:42 UTC
From: Adam E.
Topic: 5273 Message: 5273

Hi,

I need help with improving long wave reception indoors in my
apartment. I built a loop antenna, but I need some kind of tunable
amplifier that will receive a signal and also be tuned for better
reception. Is there a circuit out there for a tunable preamp for to
connect 2 leads of the loop antenna and then connect the amp circuit
to the radio receiver which is a Grundig G5 receiver. If there are
transformers and inductors
involved in the circuit please help find out where to obtain them.

Thanks,

Adam E.

5274. Re: [loopantennas] Live In Apartment Need Help With LW Reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-17 16:16:50 UTC
From: Jim Dunstan
Topic: 5273 Message: 5274

At 02:20 AM 5/17/2008 +0000, you wrote:

>Hi,
>
>I need help with improving long wave reception indoors in my
>apartment. I built a loop antenna, but I need some kind of tunable
>amplifier that will receive a signal and also be tuned for better
>reception. Is there a circuit out there for a tunable preamp for to
>connect 2 leads of the loop antenna and then connect the amp circuit
>to the radio receiver which is a Grundig G5 receiver. If there are
>transformers and inductors
>involved in the circuit please help find out where to obtain them.
>
>Thanks,
>
>Adam E.

Hi Adam,

Wouldn't it be easier and more effective to tune the loop? Not sure what kind of increased performance you require ... eg. increased gain ... or selectivity to decrease adjacent signals. A tuned loop provides both increased signal and selectivity. If you are using an untuned loop and your receiver needs added gain and selectivity, you can provide your own high Q tuned input circuit. Most commercial tuned RF amplifiers operate MW and SW.

Jim

5275. Re: [loopantennas] Live In Apartment Need Help With LW Reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-17 16:47:50 UTC
From: Steve Ratzlaff
Topic: 5273 Message: 5275

This site has a high gain preamp that works with loops or wire antennas and is tunable. A mechanical variable cap can be used instead of the varactors, if that's easier obtained.
http://www.mlecmn.net/~lyle/preamp/preamp.htm

Too bad you're severely handicapping yourself for trying to receive LF--indoor antenna, and basic portable receiver. The Grundig E1 would be a much better LF receiver for you, if you have to be content with using a portable radio.
Good luck!
Steve

----- Original Message -----
From: "Adam E." <gccengineering@...>
To: <loopantennas@yahoogroups.com>
Sent: Friday, May 16, 2008 7:20 PM
Subject: [loopantennas] Live In Apartment Need Help With LW Reception

>
> Hi,
>
> I need help with improving long wave reception indoors in my
> apartment. I built a loop antenna, but I need some kind of tunable
> amplifier that will receive a signal and also be tuned for better
> reception. Is there a circuit out there for a tunable preamp for to
> connect 2 leads of the loop antenna and then connect the amp circuit
> to the radio receiver which is a Grundig G5 receiver. If there are
> transformers and inductors
> involved in the circuit please help find out where to obtain them.
>
> Thanks,
>
> Adam E.

5276. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-20 03:25:25 UTC
From: Andy
Topic: 5250 Message: 5276

> I don't think so .... there would be no difference from the point of view
> of the impedance of the antenna as seen by the coax. ...

I didn't think we were talking about the impedance of the antenna. I thought we were discussing whether reversing the connections would change how the antenna works (i.e., its radiation pattern, and/or effectiveness in certain directions).

My reasoning was, if the feedline is nicely balanced, and the loop is also nicely balanced, then swapping connections shouldn't change anything. But make the feedline a radiator too, then swapping connections changes the relative polarity of the feedline and loop components to the total radiated signal.

> I know that signals from a bidirectional loop (vertically oriented) can be
> mixed with signals from a near by vertical antenna (sense antenna) to
> provide a means of detecting which is the true direction of the station
> being nulled. I may be wrong, but I don't believe the connection at the
> loop will change the relationship with the sense antenna.

Wouldn't swapping the loop's leads flip its polarity (relative to the vertical sense antenna), thus causing signals to cancel where they had added, and vice-versa?

Andy

5277. Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-20 09:20:55 UTC
From: Dominique Kremp
Topic: 5277 Message: 5277

Hi all,
Did anybody ever test various wire thicknesses to do the Wellbrook loops (AL100 / AL100M)?
It seems that the loop wire has to be thick enough to be less inductive.
I've been told that 16/02 minimum is recommended, 32/02 (32 strands X 0.2mm / 3kW/220V kettle wire) could be better.
Does it make a significant difference, does it improve the signals ?
My loops (AL100/AL100M) work fine so far with a 0.95mm wire.
Thanks for any reply

Dominique
from Normandy,France

5278. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-20 15:00:09 UTC
From: Rich MC Clung
Topic: 5250 Message: 5278

Could reversing the connection of the feed line to the loop affect which ray is intercepted stronger, the ordinary or the extra ordinary ray. I don't think wether a balanced or unbalanced feed is used is as important as the polarity of the feed. Typically for NVI sounding, when using loop antennas, the feeds are reversed to determine which way will provide the most usable returns.

RICH WA6KNW

loopantennas@yahoogroups.com wrote:
Re: Reversing a loop antenna
Posted by: "Andy" Andy.groups@... ingrahama
Date: Mon May 19, 2008 8:25 pm ((PDT))

> I don't think so .... there would be no difference from the point of view
> of the impedance of the antenna as seen by the coax. ...

I didn't think we were talking about the impedance of the antenna. I thought we were discussing whether reversing the connections would change how the antenna works (i.e., its radiation pattern, and/or effectiveness in certain directions).

My reasoning was, if the feedline is nicely balanced, and the loop is also nicely balanced, then swapping connections shouldn't change anything. But make the feedline a radiator too, then swapping connections changes the relative polarity of the feedline and loop components to the total radiated signal.

> I know that signals from a bidirectional loop (vertically oriented) can be
> mixed with signals from a near by vertical antenna (sense antenna) to
> provide a means of detecting which is the true direction of the station
> being nulled. I may be wrong, but I don't believe the connection at the
> loop will change the relationship with the sense antenna.

Wouldn't swapping the loop's leads flip its polarity (relative to the vertical sense antenna), thus causing signals to cancel where they had added, and vice-versa?

Andy

[Non-text portions of this message have been removed]

5279. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-20 15:12:37 UTC
From: Jim Dunstan
Topic: 5250 Message: 5279

At 11:25 PM 5/19/2008 -0400, you wrote:

> > I don't think so .... there would be no difference from the point of view
> > of the impedance of the antenna as seen by the coax. ...
>
>I didn't think we were talking about the impedance of the antenna. I
>thought we were discussing whether reversing the connections would change
>how the antenna works (i.e., its radiation pattern, and/or effectiveness in
>certain directions).

Sorry, ... i mentioned impedance as it has an effect on some aspects of performance .... albeit not much in relation to radiation patter (one aspect of performance).

>My reasoning was, if the feedline is nicely balanced, and the loop is also
>nicely balanced, then swapping connections shouldn't change anything. But
>make the feedline a radiator too, then swapping connections changes the
>relative polarity of the feedline and loop components to the total radiated
>signal.
>
> > I know that signals from a bidirectional loop (vertically oriented) can be
> > mixed with signals from a near by vertical antenna (sense antenna) to
> > provide a means of detecting which is the true direction of the station
> > being nulled. I may be wrong, but I don't believe the connection at the
> > loop will change the relationship with the sense antenna.
>
>Wouldn't swapping the loop's leads flip its polarity (relative to the
>vertical sense antenna), thus causing signals to cancel where they had
>added, and vice-versa
>
>Andy

Feeding the balanced antenna with an unbalanced coax feed line will indeed introduce a second source of RF (looking at it from the point of view of a receiving antenna). They mix in some way and present at the input to the receiver. Reversing the connection might affect how they mix. But, the horizontal loop and the vertical feed line would both be omni-directional which wouldn't produce a directional pattern. If the loop was vertical then it would have a bi-directional pattern .... the basic requirement in order for the sense antenna to be useful. The mixing of the signal from the omni-directional sense antenna with the bidirectional loop can produce a heart shaped pattern (a broad signal front with a sharp null). The RF sources must be mixed in equal amounts to produce this pattern.

I assume reversing the loop signal will flip the null to the opposite direction. The key is that the loop is already bi-directional.

Jim

5280. Re: [loopantennas] Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-20 22:11:51 UTC
From: aimo ruoho
Topic: 5277 Message: 5280

¡ Hola, Dominique !

Would you like to tell something about the measures of your Loops?
xcm x ycm, where and how high, towards which directions or even turnable?

As you may have already seen from my emails (?), I have tested The Wellbrook ALA 100M only in my radio-room with three different size coaxial-loops... I tried to purchase a rotor, but haven't received it yet.
I also connected my Wellbrook ALA 100M Amplifier with my 82 cm diameter Hula-Hoop-Loop with three turns of enamelled 0,5 mm wire, and it worked rather well, so it doesn't obviously matter much, if one can't use a larger Loop with it. - I am going to do more tests wit my copper-tube loops later, when time allows... You see, testing is my main business in my radio-hobby... I get a lot of pleasure seeing and hearing results of my "work", especially now, having received my CA-6243 Capacitance/Inductance Meter from Hong Kong.
Nice to be able to know more exactly the measures of Coils and Capacitors. Next I want to get my hands on an Antenna Analizer.

Best Regards from Ami.

Dominique Kremp <dominique.kremp@...> wrote:
Hi all,
Did anybody ever test various wire thicknesses to do the Wellbrook loops
(AL100 / AL100M)?
It seems that the loop wire has to be thick enough to be less inductive.
I've been told that 16/02 minimum is recommended, 32/02 (32 strands X 0.2mm
/ 3kW/220V kettle wire) could be better.
Does it make a significant difference, does it improve the signals ?
My loops (AL100/AL100M) work fine so far with a 0.95mm wire.
Thanks for any reply

Dominique
from Normandy,France

[Non-text portions of this message have been removed]

5281. Hi, I'm new here.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-20 20:45:44 UTC
From: Max
Topic: 5281 Message: 5281

Hi gang, I'm a new member. After living for 25 years in a house, with adequate antenna space, I've moved to an apartment with very limited antenna options. So, I'm exploring transceiving loop antennas for HF use.

I'm also not very polished at using group message boards such as this one, so if I goof up, please bear with me. Thanks.

73 all,
Max, KB7XU

5282. Re: Live In Apartment Need Help With LW Reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-18 23:50:16 UTC
From: gmcjetpilot
Topic: 5273 Message: 5282

One thing about LW reception is the radio. The Ten Tec RX320(D) is intentionally detuned below 1000khz to avoid issues with interference from strong AM BCB stations and emphasise HF 3-30mhz. The fix is easy to bypass the BCB filter on the RX320, but just be aware some radios just are not cut out to go to LW.

--- In loopantennas@yahoogroups.com, "Adam E." <gccengineering@...> wrote:
>
>
> Hi,
>
> I need help with improving long wave reception indoors in my
> apartment. I built a loop antenna, but I need some kind of tunable
> amplifier that will receive a signal and also be tuned for better
> reception. Is there a circuit out there for a tunable preamp for to
> connect 2 leads of the loop antenna and then connect the amp circuit
> to the radio receiver which is a Grundig G5 receiver. If there are
> transformers and inductors
> involved in the circuit please help find out where to obtain them.
>
> Thanks,
>
> Adam E.
>

5283. Re: Live In Apartment Need Help With LW Reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-18 23:11:34 UTC
From: gmcjetpilot
Topic: 5273 Message: 5283

Sorry it got way too long, but if you don't want to read just skip to links and link notes: (experts please feel free to correct me and teach me.) Also this info is worth what you paid for it? Ha-ha.

I'm no loop expert, but being in a somewhat similar position, may be a little ahead of you, I have done some research into this, some suggestions and opinion follow. I included a lot of links which might be of some help and informational. Again I'm no expert but plan on doing more loop experimentation.

Just to make sure we'er on the some page: "long wave radio band is the range of frequencies approximately lying between 12 and 1000 kHz".

http://en.wikipedia.org/wiki/Longwave

Do you really want to listen to anything below 500khz? 200khz? I know some LW BC stations go to 153khz, but I'm not too interested in them. In my opinion freqs below 200khz, antenna wise and radio signals, starts to be am issue. Lets face it, LW stations have antennas that are pushing 1/4 miles long. Some ULF mil stations have mile long antennas. Now you want to have an antenna to receive this, it should also be long. LOOP to the rescue, but it will involve lots O wire and or some kind of fancy tuner/amp. There solution is somewhat expensive commercial solutions or home-brews. Most of the info is on "The Google". I have included some of my favorite links below.

You can build a nice 2'x 2' or 3'x 3' box loop. Take a 3'x 3' box and 8 turns about 100 feet of wire. That gets you gets you all of BCB (MW) to the bottom of HF, a nice band range from 475khz to 2945khz. You can pick off half the loops (4 turns) and go up to about 5900 khz. This does NOT help with LW, so what to do?

If you want to get down to 200 khz its going to take about 20-25 turns and lots of wire, about 200-240ft of wire. That can get you down to 200khz. 400ft gets you to 120khz. Your LW loop will only have a top end of about 1000khz. I would make it so you can pick off the number of loops like the above BC band loop, to get higher freqs, at least to 1.8Mhz MW would be nice. Making specialized antennas for a narrow band is a valid thing to do. You can't have enough antennas! ha-ha

I personally haven't found lots a love down there below MW, in program content or signals. It's part it's no doubt my antenna and my lack of effort hunting in LW, but I know people love to listen to beacons, some military stuff and apparently BC stations. Working down below BCB can be a challenge I understand. With the fact you require

an INDOOR antenna you are starting at a disadvantage. Their antenna (LW broadcasters) have LONG wire antennas outdoors for a reason. Right? 200khz transmitters use antennas about 1/4 mile long. Ouch! Those ULF military stations have mile long antennas!

Can any one tell me the charm of LW and why its interesting? I like the technical challenge and DX bragging rights, but content wise what is there?

As you know there are all kinds of loops you can build with & without pre-amps (just google it). As some one said, why not tune your loop? You can do that with different pick-offs along the loop and of course an air capacitor to make it all resonate at the proper freq.

For you LF/LW desires, it takes lots of loop (wire). (See below)

Tricks and smoke-N-mirrors are fine, but there's nothing like a long, long wire, outside and high up. (Sorry I know blasheim on the LOOP group, ha-ha). I have 1000' of 22awg tefl stranded wire. I'm going to go out somewhere in the country and lay that baby out along some trees, connect to my Degen DE1103 portable and see what it gets. The DE1103 can tune to 100khz.

****
LOOPS LOOPS LOOPS LOOPS

There are the commercial loop units (antenna, tuners), Wellbrook and MFJ. I'm in the market for a loop to play with, learn with. I am thinking of a DIY homebrew or commercial first.

I have a small house on a small lot with homeowner rules, so out-door antennas are marginal, both physically and per HOA rules. So far no one has noticed my +45' random wire (small 22awg white wire) from house to tree. I have got good use out of the outside wire (almost 9000 mile QSL's in the 25-49m band).

An outdoor antenna is almost always better than one inside. The higher and longer (more turns) the better for LW/LF, right. No matter what you do the truth is you can't make up entirely for your in-door limitations, usually. If you had an attic, sometimes that works well. If the HOA gets snippy, that is where my antenna must go.

You say you have a loop and want to know how to tune it? If you built it with an air capacitor you can tune it. There are a 100's of loop plans and calculators on Google to "tune" the freq range you desire: size, number of turns and capacitor range.

**** COMMERCIAL LOOPS ****
Here are some commercial loops & tuners that might work for you.

Wellbrook:
http://www.wellbrook.uk.com/products.html#LA5030

Noter: ALA5030 or ALA100M? The ALA100M is what you might want. You provide the wire and the unit is a tuner and amp. The ALA100M is 138uk, so that is almost double USD. Bummer. However the ALA100M sounds like a good unit, RX only amp loop tuner, indoor, supply your own wire.

MFJ has loop tuners; Here's the link
http://www.mfjenterprises.com

Note: Click on antenna tuner and look at MFJ-932 and MFJ-933 (my pick), MFJ-935B. Why do I suggest them. They are for RX as well as TX'ing. I assume you might want to CQ someday. Even not, you can always sell it. You supply the wire and simple PVC support (or drape around book case or window. You can select different loop sizes (wire length) to optimize freq. Last you might want to listen to higher freqs some day? Simple, just hook-up a longer wire loop. eHam.net has reviews of these antennas and tuners. Mixed reviews but they work pretty good I am told.

**** HOMEBREW ****
For homebrew, which I am thinking of, DX only outdoor active magnetic Loop. It looks like an attractive antenna. The antenna police might think its for satellite TV which is allowed. If not it will go in the attic, but with a big heat furnace/AC evaporator it will not work as well as outside above the roof line. I can hide the rotor and just have the loop above the roof line. Here are some plans for DIY amplified magnetic loop, as follows:

My favorite
http://www.techlib.com/electronics/antennas.html (My favorite)

http://www.eham.net/articles/18699

http://www.mlecmn.net/~lyle/bal-pre/bal-pre.htm

http://users.tpg.com.au/users/ldbutler/Loop18MHz.htm

http://www.vlf.it/easyloop/_easyloop.htm

Note: My experience with amplification (mostly whips) is it amplifies the signal and the noise equally. Of course the joy of loops is noise rejection off the null sides. If you have no local noise situation (rare) an amplifier might be great, but if you had no local RFI noise and a good passive antenna, you would NOT need an antenna amp.

Bottom line there's no magic, simple solution or getting around the physics of a good basic (passive) antenna loop, wire, dipole, monopole or beam. However a passive or active tuner/amp can do wonders but adds more stuff and need to tune it for each freq. Again if you target one freq fine, but I like to scan over the bands (HF). Antenna tuning would be a pain but a neccassry evil sometimes.

Never the less, I want to play with some amplified/tuned loops? My first will probably be a 3'x3' passive loop as shown below, a passive

MW/LW loop with multi wraps (about 200' - 240' of wire) around a
3'x3' frame with an air capacitor. You can wire them so they have
coxial feed-line.

http://www.i1wqrlinkradio.com/antype/ch13/chiave1456.htm
(ton of loop links at bottom)

It would be nice to have a loop to target known signals. For scanning
a loop is a bit of a pain. I'm thinking of mounting the loop in the
attic. A servo is used to tune the capacitor like RC servo, electric
drill or motorized volume control. Put it in the attic with a rotor
and remote tune capacitor; heck with the antenna police. One thing
about a LOOP is having it in the middle of the room. They look like
art to me, but the wife might not like it.

Some more LINKS: Here is a AM BCB loop kit/plans:
http://www.mtmscientific.com/loop.html

http://www.mindspring.com/~loop_antenna/
(ton of loop links at bottom)

Cheers George

--- In loopantennas@yahoogroups.com, "Adam E." <gccengineering@...>
wrote:
>
>
> Hi,
>
> I need help with improving long wave reception indoors in my
> apartment. I built a loop antenna, but I need some kind of tunable
> amplifier that will receive a signal and also be tuned for better
> reception. Is there a circuit out there for a tunable preamp for to
> connect 2 leads of the loop antenna and then connect the amp circuit
> to the radio receiver which is a Grundig G5 receiver. If there are
> transformers and inductors
> involved in the circuit please help find out where to obtain them.
>
> Thanks,
>
> Adam E.

5284. Re: Live In Apartment Need Help With LW Reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-21 16:50:58 UTC
From: Adam E.
Topic: 5273 Message: 5284

Thanks for the information, I really appreciate it. I guess I a
loop antenna will be my best bet still. I have used longwire antennas
in the backyard at my old house, but since I don't have room for
longwires for longwave a loop will just do. I will be looking out
for schematics and drawings for longwave loops here when they become
available. Thanks Have a good day.

Adam E.

gccengineering

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:
>
> Sorry it got way too long, but if you don't want to read just skip to
> links and link notes: (experts please feel free to correct me and
> teach me.) Also this info is worth what you paid for it? Ha-ha.
>
> I'm no loop expert, but being in a somewhat similar position, may be
> a little ahead of you, I have done some research into this, some
> suggestions and opinion follow. I included a lot of links which might
> be of some help and informational. Again I'm no expert but plan on
> doing more loop experimentation.
>
> Just to make sure we'er on the some page: "long wave radio band is
> the range of frequencies approximately lying between 12 and 1000
> kHz".
>
> http://en.wikipedia.org/wiki/Longwave
>
> Do you really want to listen to anything below 500khz? 200khz? I know
> some LW BC stations go to 153khz, but I'm not too interested in them.
> In my opinion freqs below 200khz, antenna wise and radio signals,
> starts to be am issue. Lets face it, LW stations have antennas that
> are pushing 1/4 miles long. Some ULF mil stations have mile long
> antennas. Now you want to have an antenna to receive this, it should
> also be long. LOOP to the rescue, but it will involve lots O wire and
> or some kind of fancy tuner/amp. There solution is somewhat expensive
> commercial solutions or home-brews. Most of the info is on "The
> Google". I have included some of my favorite links below.
>
> You can build a nice 2'x 2' or 3'x 3' box loop. Take a 3'x 3' box and
> 8 turns about 100 feet of wire. That gets you gets you all of BCB
> (MW) to the bottom of HF, a nice band range from 475khz to 2945khz.
> You can pick off half the loops (4 turns) and go up to about 5900
> khz. This does NOT help with LW, so what to do?

>
> If you want to get down to 200 khz its going to take about 20-25
> turns and lots of wire, about 200-240ft of wire. That can get you
> down to 200khz. 400ft gets you to 120khz. Your LW loop will only have
> a top end of about 1000khz. I would make it so you can pick off the
> number of loops like the above BC band loop, to get higher freqs, at
> least to 1.8Mhz MW would be nice. Making specialized antennas for a
> narrow band is a valid thing to do. You can't have enough antennas!
> ha-ha
>
> I personally haven't found lots a love down there below MW, in
> program content or signals. It's part it's no doubt my antenna and my
> lack of effort hunting in LW, but I know people love to listen to
> beacons, some military stuff and apparently BC stations. Working down
> below BCB can be a challenge I understand. With the fact you require
> an INDOOR antenna you are starting at a disadvantage. Their antenna
> (LW broadcasters) have LONG wire antennas outdoors for a reason.
> Right? 200khz transmitters use antennas about 1/4 mile long. Ouch!
> Those ULF military stations have mile long antennas!
>
>
> Can any one tell me the charm of LW and why its interesting? I like
> the technical challenge and DX bragging rights, but content wise what
> is there?
>
> As you know there are all kinds of loops you can build with & without
> pre-amps (just google it). As some one said, why not tune your loop?
> You can do that with different pick-offs along the loop and of course
> an air capacitor to make it all resonate at the proper freq.
>
> For you LF/LW desires, it takes lots of loop (wire). (See below)
>
> Tricks and smoke-N-mirrors are fine, but there's nothing like a long,
> long wire, outside and high up. (Sorry I know blasheim on the LOOP
> group, ha-ha). I have 1000' of 22awg tefl stranded wire. I'm going to
> go out somewhere in the country and lay that baby out along some
> trees, connect to my Degen DE1103 portable and see what it gets. The
> DE1103 can tune to 100khz.
>
>
> **********
> LOOPS LOOPS LOOPS LOOPS
>
> There are the commercial loop units (antenna, tuners), Wellbrook and
> MFJ. I'm in the market for a loop to play with, learn with. I am
> thinking of a DIY homebrew or commercial first.
>
> I have a small house on a small lot with homeowner rules, so out-door
> antennas are marginal, both physically and per HOA rules. So far no
> one has noticed my +45' random wire (small 22awg white wire) from

> house to tree. I have got good use out of the outside wire (almost
> 9000 mile QSL's in the 25-49m band).
>
> An outdoor antenna is almost always better than one inside. The
> higher and longer (more turns) the better for LW/LF, right. No matter
> what you do the truth is you can't make up entirely for your in-door
> limitations, usually. If you had an attic, sometimes that works well.
> If the HOA gets snippy, that is where my antenna must go.
>
> You say you have a loop and want to know how to tune it? If you built
> it with an air capacitor you can tune it. There are a 100's of loop
> plans and calculators on Google to "tune" the freq range you desire:
> size, number of turns and capacitor range.
>
>
> **** COMMERCIAL LOOPS ****
> Here are some commercial loops & tuners that might work for you.
>
> Wellbrook:
> http://www.wellbrook.uk.com/products.html#LA5030
>
> Noter: ALA5030 or ALA100M? The ALA100M is what you might want. You
> provide the wire and the unit is a tuner and amp. The ALA100M is
> 138uk, so that is almost double USD. Bummer. However the ALA100M
> sounds like a good unit, RX only amp loop tuner, indoor, supply your
> own wire.
>
> MFJ has loop tuners; Here's the link
> http://www.mfjenterprises.com
>
> Note: Click on antenna tuner and look at MFJ-932 and MFJ-933 (my
> pick), MFJ-935B. Why do I suggest them. They are for RX as well as
> TX'ing. I assume you might want to CQ someday. Even not, you can
> always sell it. You supply the wire and simple PVC support (or drape
> around book case or window. You can select different loop sizes (wire
> length) to optimize freq. Last you might want to listen to higher
> freqs some day? Simple, just hook-up a longer wire loop. eHam.net has
> reviews of these antennas and tuners. Mixed reviews but they work
> pretty good I am told.
>
>
> **** HOMEBREW ****
> For homebrew, which I am thinking of, DX only outdoor active magnetic
> Loop. It looks like an attractive antenna. The antenna police might
> think its for satellite TV which is allowed. If not it will go in the
> attic, but with a big heat furnace/AC evaporator it will not work as
> well as outside above the roof line. I can hide the rotor and just
> have the loop above the roof line. Here are some plans for DIY
> amplified magnetic loop, as follows:
>

> My favorite
> http://www.techlib.com/electronics/antennas.html (My favorite)
>
> http://www.eham.net/articles/18699
>
> http://www.mlecmn.net/~lyle/bal-pre/bal-pre.htm
>
> http://users.tpg.com.au/users/ldbutler/Loop18MHz.htm
>
> http://www.vlf.it/easyloop/_easyloop.htm
>
> Note: My experience with amplification (mostly whips) is it amplifies
> the signal and the noise equally. Of course the joy of loops is noise
> rejection off the null sides. If you have no local noise situation
> (rare) an amplifier might be great, but if you had no local RFI noise
> and a good passive antenna, you would NOT need an antenna amp.
>
> Bottom line there's no magic, simple solution or getting around the
> physics of a good basic (passive) antenna loop, wire, dipole,
> monopole or beam. However a passive or active tuner/amp can do
> wonders but adds more stuff and need to tune it for each freq. Again
> if you target one freq fine, but I like to scan over the bands (HF).
> Antenna tuning would be a pain but a neccassry evil sometimes.
>
> Never the less, I want to play with some amplified/tuned loops? My
> first will probably be a 3'x3' passive loop as shown below, a passive
> MW/LW loop with multi wraps (about 200' - 240' of wire) around a
> 3'x3' frame with an air capacitor. You can wire them so they have
> coxial feed-line.
>
> http://www.i1wqrlinkradio.com/antype/ch13/chiave1456.htm
> (ton of loop links at bottom)
>
> It would be nice to have a loop to target known signals. For scanning
> a loop is a bit of a pain. I'm thinking of mounting the loop in the
> attic. A servo is used to tune the capacitor like RC servo, electric
> drill or motorized volume control. Put it in the attic with a rotor
> and remote tune capacitor; heck with the antenna police. One thing
> about a LOOP is having it in the middle of the room. They look like
> art to me, but the wife might not like it.
>
> Some more LINKS: Here is a AM BCB loop kit/plans:
> http://www.mtmscientific.com/loop.html
>
> http://www.mindspring.com/~loop_antenna/
> (ton of loop links at bottom)
>
> Cheers George
>
>

>
> --- In loopantennas@yahoogroups.com, "Adam E." <gccengineering@>
> wrote:
> >
> >
> > Hi,
> >
> > I need help with improving long wave reception indoors in my
> > apartment. I built a loop antenna, but I need some kind of tunable
> > amplifier that will receive a signal and also be tuned for better
> > reception. Is there a circuit out there for a tunable preamp for to
> > connect 2 leads of the loop antenna and then connect the amp circuit
> > to the radio receiver which is a Grundig G5 receiver. If there are
> > transformers and inductors
> > involved in the circuit please help find out where to obtain them.
> >
> > Thanks,
> >
> > Adam E.
>

5285. Re: Hi, I'm new here.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-21 16:56:54 UTC
From: Adam E.
Topic: 5281 Message: 5285

Hi, I have been a member here since 2005, I have been participating in this group for a long time. This group is better than the ones that others created and there are over 2000 members. You will alot of information about loops here and also you can get parts from stormwise and other places to build your loop antennas. I am in a apartment now experimenting with loop antennas and I am doing my best to keep the antennas near the window as best as I can. When I get variable tuning capacitors I am going to reactivate my loop antenna that measures 8ohms to receive broadcast band stations from Europe on LW.

We wish you the best in your DX.

Welcome here.

Adam E.

--- In loopantennas@yahoogroups.com, "Max" <kb7xu@...> wrote:
>
> Hi gang, I'm a new member. After living for 25 years in a house, with
> adequate antenna space, I've moved to an apartment with very limited
> antenna options. So, I'm exploring transceiving loop antennas for HF
> use.
>
> I'm also not very polished at using group message boards such as this
> one, so if I goof up, please bear with me. Thanks.
>
> 73 all,
> Max, KB7XU
>

5286. Re: Live In Apartment Need Help With LW Reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-22 19:28:14 UTC
From: heinzd777
Topic: 5273 Message: 5286

Dear Adam,

I built a loop for the longwave band. It goes from below 150 kHz to 650 kHz. Please look at http://ph.groups.yahoo.com/group/loopantennas/photos/view/5021?b=8 for a photo and http://groups.yahoo.com/group/loopantennas/message/5145 for a short description. You will need a lot of wire, a BIG variable capacitor and a lot of wood for the construction, but it works good. The loop will be coupled inductively to the receiver as shown on the picture.

Good Luck!
Heinz

--- In loopantennas@yahoogroups.com, "Adam E." <gccradioscience@...> wrote:
>
>
> Thanks for the information, I really appreciate it. I guess I a
> loop antenna will be my best bet still. I have used longwire antennas
> in the backyard at my old house, but since I don't have room for
> longwires for longwave a loop will just do. I will be looking out
> for schematics and drawings for longwave loops here when they become
> available. Thanks Have a good day.
>
> Adam E.
>
> gccengineering
>

5287. Re: A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-22 19:30:24 UTC
From: heinzd777
Topic: 5126 Message: 5287

Aaah, I forgot a link to the picture! Here it is:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/5021?b=8

--- In loopantennas@yahoogroups.com, "heinzd777" <h-d.hildebrandt@...>
wrote:
>
> And now this is my new loop antenna! It only reaches from 140 to 650
> kHz, a photo is in the "Miscellaneous" section. Side length of the
> sqare is 74 cm (19"), it has 25 turns and a capacitor of 20 to 1360 pF.
>
> There will come a second loop for the mediumwave band.
>
> Heinz
>

5288. Re: A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-22 19:34:04 UTC
From: heinzd777
Topic: 5126 Message: 5288

--- In loopantennas@yahoogroups.com, "heinzd777" <h-d.hildebrandt@...>
wrote:

And another mistake!: The side length is 29", not 19". In Germany we
calculate with centimeters and meters, not with inches and feet ;-)
>
> Aaah, I forgot a link to the picture! Here it is:
> http://ph.groups.yahoo.com/group/loopantennas/photos/view/5021?b=8
>
> --- In loopantennas@yahoogroups.com, "heinzd777" <h-d.hildebrandt@>
> wrote:
> >
> > And now this is my new loop antenna! It only reaches from 140 to 650
> > kHz, a photo is in the "Miscellaneous" section. Side length of the
> > sqare is 74 cm (19"), it has 25 turns and a capacitor of 20 to
1360 pF.
> >
> > There will come a second loop for the mediumwave band.
> >
> > Heinz
> >
>

5289. Re: A loop for longwave and mediumwave

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-22 22:44:02 UTC
From: Castaldelli
Topic: 5126 Message: 5289

Hello Heinz,
Im live in Brazil, I construct an antenna to wave with 86 cm long each side, using 50 laps of wire, making a total of approximately 170 meters, and used a capacitor of 40 to 365 pf, because I have another of greater value, but the result was great . Congratulations on construction and finishing.
Respectfully,

Eduardo
Mairiporã-SP-Brasil
Grid locator : GG66qq

--- In loopantennas@yahoogroups.com, "heinzd777" <h-d.hildebrandt@...> wrote:
>
> And now this is my new loop antenna! It only reaches from 140 to 650
> kHz, a photo is in the "Miscellaneous" section. Side length of the
> sqare is 74 cm (19"), it has 25 turns and a capacitor of 20 to 1360 pF.
>
> There will come a second loop for the mediumwave band.
>
> Heinz
>

5290. Re: Hi, I'm new here.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-23 23:59:14 UTC
From: Max
Topic: 5281 Message: 5290

Thanks so much for the welcome. I've noticed a lot of activity in
this group and that's always a good sign. Loops are indeed
fascinatating.
Max, KB7XU

--- In loopantennas@yahoogroups.com, "Adam E." <gccradioscience@...>
wrote:
>
>
> Hi, I have been a member here since 2005, I have been
participating
> in this group for a long time. This group is better than the ones
> that others created and there are over 2000 members. You will alot
of
> information about loops here and also you can get parts from
stormwise
> and other places to build your loop antennas. I am in a apartment
> now experimenting with loop antennas and I am doing my best to keep
> the antennas near the window as best as I can. When I get variable
> tuning capacitors I am going to reactivate my loop antenna that
> measures 8ohms to receive broadcast band stations from Europe on
LW.
>
> We wish you the best in your DX.
>
> Welcome here.
>
> Adam E.
>
>
> --- In loopantennas@yahoogroups.com, "Max" <kb7xu@> wrote:
> >
> > Hi gang, I'm a new member. After living for 25 years in a house,
with
> > adequate antenna space, I've moved to an apartment with very
limited
> > antenna options. So, I'm exploring transceiving loop antennas
for HF
> > use.
> >
> > I'm also not very polished at using group message boards such as
this
> > one, so if I goof up, please bear with me. Thanks.
> >
> > 73 all,

> > Max, KB7XU
> >
>

5291. Re: 621Khz loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-24 21:24:00 UTC
From: noswadplease
Topic: 5241 Message: 5291

--- In loopantennas@yahoogroups.com, "Hugh" <quuilpy@...> wrote:
>
> Thanks guys, I'm fired with enthusiasm.
> Mark, I said 6' 'cause it would fit thru a doorway and maybe I could
> make one as a peculiar kind of shadow cabinet on the wall with radio
> in one nook. I have an external one going that is 10' 5 sided made
> from fibreglass electric fence 1/2" rods and tv ribbon, but it is a
> bit floppy. Fed unbalanced top coupled 33pf to the AM side of a car
> radio. works fine,and surprise it rejects the electric fence
splatter
> that shows up with wire antennas. Daytime 621 clear as a bell and no
> apparent overloading at night.
> Liked the utube Paul, I'm looking for clear listening tho, low
noise.
> Ed, your beasty shows coax eminating from your tuner - How are you
> coupling into the loop?
> ... Hugh
>
Hugh, I would have answered sooner but have been away for awhile.
The black box is fitted with an so-239, the coax runs up to a
lightning arrestor at the shed peak and grounded right at the base.
The coax runs about 90 feet to a 3-way Diamond antenna switch. My MW.
G5RV and AOR SA-7000 are then fed thru an antenna tuner. The MW
antenna is then fed thru a 10:1 balun and then into my Icom R75.
Also in the pictures you see part of my G5RV fed to 65 feet of ladder
line and then into a 140 ft coax. Ed Dawson

5292. Re: [loopantennas] Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-24 23:48:35 UTC
From: aimo ruoho
Topic: 5250 Message: 5292

How about putting a large grounded aluminium or copper sheet near the other end of the small directive antenna trying to prevent the antenna to receive signals coming from the non-wished direction?
Has anyone tried it?
If not, that will be my next test/experiment...
TV antennas and Yagis are made in the same principle, aren't they?
Ami

Andy <Andy.groups@...> wrote:
> I don't think so .... there would be no difference from the point of view
> of the impedance of the antenna as seen by the coax. ...

I didn't think we were talking about the impedance of the antenna. I thought we were discussing whether reversing the connections would change how the antenna works (i.e., its radiation pattern, and/or effectiveness in certain directions).

My reasoning was, if the feedline is nicely balanced, and the loop is also nicely balanced, then swapping connections shouldn't change anything. But make the feedline a radiator too, then swapping connections changes the relative polarity of the feedline and loop components to the total radiated signal.

> I know that signals from a bidirectional loop (vertically oriented) can be
> mixed with signals from a near by vertical antenna (sense antenna) to
> provide a means of detecting which is the true direction of the station
> being nulled. I may be wrong, but I don't believe the connection at the
> loop will change the relationship with the sense antenna.

Wouldn't swapping the loop's leads flip its polarity (relative to the vertical sense antenna), thus causing signals to cancel where they had added, and vice-versa?

Andy

[Non-text portions of this message have been removed]

5293. Re: Live In Apartment Need Help With LW Reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-24 22:10:08 UTC
From: Adam E.
Topic: 5273 Message: 5293

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 02:20 AM 5/17/2008 +0000, you wrote:
>
>
> >Hi,
> >
> >I need help with improving long wave reception indoors in my
> >apartment. I built a loop antenna, but I need some kind of tunable
> >amplifier that will receive a signal and also be tuned for better
> >reception. Is there a circuit out there for a tunable preamp for to
> >connect 2 leads of the loop antenna and then connect the amp circuit
> >to the radio receiver which is a Grundig G5 receiver. If there are
> >transformers and inductors
> >involved in the circuit please help find out where to obtain them.
> >
> >Thanks,
> >
> >Adam E.
>
> Hi Adam,
>
> Wouldn't it be easier and more effective to tune the loop? Not sure
what
> kind of increased performance you require ... eg. increased gain
... or
> selectivity to decrease adjacent signals. A tuned loop provides both
> increased signal and selectivity. If you are using an untuned loop and
> your receiver needs added gain and selectivity, you can provide your
own
> high Q tuned input circuit. Most commercial tuned RF amplifiers
operate MW
> and SW.
>
> Jim
>
I need a loop that has increased gain and selectivity. And can have
an amplifier for more gain. But I still need to learn on how to make
a signal magnet (magnetic loop that ignores electric fields) cause
there is noise present in the apartment area such as nearby TV's and
computer noise signals, and cable TV noise. If you can help me find a
circuit for me to study and also are there any books on this? I have
some books on JJ Carrs receiving antenna book, but do not have a copy
of JJ Carrs Loop Antenna Handbook. And 2 different volumes of Radio
Science Observing 1 and 2, but the 2 books were hard to understand for

intermediate hobby in electronics. I just hope the parts are still available to buy to build these loop projects.

Adam E.

5294. Re: 621Khz loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-26 06:38:56 UTC
From: Hugh
Topic: 5241 Message: 5294

Ed
Thanks. My cursory glance said it was some kind of match to the MW
loop only.
I have timber, wire to build my shadow cabinet AM loop special. Next
is the moment spare to get on to it!
PS, I had a 5 wavelength leg rhombic up on 6M once, it did good
things.... Hugh
--- In loopantennas@yahoogroups.com, "noswadplease" <ewdawso_1@...>
wrote:
>
> --- In loopantennas@yahoogroups.com, "Hugh" <quuilpy@> wrote:
> >
> > Thanks guys, I'm fired with enthusiasm.
> > Mark, I said 6' 'cause it would fit thru a doorway and maybe I could
> > make one as a peculiar kind of shadow cabinet on the wall with radio
> > in one nook. I have an external one going that is 10' 5 sided made
> > from fibreglass electric fence 1/2" rods and tv ribbon, but it is a
> > bit floppy. Fed unbalanced top coupled 33pf to the AM side of a car
> > radio. works fine,and surprise it rejects the electric fence
> splatter
> > that shows up with wire antennas. Daytime 621 clear as a bell and no
> > apparent overloading at night.
> > Liked the utube Paul, I'm looking for clear listening tho, low
> noise.
> > Ed, your beasty shows coax eminating from your tuner - How are you
> > coupling into the loop?
> > ... Hugh
> >
> Hugh, I would have answered sooner but have been away for awhile.
> The black box is fitted with an so-239, the coax runs up to a
> lightning arrestor at the shed peak and grounded right at the base.
> The coax runs about 90 feet to a 3-way Diamond antenna switch. My MW.
> G5RV and AOR SA-7000 are then fed thru an antenna tuner. The MW
> antenna is then fed thru a 10:1 balun and then into my Icom R75.
> Also in the pictures you see part of my G5RV fed to 65 feet of ladder
> line and then into a 140 ft coax. Ed Dawson
>

5295. Re: A loop for longwave and mediumwave/Metric/Imperial

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-26 06:45:55 UTC
From: Hugh
Topic: 5126 Message: 5295

--- In loopantennas@yahoogroups.com, "Castaldelli" <adcas@...> wrote:
>
> Hello Heinz,
> Im live in Brazil, I construct an antenna to wave with 86 cm long
> each side, using 50 laps of wire, making a total of approximately 170
> meters, and used a capacitor of 40 to 365 pf, because I have another
> of greater value, but the result was great . Congratulations on
> construction and finishing.
> Respectfully,
>
> Eduardo
> Mairiporã-SP-Brasil
> Grid locator : GG66qq
>
> --- In loopantennas@yahoogroups.com, "heinzd777" <h-
> d.hildebrandt@> wrote:
> >
> > And now this is my new loop antenna! It only reaches from 140 to 650
> > kHz, a photo is in the "Miscellaneous" section. Side length of the
> > sqare is 74 cm (19"), it has 25 turns and a capacitor of 20 to 1360
> pF.
> >
> > There will come a second loop for the mediumwave band.
> >
> > Heinz
> >
>

5296. Re: A loop for longwave and mediumwave/Metric/Imperial

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-26 07:02:45 UTC
From: Hugh
Topic: 5126 Message: 5296

Hello Castello and Heinz
This is off topic, but fun.
I live in Australia which changed from imperial measurement to metric in 1966. We have become bilingual and usually at ease with either system. ... Now I am a farmer and not so long ago bought a new tractor.. It is a Massey Ferguson (English marque) made in Brazil (Brazil is Metric is it not Castello?) but everything on this tractor is old fashioned imperial. I think I am comfused! Now if someone could suggest some dimensions for this loop I am contemplating in Cubits, or the speed of light in Furlongs per Fortnight my day will be made. Cheers ... Hugh

5297. Building a Loop for Wellbrook ALA 100 M

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-26 22:42:17 UTC
From: aimo ruoho
Topic: 5297 Message: 5297

Hello, folks!

I would like to build a turnable Loop for use with my W.ALA 100 M Active Antenna Amplifier. I would turn it with a proper rotor. (Any ideas of good new rotors to be bought from Europe?)

I have been calculating some possible measures for this future Loop.
A: 8 meter, 4 x 2000 mm of thick plastic coated wire, diamond shape, cross lengths 2825 mm or circular shape, 2500 mm diameter.

B: 7 meter, 4 x 1750 mm of thick plastic coated stranded wire, diamond shape, cross lengths 2470 mm or circular shape, 2200 mm diameter.

C: 5,4 meter wire, 4 x 1350 mm plastic coated stranded, diamond shape, cross frame lengths 1900 mm or circular shaped, 1600 mm diameter (1,6 meter or 160 cm).

If you would choose, which one of these would be the best according to your opinion?
But perhaps you have better ideas?

I already have enough of wooden lists of 1900 x 40 x 12 mm, so I would like to use them to build a wooden cross-formed frame, but before I begin building, I would like to read your very much appreciated expertice, I also possess long PVC-tubes to go that way, if I prefer it, but I'd like to have there also very good advice, if available from group members.

Best Regards from,

Ami

[Non-text portions of this message have been removed]

5298. Fwd: Re: [Shortwave-SWL-Antenna] Re: While we are on the subject of Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-26 22:50:01 UTC
From: aimo ruoho
Topic: 5298 Message: 5298

Note: forwarded message attached.

[Non-text portions of this message have been removed]

5299. Re: [loopantennas] Fwd: Re: [Shortwave-SWL-Antenna] Re: While we are on the subject of Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-26 22:59:49 UTC
From: aimo ruoho
Topic: 5298 Message: 5299

sorry,but the attached files never left my computer. what happened? i only wanted you to know, what kind of emails i receive, when i try to say anything at these groups.
Ami
aimo ruoho <aimounto@...> wrote:

Note: forwarded message attached.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5300. Re: [loopantennas] Building a Loop for Wellbrook ALA 100 M

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-27 09:19:00 UTC
From: tsmithers@cix.co.uk
Topic: 5297 Message: 5300

This article might be of interest
http://perseus-sdr.blogspot.com/2006/07/close-up-wellbrook-ala-100-antenna.html

Trevor

5301. Re: [loopantennas] Building a Loop for Wellbrook ALA 100 M

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-27 19:02:09 UTC
From: aimo ruoho
Topic: 5297 Message: 5301

Thanks a lot, Trevor !

It really was a very nice gift from you and really interesting.
I was just building a 6' 4" x 6' 4" cross framed loop with 1 turn = abt 18' wire.
I'll connect it later with my 100 M...
Perhaps I should have used more turns? Maybe I'll do it some day.
7 to 8 meters (21 to 24 feet may be better) ?
This M-model will work with 1/2 of the 100-only-model wire length.

Thanks again and best regards from Ami.

tsmithers@... wrote:
This article might be of interest
http://perseus-sdr.blogspot.com/2006/07/close-up-wellbrook-ala-100-antenna.html

Trevor

[Non-text portions of this message have been removed]

5302. Re: [loopantennas] Building a Loop for Wellbrook ALA 100 M

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-27 22:47:49 UTC
From: aimo ruoho
Topic: 5297 Message: 5302

Yes!

I chose the "C"-version. It gives a decent signal on LW, MW and tropical frequencies + SW. Lots of strength. I put it on the upper roof of my house without anything but the roof ground!
Waiting eagerly to raise it a few meters above it and having a rotor to turn it around... A lot better than the loops in my room. But to be truthful, it doesn't beat my DX 1 Pro MK II, at least yet.

Best from Ami, an optimist homebrewer.

aimo ruoho <aimounto@...> wrote:
Hello, folks!

I would like to build a turnable Loop for use with my W.ALA 100 M Active Antenna Amplifier. I would turn it with a proper rotor. (Any ideas of good new rotors to be bought from Europe?)

I have been calculating some possible measures for this future Loop.
A: 8 meter, 4 x 2000 mm of thick plastic coated wire, diamond shape, cross lengths 2825 mm or circular shape, 2500 mm diameter.

B: 7 meter, 4 x 1750 mm of thick plastic coated stranded wire, diamond shape, cross lengths 2470 mm or circular shape, 2200 mm diameter.

C: 5,4 meter wire, 4 x 1350 mm plastic coated stranded, diamond shape, cross frame lengths 1900 mm or circular shaped, 1600 mm diameter (1,6 meter or 160 cm).

If you would choose, which one of these would be the best according to your opinion?
But perhaps you have better ideas?

I already have enough of wooden lists of 1900 x 40 x 12 mm, so I would like to use them to build a wooden cross-formed frame, but before I begin building, I would like to read your very much appreciated expertice, I also possess long PVC-tubes to go that way, if I prefer it, but I'd like to have there also very good advice, if available from group members.

Best Regards from,

Ami

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5303. Fwd: Re: [Shortwave-SWL-Antenna] Re: While we are on the subject of Wellbrook lo

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-05-27 23:11:40 UTC
From: Steve
Topic: 5298 Message: 5303

I have the list set to no attachments.

Is this something that you need to take up with me, the moderator? If so, please forward to me off list.

Steve Greenfield

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> sorry,but the attached files never left my computer. what happened? i only wanted you to know, what kind of emails i receive, when i try to say anything at these groups.
> Ami
> aimo ruoho <aimounto@...> wrote:
>
> Note: forwarded message attached.
>
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

5304. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-01 22:49:31 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 5304

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

5305. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-01 22:49:31 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 5305

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

5306. Re: Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-03 22:47:30 UTC
From: resopkr24422
Topic: 5250 Message: 5306

--- In loopantennas@yahoogroups.com, Andy <Andy.groups@...> wrote:
>
> > I don't think so .... there would be no difference from the point
of view
> > of the impedance of the antenna as seen by the coax. ...
>
> I didn't think we were talking about the impedance of the antenna. I
> thought we were discussing whether reversing the connections would
change
> how the antenna works (i.e., its radiation pattern, and/or
effectiveness in
> certain directions).
>
> My reasoning was, if the feedline is nicely balanced, and the loop
is also
> nicely balanced, then swapping connections shouldn't change
anything. But
> make the feedline a radiator too, then swapping connections changes the
> relative polarity of the feedline and loop components to the total
radiated
> signal.
>
> > I know that signals from a bidirectional loop (vertically
oriented) can be
> > mixed with signals from a near by vertical antenna (sense antenna) to
> > provide a means of detecting which is the true direction of the
station
> > being nulled. I may be wrong, but I don't believe the connection
at the
> > loop will change the relationship with the sense antenna.
>
> Wouldn't swapping the loop's leads flip its polarity (relative to the
> vertical sense antenna), thus causing signals to cancel where they had
> added, and vice-versa?
>
> Andy
>

Changing the feed point will impact pattern. Changing or swapping the
the leads shouldn't, since the signal we're dealing with is
Alternating Current not Direct Current.

Wayne C.

5307. Re: [loopantennas] Re: Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-04 00:52:34 UTC
From: Jim Dunstan
Topic: 5250 Message: 5307

At 10:47 PM 6/3/2008 +0000, you wrote:

>Changing the feed point will impact pattern.

I believe the original post referred to a horizontal loop. Why would
placing the feed point impact pattern?

> Changing or swapping the
>the leads shouldn't, since the signal we're dealing with is
>Alternating Current not Direct Current.

Wayne C.

I don't think anyone was trying to radiate with DC hi hi. The issue is
that feeding the horizontal loop with a coax feed line will introduce a
vertical component (antenna current on the outside of the shield). Will
the interaction of the two radiation components change if the feed point
connection is reversed? The idea being that the vertical portion would act
like a 'sense' antenna.

My sense (no pun intended) is that a 'sense' antenna works with a
bi-directional (vertically positioned) loop and not with an
omni-directional horizontal loop. The combination of a bi-directional loop
pattern with an omni directional pattern of a vertical antenna will produce
a heart shaped pattern .... (used in direction finding).

I feel there is a possible affect in pattern if the loop is oriented
vertically and not if it is oriented horizontally. For full effect the
signals should be mixed with relatively equal strength. In a system where
signals from a bidirectional and omni directional antennas are mixed the
null (top of the heart pattern) is indeed swapped (by 180 degrees) when the
feed point of the bidirectional antenna is swapped. It would only be by
chance that the two signals in a coax fed large loop would be of such
relative strength that any noticeable pattern change would occur.

Jim, VE3CI

>

[Non-text portions of this message have been removed]

5308. Re: [loopantennas] Re: Reversing a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-08 17:19:13 UTC
From: Andy
Topic: 5250 Message: 5308

> >Changing the feed point will impact pattern.
>
> I believe the original post referred to a horizontal loop. Why would
> placing the feed point impact pattern?

Actually, I think it can. For example, a large horizontal loop used above its primary (1-wavelength circumference) resonant frequency has lobes and nulls in its pattern, and moving the feed point would rotate that pattern.

With a square or triangular loop there is also some difference between feeding it at a corner or the middle of a side.

> I don't think anyone was trying to radiate with DC hi hi. The issue is
> that feeding the horizontal loop with a coax feed line will introduce a
> vertical component (antenna current on the outside of the shield). Will
> the interaction of the two radiation components change if the feed point
> connection is reversed? The idea being that the vertical portion would
> act
> like a 'sense' antenna.

Personally, I wouldn't have used the term 'sense' antenna, but if it works for you, OK. The point is there are two radiators present, the loop and the feedline, and the total radiation (when used for TX) or reception (for RX) is the sum of the two, which might add or cancel to varying degrees in different directions.

> My sense (no pun intended) is that a 'sense' antenna works with a
> bi-directional (vertically positioned) loop and not with an
> omni-directional horizontal loop.

Although a 'sense' antenna might be designed for use with a bi-directional loop to make it cardioid, it will still to do the same kind of alteration to any antenna regardless of its construction or orientation, even though it might not turn it into a nice cardioid. Both antennas, the horizontal loop and the vertical coax, radiate in 3 dimensions and their signals will add in some directions and subtract in others.

You might not get deep nulls that result when the component amplitudes are exactly equal, but it will be different than having the loop alone.

Then, if you flip the connections at the coax/loop connection point, what was additive becomes subtractive and vice-versa. So swapping the connections there (which was the original question), would change the resulting pattern.

Andy

5309. Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-12 05:11:39 UTC
From: tom.9.2006
Topic: 5309 Message: 5309

The technology that we all reject ... for sale at only $43 at my Best Buy, the xdr-s3hd HD radio from Sony...Has line-out (headphones), and also a line-in...Regular price, are you sitting down ... $199 !!!

5310. Re: [loopantennas] Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-12 14:45:56 UTC
From: Jay Heyl
Topic: 5309 Message: 5310

Still listed online at $199. For $43 I might be tempted. I guess I know
where I'm going at lunch time.

-- Jay

On Thu, Jun 12, 2008 at 1:11 AM, tom.9.2006 <indigotalkradio@...>
wrote:

> The technology that we all reject ... for sale at only $43 at my Best Buy,
> the xdr-s3hd HD radio from Sony...Has line-out (headphones), and also a
> line-in...Regular price, are you sitting down ... $199 !!!
>

[Non-text portions of this message have been removed]

5311. Re: [loopantennas] Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-12 17:37:10 UTC
From: Joshua Everett
Topic: 5309 Message: 5311

Not online thou
----- Original Message -----
From: Jay Heyl
To: loopantennas@yahoogroups.com
Sent: Thursday, June 12, 2008 10:45 AM
Subject: Re: [loopantennas] Best Buy HD Radio Closeout

Still listed online at $199. For $43 I might be tempted. I guess I know
where I'm going at lunch time.

-- Jay

On Thu, Jun 12, 2008 at 1:11 AM, tom.9.2006 <indigotalkradio@...>
wrote:

> The technology that we all reject ... for sale at only $43 at my Best Buy,
> the xdr-s3hd HD radio from Sony...Has line-out (headphones), and also a
> line-in...Regular price, are you sitting down ... $199 !!!
>

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG.
Version: 8.0.100 / Virus Database: 270.3.0/1498 - Release Date: 6/11/2008 7:13 PM

[Non-text portions of this message have been removed]

5312. Re: [loopantennas] Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-12 18:34:57 UTC
From: Jay Heyl
Topic: 5309 Message: 5312

What a bust that was! Go to closest Best Buy and all they have left is the display, which is missing the remote. Since there were several other stores in the area that had them in stock I decided against dealing on the display. Go to the next closest store. They have one on the shelf, no display unit, and no price tag. I take it to the front and they want $90.77 for it. I may have to go back to the first one after work and buy the display.

-- Jay

[Non-text portions of this message have been removed]

5313. Re: [loopantennas] HD Antenna Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-13 09:21:57 UTC
From: tom.9.2006
Topic: 5309 Message: 5313

Jay,
Best Buy will discount in increments so the one for $90 may go down to $43. The on-line is still listed as $199.

I heard my first AM HD tonight, ever. Very impressive - the Legendary Larry Van Nuys on Newsradio 1070 KNX L.A. sounded great. Sounds like listening to streaming CBS talk stations (CBS has very high quality streaming like KNX and KPTK/Seattle and KXNT/Vegas).

HOWEVER ... I'm 460 miles ENE of L.A. and the HD signal is there sometimes, but most of the time, the HD indicator is flashing and not solid.

How does one make an HD antenna for AM, and for FM? They're on the Best Buy web site (link Below) Are there any engineering principles different than a stand My Radio Shack AM 9" loop Terk clone doesn't help in combo with the 5" square loop antennas provided with the Sony HD.

best buy HD on sale $43
copy text to scroll bar if line gets broken

http://www.bestbuy.com/site/olspage.jsp?skuId=8383554&st=HD+Radio&type=product&id=1179165802720

--- On Thu, 6/12/08, Jay Heyl <yahoogroups@...> wrote:
From: Jay Heyl <yahoogroups@...>
Subject: Re: [loopantennas] Best Buy HD Radio Closeout
To: loopantennas@yahoogroups.com
Date: Thursday, June 12, 2008, 11:34 AM

What a bust that was! Go to closest Best Buy and all they have left is the

display, which is missing the remote. Since there were several other stores

in the area that had them in stock I decided against dealing on the display.

Go to the next closest store. They have one on the shelf, no display unit,

and no price tag. I take it to the front and they want $90.77 for it. I may

have to go back to the first one after work and buy the display.

-- Jay

[Non-text portions of this message have been removed]

5314. Re: [loopantennas] HD Antenna Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-13 12:59:51 UTC
From: Jay Heyl
Topic: 5309 Message: 5314

On Fri, Jun 13, 2008 at 5:21 AM, tom.9.2006 <indigotalkradio@...>
wrote:

>
> How does one make an HD antenna for AM, and for FM? They're on the Best
> Buy web site (link Below) Are there any engineering principles different
> than a stand My Radio Shack AM 9" loop Terk clone doesn't help in combo with
> the 5" square loop antennas provided with the Sony HD.
>

You need special solid gold Litz wire wound in a spiral, diamond-shaped loop of at least two feet point-to-point diameter. The loop is tuned with an air variable flux capacitor. This is for AM, of course. ;-)

Seriously, it's just a radio signal like any other. Where you might benefit from a special antenna is if you normally use an AM loop that has a very tight peak frequency. The HD signal starts outside the normal envelope of the analog signal. Based on what my ears have heard (as opposed to what the spec says), the HD signal starts about 5kHz from the carrier and goes to at least 15kHz from the carrier. If your tuned antenna results in significant signal strength drop off 8kHz away from the center of the tuned segment you'll be getting far less of the HD signal and may not be able to lock on any but the strongest.

With an untuned loop you shouldn't have this issue.

Skywave reception of HD is going to be spotty under any but the best of conditions. You will probably continue to get the type of reception you reported from distant stations at night.

-- Jay

[Non-text portions of this message have been removed]

5315. Re: [loopantennas] HD Antenna Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-13 14:11:26 UTC
From: Don
Topic: 5309 Message: 5315

The companion HD antennas are on eBay for about $90 with shipping.

Don
Upland, CA

tom.9.2006 wrote:
> Jay,
> Best Buy will discount in increments so the one for $90 may go down to $43. The on-line is still listed as $199.
>
> I heard my first AM HD tonight, ever. Very impressive - the Legendary Larry Van Nuys on Newsradio 1070 KNX L.A. sounded great. Sounds like listening to streaming CBS talk stations (CBS has very high quality streaming like KNX and KPTK/Seattle and KXNT/Vegas).
>
> HOWEVER ... I'm 460 miles ENE of L.A. and the HD signal is there sometimes, but most of the time, the HD indicator is flashing and not solid.
>
> How does one make an HD antenna for AM, and for FM? They're on the Best Buy web site (link Below) Are there any engineering principles different than a stand My Radio Shack AM 9" loop Terk clone doesn't help in combo with the 5" square loop antennas provided with the Sony HD.
>
> best buy HD on sale $43
> copy text to scroll bar if line gets broken
>
> http://www.bestbuy.com/site/olspage.jsp?skuId=8383554&st=HD+Radio&type=product&id=1179165802720
>
>
>
>
>
> --- On Thu, 6/12/08, Jay Heyl <yahoogroups@...> wrote:
> From: Jay Heyl <yahoogroups@...>
> Subject: Re: [loopantennas] Best Buy HD Radio Closeout
> To: loopantennas@yahoogroups.com
> Date: Thursday, June 12, 2008, 11:34 AM
>
>
>
>
>
>
>
>
>

```
>
>
>
> What a bust that was! Go to closest Best Buy and all they have left is the
>
> display, which is missing the remote. Since there were several other stores
>
> in the area that had them in stock I decided against dealing on the display.
>
> Go to the next closest store. They have one on the shelf, no display unit,
>
> and no price tag. I take it to the front and they want $90.77 for it. I may
>
> have to go back to the first one after work and buy the display.
>
>
>
> -- Jay
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
```

>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG.
> Version: 8.0.100 / Virus Database: 270.3.0/1499 - Release Date: 6/12/2008 7:13 AM
>

5316. Re: [loopantennas] HD Antenna Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-13 14:43:49 UTC
From: Andy
Topic: 5309 Message: 5316

> The companion HD antennas are on eBay for about $90 with shipping.

Does that include the flux capacitor?

5317. Re: HD Antenna Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-13 14:50:32 UTC
From: aircheckIover
Topic: 5309 Message: 5317

I'll run over and see if my local Best Buy has one for under $50.
I'll give it a shot if they do. Gosh those radios sure are ugly! Hope
they sound better than they look.

Mark

=========

5318. RE: [loopantennas] HD Antenna Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-13 14:58:18 UTC
From: JAMES WILHELM
Topic: 5309 Message: 5318

I've tried a Twin Coil Ferrite loop, a Terk loop and a 100' long wire and it doesn't seem to make much difference what is used on the Sony SDR-S3HD. Even when distant signals are strong it's hard to keep a lock for anything more than a few minuets. The signal is almost 40khZ wide and phase shifting of a signal that wide at such low frequencies makes locking the signal almost impossible. In other words it's the ionosphere distoring the signal enough to keep the radio from locking.

Jim W
-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]On Behalf Of Don
Sent: Friday, June 13, 2008 10:11 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] HD Antenna Best Buy HD Radio Closeout

The companion HD antennas are on eBay for about $90 with shipping.

Don
Upland, CA

tom.9.2006 wrote:
> Jay,
> Best Buy will discount in increments so the one for $90 may go down to $43. The on-line is still listed as $199.
>
> I heard my first AM HD tonight, ever. Very impressive - the Legendary Larry Van Nuys on Newsradio 1070 KNX L.A. sounded great. Sounds like listening to streaming CBS talk stations (CBS has very high quality streaming like KNX and KPTK/Seattle and KXNT/Vegas).
>
> HOWEVER ... I'm 460 miles ENE of L.A. and the HD signal is there sometimes, but most of the time, the HD indicator is flashing and not solid.
>
> How does one make an HD antenna for AM, and for FM? They're on the Best Buy web site (link Below) Are there any engineering principles different than a stand My Radio Shack AM 9" loop Terk clone doesn't help in combo with the 5" square loop antennas provided with the Sony HD.
>
> best buy HD on sale $43
> copy text to scroll bar if line gets broken
>
>
http://www.bestbuy.com/site/olspage.jsp?skuId=8383554&st=HD+Radio&type=product&id=1179165802720
>

>
>
>
>
> --- On Thu, 6/12/08, Jay Heyl <yahoogroups@...> wrote:
> From: Jay Heyl <yahoogroups@...>
> Subject: Re: [loopantennas] Best Buy HD Radio Closeout
> To: loopantennas@yahoogroups.com
> Date: Thursday, June 12, 2008, 11:34 AM
>
>
>
>
>
>
>
>
>
>
>
> What a bust that was! Go to closest Best Buy and all they have left is
the
>
> display, which is missing the remote. Since there were several other
stores
>
> in the area that had them in stock I decided against dealing on the
display.
>
> Go to the next closest store. They have one on the shelf, no display
unit,
>
> and no price tag. I take it to the front and they want $90.77 for it. I
may
>
> have to go back to the first one after work and buy the display.
>
>
>
> -- Jay
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and
GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG.
> Version: 8.0.100 / Virus Database: 270.3.0/1499 - Release Date:
6/12/2008 7:13 AM
>

[Non-text portions of this message have been removed]

5319. Re: Best Buy HD Radio Closeout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-13 16:06:27 UTC
From: Rob - W1AEX
Topic: 5309 Message: 5319

Thanks for the alert to the potential sale price for this radio. Apparently it is a local market thing and varies from store to store. I took a ride over to one of the local Best Buy stores in my area and saw that they had discounted it to 116 bucks. After telling me what a great deal this was, I mentioned that it was on sale for 43 bucks in some markets, then I asked him why the box was covered with so much dust. He admitted that they were not exactly jumping off the shelf. I offered them 50 bucks for it and they came back with 75 bucks. So... I grabbed it for 75 bucks and whipped out an old Best Buy gift card for 50 bucks and got it for 25 bucks out of my own pocket. So, it appears that each store will wheel and deal a little to get these things off their shelves.

As far as the radio goes, aside from a few little quirky things (no battery backup so you lose time/alarm settings and your station presets if power is lost) this is a fabulous radio. I have not used any other antennas yet except for the supplied AM loop and the FM dipole, but had no problem filling up the FM presets (20 of them) with HD content, and was able to receive the two AM stations (one of them in HD)I am apt to listen to without any problems at all. The fidelity is outstanding and the remote is very convenient for getting into menus with a single button press. This is a seriously nice chunk of radio for 100 bucks or less. As a bonus, it has a line input for my little MP3 player and it does a great job with that function. If you are interested in this thing, I'd suggest you read the reviews online at the Best Buy site to get some insight into how purchasers rate it.

I think I really like this thing! Can't wait to plug one of my loops into it for some AM DX work!

:O)

Rob

--- In loopantennas@yahoogroups.com, "tom.9.2006" <indigotalkradio@...> wrote:
>
> The technology that we all reject ... for sale at only $43 at my Best Buy, the xdr-s3hd HD radio from Sony...Has line-out (headphones), and also a line-in...Regular price, are you sitting down ... $199 !!!
>

5320. New Drake SW8 group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-13 21:54:25 UTC
From: Denny Dollahon
Topic: 5320 Message: 5320

Hi Group,
I wanted to let everyone know I have started a new group for owners and fans of the Drake SW8 shortwave receiver:

http://groups.yahoo.com/group/DrakeSW8

Please let anyone who has a Drake SW8 or is interested in one know about it and feel free to check it out. Denny Dollahon.

5321. My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-15 23:51:01 UTC
From: gmcjetpilot
Topic: 5321 Message: 5321

In a quest to actually hook antennas up to my mini stereo's, which mostly does duty for TV and CD's, I came up with these cheap deals that work. I did not want to go out and buy a $100 worth of indoor antenna stuff I could make which work as well. If I was going to buy an antenna a directional beam on a rotor would be in order. However there is no need, since I live in a target rich radio environment to go with a big antenna. However not wanting to destroy the decor too much here is what I came up with:

http://img249.imageshack.us/img249/7051/amfmslide1pk6.jpg

http://img517.imageshack.us/img517/8027/amfnslide2yo2.jpg

** AM shipping box loop **
The AM antenna is my version of the "Ultimate AM Antenna ** Carver Corporation of Lynnwood, Washington once had plans for with their super high fidelity TX-11b receiver gear back in the 80's.

Here are the plans and excellent analysis of this loop from the web.

Plans "Ultimate AM radio LOOP"
http://members.cox.net/rwagoner/columns/am_antenna.html

Basically it's an un-tuned loop 12" per side. The USPS box is 12 x 13.625 by 3 thick. I had about 23 feet of 22awg stranded tfe lying around so why not. My first attempt before the loop was to string the wire up along the wall horizontal. I did not use a ground and just attached the one end to the radio; it was a noise collector, horrible.

This loop works perfect and that wall is east-west. The main stations are to the east.

I can just tack the box to the wall behind the radio or dresser, out of the way and out of sight. I could even get a nicer box and put a picture on it? ha-ha

There are only one or two AM stations worth listening to, and both are pointed E. A few stations are N-S orientation and fixing the loop N-S makes them go bye bye, which is OK. With out the LOOP I have zero.

Explanation of how and why it works
http://www.midnightscience.com/_web/000003be.htm

Of course there are better loops, tuned with air capacitors and of course larger the better. I went with 5 wraps or about 21.5 feet to get around the box 5 times since it was 12" x 13.625".

64" folded dipole:
The FM antenna is 128 inches of 22awg stranded tfe covered wire to a TV balun/transformer (300ohm,:75ohm) to some 75 ohm TV coaxial, than to the radios spring loaded wire terminals. I used clear push tacks to hold it all up, I soldiered on a little pig tail to the shield at the radio end, which is slim pickings on el-cheap-O coaxial with foil and a few drain wires. It works well I get +25 stations. A hand full are 55-65 miles away. Most of those fringe stations come in 4/5 with some static, but one station has no at all static. There other closer stations with some static, but they are college low power deals. According to radio locate dot com they would be weak signals in my zip. The dipole might not be orientated properly but it's better than nothing. I also went for the low end of the band with 64" overall length. I tried connecting it to the cable TV but that result was poor at best. Just the short coaxial lead to the cable TV splitter was better than connection to cable; for some reason TWC in my area does not superimpose FM onto their signal. Not sure if I was dreaming they could or did that.

The cost to make the loop about $2.00 and it works. Moving it around shows clear gain and noise rejection. The TV or cable box is giving off some wicked 60hz hum and some other noise. The dipole was as cheap. I had the wire, balun and coaxial. Oh I did use crimp on terminals on the wire.

** Carver was famous for building the best amps in the world and also suing audio magazines. He threw down challenges and won. The company is out of consumer products but they still make high end commercial sound systems for theaters under sunfire. Carver still holds a boat load of patents on things like Sonic holography, Magnetic field coil power amplifier, Transfer function modification, Digital Time Lens (DTL) or "Soft eq", Asymmetrical charge coupled stereo detector. The AM tuner of the TX-11a and TX-11b versions employed a notch filter that demonstrated an AM broadcast can exceed the 15 kHz bandwidth of FM stations without objectionable

interference (in theory, but may no longer be true since
about 1990 AM freqs spacing was reduced, I think?)

5322. Re: [loopantennas] My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-16 01:31:00 UTC
From: Jim Dunstan
Topic: 5321 Message: 5322

At 11:51 PM 6/15/2008 +0000, you wrote:

The 'Ultimate AM antenna' is ultimately a compromise given the situation of using the TX-11. The compromise being enough signal for good copy without overload vs broadband (No tuning). I assume that is what you are aiming at with your situation. I do not know what kind of AM front end your mini-stereo possess, but it probably has a tuned ferrite antenna .... with provision for connection of an external antenna. I have a number of quality AM receivers with this kind of front end design. The result is that you in fact have two antennas (both loops) and 2 RF sources. The result is that orienting the shipping box loop for minimum noise is only half the solution; the mini-stereo must also be oriented so it's internal antenna produces a minimum noise. If your mini-HiFi has a plastic case it probably has an internal tuned ferrite antenna.

The 'Ultimate Am antenna' is not a DX antenna (to be fair it was not designed to be). Simply tuning the loop .... even with a smaller diameter than 1'x1' will provide dramatically better performance ... more signal voltage with a narrower pass band. In my location the 'Ultimate AM antenna' falls dramatically short of the mark since the closest AM station is 180 miles away (almost as the crow flies). The result is, for me, all AM reception is DX hi.

Getting back to receivers again, I have several quality receivers that are well shielded with no internal ferrite antenna; no external antenna .... no reception. One of them is an excellent HiFi receiver ... old, but certainly more modern than the TX-11. It has an excellent front end with a tuned RF amplifier. It came with a simple un-tuned loop for AM which consists of 3 turns of insulated wire on an 8.5" plastic loop form. It worked vy well on local broadcast stations (we did have 2 stations a few years ago). In order to pick up the DX stations I constructed a tuned loop about 12" square. I then simply made a suspension hook on the tuned loop on which I place the 8" untuned loop when tuning DX stations. After the last AM station closed down (6 mo ago) all AM reception is DX . The 'Ultimate AM antenna' won't work here hi hi.

By the way, with small loops maximum signal is off the sides and the null is broadside to the loop, opposite of full size loops. I find that rotation is seldom required. The null is quite sharp but maximum signal is quite broad. All that is required is to orient for minimum noise.... thereafter reception is good to acceptable in all directions except for the small portion of the azimuth occupied by the null. However, as pointed out in the online article you posted, tuning the loop for each station is a pain ... unless your objective is DX hi hi.

By the way, I am located in Thunder Bay on Lake Superior. The DX stations
are all in Minnesota and Wisconsin .. I often travel down to Duluth and/or
Minneapolis so I like to keep in touch with their local news hi.
I can sit out on the deck and receive 4 stations with 'full quieting' with
a simple 1 ft tune loop.

Jim

>In a quest to actually hook antennas up to my mini
>stereo's, which mostly does duty for TV and CD's, I
>came up with these cheap deals that work. I did not
>want to go out and buy a $100 worth of indoor antenna
>stuff I could make which work as well. If I was going
>to buy an antenna a directional beam on a rotor would
>be in order. However there is no need, since I live in
>a target rich radio environment to go with a big antenna.
>However not wanting to destroy the decor too much here
>is what I came up with:
>
><http://img249.imageshack.us/img249/7051/amfmslide1pk6.jpg>http://img249.imageshack.us/im
g249/7051/amfmslide1pk6.jpg
>
>http://img517.imageshack.us/img517/8027/amfnslide2yo2.jpg
>
>** AM shipping box loop **
>The AM antenna is my version of the "Ultimate
>AM Antenna ** Carver Corporation of Lynnwood,
>Washington once had plans for with their super
>high fidelity TX-11b receiver gear back in the 80's.
>
>Here are the plans and excellent analysis of this
>loop from the web.
>
>Plans "Ultimate AM radio LOOP"

[Non-text portions of this message have been removed]

5323. Re: My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-16 15:39:28 UTC
From: tenorman1952
Topic: 5321 Message: 5323

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 11:51 PM 6/15/2008 +0000, you wrote:
>
> The 'Ultimate AM antenna' is ultimately a compromise given the situation of
> using the TX-11. The compromise being enough signal for good copy without
> overload vs broadband (No tuning). I assume that is what you are aiming at
> with your situation. I do not know what kind of AM front end your
> mini-stereo possess, but it probably has a tuned ferrite antenna .... with
> provision for connection of an external antenna.

If you will go to the photos section on the first page, Loop Kits by tenorman1952, you will see a photo of my "Ultimate AM Loop".

Regarding built in ferrite antennae, these untuned loops work very will with tuners that do not have built in ferrite sticks. In fact, they seem to short out the ferrite stick and the tuner gets less signal.

My untuned loops work very effectively with my various Onkyo receivers and tuners, all of which lack a ferrite stick antenna.

As far as DX, I have, at night, from my home on the La Gulf Coast, listened to WSB in Atlanta to the east, WOAI San Antonio to the west, WBAP in Dallas, KMOX in St. Louis, WLW in Cincinnati, WGN and WLS in Chicago. I can pick these up pretty consistently, with good clear, strong signals.

And no fiddling with a tuning cap.

But a tuned loop does have a stronger signal. Still, this simple untuned loop can work quite well in many cases.

Paul
tenorman1952

5324. Re: My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-16 18:35:09 UTC
From: gmcjetpilot
Topic: 5321 Message: 5324

Replies below:

>Jim Dunstan <jimdunstan@...> wrote:

>I do not know what kind of AM front end your
>mini-stereo possess, >but it probably has a tuned
>ferrite antenna .... with provision for connection
>of an external antenna. I have a number of
>quality AM >receivers with this kind of front end
>design. The result is that you in fact have two
>antennas (both loops) and 2 RF sources.

The manual shows no internal loop stick. I took it apart to fix the CD and tape belts. It just has two wire input for AM. I saw no loop stick. According to the manual it came with, it came with a wire loop, but I have no idea where that is. I bought this new about +10 years ago. I love the little thing sounds great. A lot of the mini systems I hear at best buy sound like crud. Also the case is METAL!

>Simply tuning the loop .... even with a smaller
>diameter than 1'x1' will provide dramatically
>better performance ... more signal voltage with a
>narrower pass band. In my location the 'Ultimate
>AM antenna' falls dramatically short of the mark
>since the closest AM station is 180 miles away
>(almost as the crow flies). The result is, for me,
>all AM reception is DX hi.

TO BE FAIR I have not given the Awia a good A/B test. I'll have to unplug it and bring it upstairs and really compare it to my other "REAL" radios, a Ten Tec RX320D (45' random) and Degen DE1103, using active AM loop with amplified loop booster stick (next to the internal one).

For AM DX'ing the Awia I suspect is not going to great?I could be wrong. Frankly my "Standard" for AM radio is an old Sony ICF-34 portable with a BIG LOOP stick inside. I know its good sized because I also took it apart, 6" may be 8"? The Sony does OK but digital tuning is the way to go. Analog with an inaccurate dial makes DX'ing and ID'ing stations difficult.

> Getting back to receivers again, I have several
>quality receivers that are well shielded with no

>internal ferrite antenna; no external antenna no
>reception.

I don't know about quality but this AWIA cost big
bucks in the day and it has NO internal loop-stick.
In fact the whole case is metal. No loop no signal
at all!

For fun I am going to get it away from the cable
box/TV which put out some sadly. I just got the
TV, Sony KDL-32M3000 and think it is making
some noise. The antenna is right next to it. Seems
to not affect FM, but AM in the 1000-1700 Khz
range has some real howl in spots. Even the
strongest station has a subtle 60Hz hum (but
bairly).

My real radio shack is up stairs with the "real" radios.
This is just for fun. I do have an old SX780 pioneer
in the living room that I want to get going as well,
but the air capacitor has so much dust in it tuning
it is very unpleasant. The Pioneer does have an attached
real loop stick off the back in a plastic case and a
gimbal mount you can rotate and aim. It is at least 6"
to 10" long. I suspect the Pioneer will be a good AM
radio. I used FM to great affect. Its pure analog of
course but has a huge accurate dial, plus a signal
meter, analog of course.

BTW on the strong stations (680 and 850) moving
the loop N-S brings in normal static and E-W
brings the signal in well. So the loop works to
some extent. I plan on making a nice 2'x2' tuned
loop.

Also I am going to try my Degen/Kaito TG34
active loop on the Awia, again away from the TV.
I'll compare it to my other radios.

Right now the box is behind the radio/stereo and it
works well on the two stations I can get easy and
care about (really one). Frankly a portable AM
radio SONY ICF-34, with a good sized loop stick
(took it apart and eye balled it), doesn't do much
better.

I think in the case of the Awia they put in AM as
an after thought to fill in the features list. It has a 3-
disk CD changer, two auto reverse tape decks,
Karaoke mic input and affects (really works, filters
out voice, re-verb etc). The FM is good but the AM
was an after thought, to fill in the features list. I

love this little unit because it has surround sound;
each speaker has 5 speakers and 4 wires, two sets
of speaker wires, bass and surround. With the EQ
and surround affects it sounds awesome. It even
has an output for a powered subwoofer. I had it
open fix the CD player and Tape deck. Long story
but I fixed both!

Thanks Jim I appreciate all the cool info.

Thanks again.

5325. Re: [loopantennas] Re: My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-16 19:21:16 UTC
From: Jim Dunstan
Topic: 5321 Message: 5325

At 03:39 PM 6/16/2008 +0000, you wrote:

>--
>If you will go to the photos section on the first page, Loop Kits by
>tenorman1952, you will see a photo of my "Ultimate AM Loop".
>
>Regarding built in ferrite antennae, these untuned loops work very will
>with tuners that do not have built in ferrite sticks. In fact, they
>seem to short out the ferrite stick and the tuner gets less signal.

Yes they do .... however, the point I was making is that if you use an external loop (tuned or untuned) with a receiver that uses an internal Ferrite Loop you have 2 antennas at work. If your objective is to null local noise then the receiver and the external loop have to oriented for minimum noise.

>My untuned loops work very effectively with my various Onkyo receivers
>and tuners, all of which lack a ferrite stick antenna.

Yes, if the receiver does not have an internal ferrite loop antenna then the external antenna (loop or otherwise) is the only antenna. I too use a loop with this kind of receiver.

>As far as DX, I have, at night, from my home on the La Gulf Coast,
>listened to WSB in Atlanta to the east, WOAI San Antonio to the west,
>WBAP in Dallas, KMOX in St. Louis, WLW in Cincinnati, WGN and WLS in
>Chicago. I can pick these up pretty consistently, with good clear,
>strong signals.

For me, receiving stations at night is not DX .... a different kind of DX perhaps. The kind of reception you refer to is 'falling of a log' kind of dx .... any kind of receiver ... antenna or no antenna will work .... never mind if it has a tuning cap hi hi

However daytime reception of a station 250 miles away will certainly require an excellent antenna.

>And no fiddling with a tuning cap.
>
>But a tuned loop does have a stronger signal. Still, this simple
>untuned loop can work quite well in many cases
>
>Paul
>tenorman1952

So Paul, ur untuned loop will work just fine if all you want to do is listen to local stations during the day and listen random "DX" stations at

night.

Jim

5326. Re: [loopantennas] Re: My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-16 19:27:19 UTC
From: Jay Heyl
Topic: 5321 Message: 5326

On Mon, Jun 16, 2008 at 11:39 AM, tenorman1952 <tenorman1952@...>
wrote:

>
> As far as DX, I have, at night, from my home on the La Gulf Coast,
> listened to WSB in Atlanta to the east, WOAI San Antonio to the west,
> WBAP in Dallas, KMOX in St. Louis, WLW in Cincinnati, WGN and WLS in
> Chicago. I can pick these up pretty consistently, with good clear,
> strong signals.
>

I don't mean to burst any bubbles, but I wouldn't consider any of those to be DX. Sure, they're a distance away, but they're all 50kW stations that cover almost half the lower 48. I can get all of those here in Orlando at night on my pocket-sized Sony SRF-59 with the built in 2" ferrite antenna. WFAN and WABC from New York are also regular visitors, along with WJR from Detroit.

I'm not saying your loop isn't good, just that these aren't the receptions to be bragging about if you want the loop to sound good.

-- Jay

[Non-text portions of this message have been removed]

5327. Re: [loopantennas] Re: My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-16 19:33:27 UTC
From: Jay Heyl
Topic: 5321 Message: 5327

On Mon, Jun 16, 2008 at 3:21 PM, Jim Dunstan <jimdunstan@...> wrote:

>
> For me, receiving stations at night is not DX .... a different kind of DX
> perhaps. The kind of reception you refer to is 'falling of a log' kind of
> dx .... any kind of receiver ... antenna or no antenna will work .... never
> mind if it has a tuning cap hi hi

I wouldn't go so far as to say there is no DX at night. If you can pull in a 5kW station from 1000 miles away, I'd say that probably qualifies. I agree, though, that hearing a 50kW station from 1000 miles away is no big thing. It's hard not to hear it unless you have nearby stations on the same frequency.

-- Jay

[Non-text portions of this message have been removed]

5328. Re: [loopantennas] Re: My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-16 19:37:15 UTC
From: Jim Dunstan
Topic: 5321 Message: 5328

At 06:35 PM 6/16/2008 +0000, you wrote:

>Replies below:
>
> >Jim Dunstan <jimdunstan@...> wrote:
>
> >I do not know what kind of AM front end your
> >mini-stereo possess, >but it probably has a tuned
> >ferrite antenna .... with provision for connection
> >of an external antenna. I have a number of
> >quality AM >receivers with this kind of front end
> >design. The result is that you in fact have two
> >antennas (both loops) and 2 RF sources.
>
>The manual shows no internal loop stick. I took it
>apart to fix the CD and tape belts. It just has two
>wire input for AM. I saw no loop stick. According
>to the manual it came with, it came with a wire
>loop, but I have no idea where that is. I bought this
>new about +10 years ago. I love the little thing
>sounds great. A lot of the mini systems I hear at
>best buy sound like crud. Also the case is METAL!

That's good, then your strategy of orienting the external loop is just fine. My HiFi (Nikko) is also metal enclosed with no internal ferrite antenna. With my loop it is the best AM receiver I have ... the problem is that it is stationary indoors hi hi.

> >Simply tuning the loop .... even with a smaller
> >diameter than 1'x1' will provide dramatically
> >better performance ... more signal voltage with a
> >narrower pass band. In my location the 'Ultimate
> >AM antenna' falls dramatically short of the mark
> >since the closest AM station is 180 miles away
> >(almost as the crow flies). The result is, for me,
> >all AM reception is DX hi.
>
>TO BE FAIR I have not given the Awia a good A/B test.
>I'll have to unplug it and bring it upstairs and really
>compare it to my other "REAL" radios, a Ten Tec RX320D
>(45' random) and Degen DE1103, using active AM loop with
>amplified loop booster stick (next to the internal one).
>
>For AM DX'ing the Awia I suspect is not going to
>great?I could be wrong. Frankly my "Standard" for
>AM radio is an old Sony ICF-34 portable with a BIG

>LOOP stick inside. I know its good sized because I
>also took it apart, 6" may be 8"? The Sony does
>OK but digital tuning is the way to go. Analog with
>an inaccurate dial makes DX'ing and ID'ing stations
>difficult.

FB on the RX320 ... I have one of those as well ... a great radio. Out on the deck the hottest AM radio is an old RadioShack TRF .

> > Getting back to receivers again, I have several
> >quality receivers that are well shielded with no
> >internal ferrite antenna; no external antenna no
> >reception.
>
>I don't know about quality but this AWIA cost big
>bucks in the day and it has NO internal loop-stick.
>In fact the whole case is metal. No loop no signal
>at all!
>
>For fun I am going to get it away from the cable
>box/TV which put out some sadly. I just got the
>TV, Sony KDL-32M3000 and think it is making
>some noise. The antenna is right next to it. Seems
>to not affect FM, but AM in the 1000-1700 Khz
>range has some real howl in spots. Even the
>strongest station has a subtle 60Hz hum (but
>bairly).
>
>My real radio shack is up stairs with the "real" radios.
>This is just for fun. I do have an old SX780 pioneer
>in the living room that I want to get going as well,
>but the air capacitor has so much dust in it tuning
>it is very unpleasant. The Pioneer does have an attached
>real loop stick off the back in a plastic case and a
>gimbal mount you can rotate and aim. It is at least 6"
>to 10" long. I suspect the Pioneer will be a good AM
>radio. I used FM to great affect. Its pure analog of
>course but has a huge accurate dial, plus a signal
>meter, analog of course.
>
>BTW on the strong stations (680 and 850) moving
>the loop N-S brings in normal static and E-W
>brings the signal in well. So the loop works to
>some extent. I plan on making a nice 2'x2' tuned
>loop.

I have used a 2' x 2' tuned loop ... again out on the deck .... a marvel to use. Such a loop makes any AM receiver a superstar. It always amazes me when you tune the loop and the radio jumps from 'stone dead' to blaring audio when it resonants on frequency. You would swear someone switched the on/off switch.

Fooling around with tuned/untuned loops is a cheap way to have fun hi hi

>Also I am going to try my Degen/Kaito TG34
>active loop on the Awia, again away from the TV.
>I'll compare it to my other radios.
>
>Right now the box is behind the radio/stereo and it
>works well on the two stations I can get easy and
>care about (really one). Frankly a portable AM
>radio SONY ICF-34, with a good sized loop stick
>(took it apart and eye balled it), doesn't do much
>better.
>
>I think in the case of the Awia they put in AM as
>an after thought to fill in the features list. It has a 3-
>disk CD changer, two auto reverse tape decks,
>Karaoke mic input and affects (really works, filters
>out voice, re-verb etc). The FM is good but the AM
>was an after thought, to fill in the features list. I
>love this little unit because it has surround sound;
>each speaker has 5 speakers and 4 wires, two sets
>of speaker wires, bass and surround. With the EQ
>and surround affects it sounds awesome. It even
>has an output for a powered subwoofer. I had it
>open fix the CD player and Tape deck. Long story
>but I fixed both!
>
>Thanks Jim I appreciate all the cool info.
>
>Thanks again.

Cu ... Jim

5329. New Member, New Radio, Need antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-16 18:46:47 UTC
From: markjtaylor73
Topic: 5329 Message: 5329

Hello all,
I have just joined this group. I have been using a Sony 7600 for several years and have just ordered a Palstar R30CC. Now I'm going to need an antenna. I am thinking of a loop, maybe a Wellbrook. Would anyone care to offer suggestions for primarily AM BCB listening?
Best regards,
Mark Taylor

5330. Re: New Member, New Radio, Need antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-17 04:14:22 UTC
From: Bucky Hydal
Topic: 5329 Message: 5330

Hi Mark,

1. Wellbrook 1530 (Model depends on how strong local AM stations are near your QTH; I have the 330S, primarily for SW, but also very good on MW.)

2. Quantum QX Loop v2.0 or v.2.0 Plus+

3. C. Crane Twin Coil Ferrite AM Antenna

4. 100-ft random wire. (Sometimes (rarely) the big wire pulls a better signal than the 220S. Plus, it's fun to make A-B comparisons with the 330S.)

Goot luck.

Bucky

--- In loopantennas@yahoogroups.com, "markjtaylor73" <beulahland@...> wrote:
>
> Hello all,
> I have just joined this group. I have been using a Sony 7600 for several years and
> have just ordered a Palstar R30CC. Now I'm going to need an antenna. I am thinking
> of a loop, maybe a Wellbrook. Would anyone care to offer suggestions for primarily
> AM BCB listening?
> Best regards,
> Mark Taylor
>

5331. Re: My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-17 15:31:13 UTC
From: tenorman1952
Topic: 5321 Message: 5331

--- In loopantennas@yahoogroups.com, "Jay Heyl" <yahoogroups@...>
wrote:
>
> On Mon, Jun 16, 2008 at 11:39 AM, tenorman1952 <tenorman1952@...>
> wrote:
>
> > >
> > > As far as DX, I have, at night, from my home on the La Gulf Coast,
> > > listened to WSB in Atlanta to the east, WOAI San Antonio to the
west,
> > > WBAP in Dallas, KMOX in St. Louis, WLW in Cincinnati, WGN and WLS
in
> > > Chicago. I can pick these up pretty consistently, with good
clear,
> > > strong signals.
> > >
>
> I don't mean to burst any bubbles, but I wouldn't consider any of
those to
> be DX. Sure, they're a distance away, but they're all 50kW stations
that
> cover almost half the lower 48.

Hi, Jay!

During the day I can also easily pull in a 5,000 w station I like
that is 180 miles away. That is with the untuned Ultimate.

The tuned loop is stronger, but requires more fiddling of course.

Paul

5332. Re: [loopantennas] Re: My wiz bang AM / FM antenna pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-17 19:52:56 UTC
From: Jim Dunstan
Topic: 5321 Message: 5332

At 03:33 PM 6/16/2008 -0400, you wrote:

>On Mon, Jun 16, 2008 at 3:21 PM, Jim Dunstan
><<mailto:jimdunstan%40rogers.com>jimdunstan@...> wrote:
>
> >
> > For me, receiving stations at night is not DX .... a different kind of DX
> > perhaps. The kind of reception you refer to is 'falling of a log' kind of
> > dx .... any kind of receiver ... antenna or no antenna will work .... never
> > mind if it has a tuning cap hi hi
>
>I wouldn't go so far as to say there is no DX at night. If you can pull in a
>5kW station from 1000 miles away, I'd say that probably qualifies. I agree,
>though, that hearing a 50kW station from 1000 miles away is no big thing.
>It's hard not to hear it unless you have nearby stations on the same
>frequency.
>
>-- Jay

Hi Jay,

You are right, MF DXing at night is a different situation. Trying to receive a particular low power station at night is a matter of dealing with QRM from all the other stations that may be coming in on the same or nearby frequencies. Using the null of the antenna with other special techniques such as signal phasing the DX station can be brought out of the QRM. As I mentioned, my DX is daytime DX ... which is basically a matter of maximizing signals ... and QRM is not a problem.

Jim

[Non-text portions of this message have been removed]

5333. Re: My wiz bang AM / FM antenna pictures (NEW! Mk V - PB)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-18 03:47:17 UTC
From: gmcjetpilot
Topic: 5321 Message: 5333

The first "box" loop was a "Mk I - SB".
(SB for Shipping Box)

The NEW Wiz bang AM antenna is the "Mk V-
PB", PB for Pizza Box. I call it the "Mk V" for
getting five wraps around the box fairly straight,
despite just eating the pizza, that was in the box
and having two beers (or five). (ha-ha)

http://img443.imageshack.us/img443/2949/pizzabox2cw1.jpg

It works about as good as the shipping box version,
may be a tad less, the wires are closer together and
the frozen pizza box is exactly 12" x 12". The
shipping box was "SB" 12" x 13.625" and wider.
The pizza box is better because it's thinner and fits
behind the dresser easily.

Delusion? (ha-ha) No this is not a great, "ultimate",
wiz-bang antenna, but for my needs to get the
50KW or 10KW stations down the street, it's fine and
better than the wire I was running around the room
that picked up signal but noise like crazy.

I suspect it's as good as the other non-tuned loops
you get with consumer electronics, but no where
near a larger tuned (resonate loop).

Since the two stations (680 & 850) are in the same
direction, close and shooting out gobs of power,
it works. Other wise with no antenna the Aiwa AM
radio gets bupkis. To be honest in 10 years I never
used the AM radio on the stereo.

Now that I have this Mk V - PB antenna, from the
comfort of my bedroom I can listen to Rush
Limbaugh, Shawn Hannity and other shows about,
UFO's, Alien's, Gov conspiracies and how to live
to be 100 years old by eating (or not eating).......?

Oh, may be that is why I never connected the
antenna?

I did "test" the Awia Mini Stereo with a "real"
antenna and against a solid AM radio.

I connected my active wire LOOP antenna to the
Mini Stereo:

http://farm2.static.flickr.com/1266/728763061_2efd16e47d_o.jpg

The above active TG34 loop connected to the Aiwa did
better than Mk V - PB antenna, but not by much. However
when I use that loop on other radios they come alive.
To be fair when you tune the loop the Aiwa did respond
but just not like other radios with loop sticks. There
are two ways to connect, direct or through a loop-stick
booster/repeater.

I used my Sony ICF-34 (cheap portable/table-top
am/fm/tv/wx radio) to compare to the Aiwa mini
stereo with the Pizza box antenna. It was not
impressive, to say the least. The two stations are
50kw and 10kw day transmitters (5kw night), so its
not a technical miracle.

Info on two strong stations from Radio locator:
http://www.radio-locator.com/cgi-bin/info?call=WPTF&service=AM
http://www.radio-locator.com/cgi-bin/info?call=WRBZ&service=AM

The stations are close and the Pizza box behind the
dresser is aimed at the two close stations, mission
accomplished, 50-cent antenna. As I said turning the
Pizza box 90 degrees does cause even these strong
stations to get some static (ie rejecting the signal).

The two strong stations sound excellent on the
Awia, but weak stations where stronger on the
Sony. The Sony also heard stations the Awia could
not, even moving the Mk V -PB antenna around.
The Awia really picked up crazy noise in spots.
Also the location of the 1st floor bedroom, inner
walls is not very ideal. My radio room is 2nd floor
near corner windows.

Still the Sony ICF=34 compared to the Aiwa stereo
just ignored noise, suppressing partly or totally
(better gain, BW, filters?). I had this Sony radio in
the closet (got it free at time-share deal), thinking it
was junk. I'm impressed, it really works (but it's
not a RCA Superadio III I am sure).

If I connected a long-wire to the Aiwa stereo's AM
radio antenna input, would it become a DX
machine? Yea but not a good one I think. It's
digital tuning is locked into 10 Khz steps.

Conclusion, if you want a 'LX' antenna for strong
local stations, the Wiz-bang, ultimate, Mk pizza

box will work. Most of these stereos come with some kind of loop, which probably do as well, but for fun build one and see how it compares. I am sure changing wraps and size you can tune it.

A nice light wood frame, with some varnish would look classy, verses the Pizza box. Of course if you are going to make a loop a 2 foot'er with a air capacitor to "resonate" would be time well spent.

Cheers George

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:

> > > For me, receiving stations at night is not DX .... a different kind of DX

>>I wouldn't go so far as to say there is no DX at
>>night. If you can pull in a 5kW station from
>>1000 miles away, I'd say that probably qualifies.
>>I agree, though, that hearing a 50kW station
>>from 1000 miles away is no big thing. It's hard
>>not to hear it unless you have nearby stations on
>>the same frequency.
>>
>>-- Jay
>
> Hi Jay,
>
> You are right, MF DXing at night is a different
>situation. Trying to receive a particular low
>power station at night is a matter of dealing with
>QRM from all the other stations that may be
>coming in on the same or nearby frequencies.
>Using the null of the antenna with other special
>techniques such as signal phasing the DX station
>can be brought out of the QRM. As I mentioned,
>my DX is daytime DX ... which is basically a
>matter of maximizing signals ... and QRM is not a
>problem.
>
> Jim

5334. AM ferrite loop for HT?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-23 13:08:22 UTC
From: genedathe
Topic: 5334 Message: 5334

Hello,

Please forgive if this has been covered before.

I'm looking for a MW ferrite loop with a SMA connector to replace the stock rubber duck on my Icom 92AD. One antenna screws off, other one on so I can convert the HT over when the ball game comes on.
Any such beast?

Thank you in advance,

73 de NAØG

5335. Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-26 19:47:05 UTC
From: Adam E.
Topic: 5335 Message: 5335

I need information on how to build my first working shortwave loop antenna. Also what are the parts required for building it?

Adam E.

5336. Re: ***SPAM*** [loopantennas] Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-26 23:33:49 UTC
From: EDUARDO
Topic: 5336 Message: 5336

Hello,
see the page :-

http://www.pcproject.com.br/forum/projetos/13522-antena_loop_para_om.htm

good lock,

Eduardo
Mairiporã- SP- Brazil
Grid Locator : GG66qq
----- Original Message -----
From: Adam E.
To: loopantennas@yahoogroups.com
Sent: Thursday, June 26, 2008 4:47 PM
Subject: ***SPAM*** [loopantennas] Shortwave Loop Antenna Construction

I need information on how to build my first working shortwave loop
antenna. Also what are the parts required for building it?

Adam E.

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 270.4.1/1521 - Release Date: 26/6/2008 11:20

[Non-text portions of this message have been removed]

5337. Re: ***SPAM*** [loopantennas] Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-28 16:54:25 UTC
From: Adam E.
Topic: 5336 Message: 5337

Sorry but there is no link there except a Spanish forum that does not
have any instructions in building a SW loop antenna. If anyone else
can help that would be greatly appreciated thanks.

Adam E.

--- In loopantennas@yahoogroups.com, "EDUARDO" <adcas@...> wrote:
>
> Hello,
> see the page :-
>
> http://www.pcproject.com.br/forum/projetos/13522-antena_loop_para_om.htm
>
> good lock,
>
> Eduardo
> Mairiporã- SP- Brazil
> Grid Locator : GG66qq
> ----- Original Message -----
> From: Adam E.
> To: loopantennas@yahoogroups.com
> Sent: Thursday, June 26, 2008 4:47 PM
> Subject: ***SPAM*** [loopantennas] Shortwave Loop Antenna Construction
>
>
>
> I need information on how to build my first working shortwave loop
> antenna. Also what are the parts required for building it?
>
> Adam E.
>
>
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it
in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG

and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.516 / Virus Database: 270.4.1/1521 - Release Date:
26/6/2008 11:20
>
>
>
> [Non-text portions of this message have been removed]
>

5338. Re: [loopantennas] Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-28 19:25:17 UTC
From: Jim Dunstan
Topic: 5335 Message: 5338

At 07:47 PM 6/26/2008 +0000, you wrote:

>I need information on how to build my first working shortwave loop
>antenna. Also what are the parts required for building it?
>
>Adam E.

Hi Adam,

I assume you are looking at a 'small' loop antenna .... technically a small loop is considered to be 1/10 of a wavelength in dia. or less and it is to be used for SW reception ... eg you are not transmitting with it.

Lets say your SW loop will be for reception only and physically about 3' in diameter or less.

Now such loops fall into 2 categories .... tuned and untuned. Tuned loops are very efficient and work vy well with the shortcoming that they either have to be located close enough to the listening position so you can manually tune them or you contrive a system to tune them remotely if it is to located at a distance. Untuned loops of course don't suffer this problem .... they are however inefficient and require a high gain amplifier to compensate .... the amplifier located at the loop position.

There is a somewhat intermediate solution that uses a tuned loop that is tuned at the end of the feed line by an 'antenna tuner' located at the listening position. However, the distance between the loop and tuner is limited to approximately 8' to 10'

Having said all this, you will have to narrow down your project hi hi

Jim

5339. Re: ***SPAM*** [loopantennas] Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-29 15:04:39 UTC
From: airchecklover
Topic: 5336 Message: 5339

--- In loopantennas@yahoogroups.com, "Adam E." <gccradioscience@...>
wrote:
>
>
> Sorry but there is no link there except a Spanish forum that does not
> have any instructions in building a SW loop antenna. If anyone else
> can help that would be greatly appreciated thanks.
>
>
> Adam E.

Adam; I agree with Jim. What do you want to build? ... untuned passive loop? active loop? tuned passive loop? resonant cut loop/folded dipole? 1.5 years ago I did not know anything about loops but I read through some of the 5300 messages in this particular forum & used Google to find loop theory and projects on the web. I learned the difference between active verses passive and tuned verses untuned. What I couldn't understand, people on this forum helped me out. Go figure out what you want to build by doing some reading - or at least do some reading, get totally confused (it happened to me :)- then ask questions on how to proceed and we will jump in and help you out. Or buy a Wellbrook and be done with it :)

Mark

5340. Re: ***SPAM*** [loopantennas] Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-29 16:06:16 UTC
From: Adam E.
Topic: 5336 Message: 5340

Tuned passive loop for to hang around by the window.

--- In loopantennas@yahoogroups.com, "airchecklover" <mdh@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Adam E." <gccradioscience@>
> wrote:
> >
> >
> > Sorry but there is no link there except a Spanish forum that does not
> > have any instructions in building a SW loop antenna. If anyone else
> > can help that would be greatly appreciated thanks.
> >
> >
> > Adam E.
>
> Adam; I agree with Jim. What do you want to build? ... untuned passive
> loop? active loop? tuned passive loop? resonant cut loop/folded
> dipole? 1.5 years ago I did not know anything about loops but I read
> through some of the 5300 messages in this particular forum & used
> Google to find loop theory and projects on the web. I learned the
> difference between active verses passive and tuned verses untuned.
> What I couldn't understand, people on this forum helped me out. Go
> figure out what you want to build by doing some reading - or at least
> do some reading, get totally confused (it happened to me :)- then ask
> questions on how to proceed and we will jump in and help you out. Or
> buy a Wellbrook and be done with it :)
>
> Mark
>

5341. Re: [loopantennas] Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-29 16:55:10 UTC
From: Chris Trask
Topic: 5335 Message: 5341

```
>
> >
> > > Sorry but there is no link there except a Spanish forum that does not
> > > have any instructions in building a SW loop antenna. If anyone else
> > > can help that would be greatly appreciated thanks.
> > >
> > >
> > > Adam E.
> >
> > Adam; I agree with Jim. What do you want to build? ... untuned passive
> > loop? active loop? tuned passive loop? resonant cut loop/folded
> > dipole?
>
>
> Tuned passive loop for to hang around by the window.
>
```

A wideband tuned passive loop will be very difficult to implement as the impedance of the loop will vary significantly. For instance, a 1 meter diameter loop consisting of 1 turn of 1/4" diameter copper tubing will have a resistance of about 0.5 ohms at 4MHz, 10 ohms at 12MHz, and then increases to 420 ohms at 15MHz. It's parallel resonance is around 17.9MHz. With a 4:1 BalUn transformer, such an antenna can be easily used for the 25M SWBC band without an amplifier.

I went through months of building and testing loops of various diamters, turns, and conductor diameters for my 2-part series on active loops in the Jul/Aug and Sep/Oct 2003 issues of QEX.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5342. Before I Go To EBAY With This...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-29 18:13:24 UTC
From: msznh
Topic: 5342 Message: 5342

I'm getting rid of some good stuff that a SWL might be interested in.
Thought I'd offer this here before I go to Ebay or Craigslist.

This is for SWL/Receive mode only. NOT for transmission.

I have a never-been-used RF Systems Wideband WA-50 rf amplifier for
sale. Read up on it here:

http://www.universal-radio.com/catalog/preamps/3574.html
http://www.rf-systems.nl/pdf/wa50.pdf

I originally paid $200. Willing to let it go for $100 + S&H.

If interested contact me privately off line. US & Canada only.

Tom

5343. Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-30 03:27:22 UTC
From: Adam E.
Topic: 5335 Message: 5343

That sounds pretty hard, oops, my mistake, I got the wrong one. Ok let me explain, there is a shortwave loop antenna that I want to plan on building soon a company called MTM Scientific made and they sell it as a kit and I wanted to learn more about how to build one with readably available parts . I saw this kit and I thought it would be fun to build since there is a frame and wire and other parts and pieces. If not possible I guess I will have to buy this kit soon. I am still considering getting myself a copy of the JJ Carrs Loop Antenna Handbook for me to study when I am bored. Thanks for the help, its really appreciated.

link: http://www.mtmscientific.com/swloop.html

Adam E.
Virginia Beach VA

SWL Radios: Grundig YB-400PE, G5, Mini 300, S-350DL, FR-200. Radio Shack DX-380, 390, 392, 398. RY-611 and CF-1888

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > >
> > > > Sorry but there is no link there except a Spanish forum that does not
> > > > have any instructions in building a SW loop antenna. If anyone else
> > > > can help that would be greatly appreciated thanks.
> > > >
> > > >
> > > > Adam E.
> > >
> > > Adam; I agree with Jim. What do you want to build? ... untuned passive
> > > loop? active loop? tuned passive loop? resonant cut loop/folded
> > > dipole?
> > >
> > >
> > > Tuned passive loop for to hang around by the window.
> > >
> >
> > A wideband tuned passive loop will be very difficult to implement as the impedance of the loop will vary significantly. For instance, a 1 meter diameter loop consisting of 1 turn of 1/4" diameter copper tubing will have a resistance of about 0.5 ohms at 4MHz, 10 ohms at 12MHz, and then increases to 420 ohms at 15MHz. It's

parallel resonance is around 17.9MHz. With a 4:1 BalUn transformer, such an antenna can be easily used for the 25M SWBC band without an amplifier.
>
> I went through months of building and testing loops of various diamters, turns, and conductor diameters for my 2-part series on active loops in the Jul/Aug and Sep/Oct 2003 issues of QEX.
>
>
>
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

5344. Re: ***SPAM*** [loopantennas] Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-30 15:17:40 UTC
From: Eduardo
Topic: 5344 Message: 5344

Hello,

We are using antenna to OT and OC made with ferrite, frequency coverage of 1500 khz ~ 16 Mhz. Its construction is simple, and use the device to signal with inducer. The results were satisfactory. If you have interest can send the scheme.

Respectfully,

Eduardo
SP-Brasil
GG66qq
----- Original Message -----
From: Adam E.
To: loopantennas@yahoogroups.com
Sent: Monday, June 30, 2008 12:27 AM
Subject: ***SPAM*** [loopantennas] Re: Shortwave Loop Antenna Construction

That sounds pretty hard, oops, my mistake, I got the wrong one. Ok
let me explain, there is a shortwave loop antenna that I want to plan
on building soon a company called MTM Scientific made and they sell it
as a kit and I wanted to learn more about how to build one with
readably available parts . I saw this kit and I thought it would be
fun to build since there is a frame and wire and other parts and
pieces. If not possible I guess I will have to buy this kit soon. I
am still considering getting myself a copy of the JJ Carrs Loop
Antenna Handbook for me to study when I am bored. Thanks for the
help, its really appreciated.

link: http://www.mtmscientific.com/swloop.html

Adam E.
Virginia Beach VA

SWL Radios: Grundig YB-400PE, G5, Mini 300, S-350DL, FR-200. Radio
Shack DX-380, 390, 392, 398. RY-611 and CF-1888

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > >
> > > > Sorry but there is no link there except a Spanish forum that
does not
> > > > have any instructions in building a SW loop antenna. If
anyone else
> > > > can help that would be greatly appreciated thanks.

> > > >
> > > >
> > > > Adam E.
> > >
> > > Adam; I agree with Jim. What do you want to build? ... untuned
passive
> > > loop? active loop? tuned passive loop? resonant cut loop/folded
> > > dipole?
> >
> >
> > Tuned passive loop for to hang around by the window.
> >
>
> A wideband tuned passive loop will be very difficult to
implement as the impedance of the loop will vary significantly. For
instance, a 1 meter diameter loop consisting of 1 turn of 1/4"
diameter copper tubing will have a resistance of about 0.5 ohms at
4MHz, 10 ohms at 12MHz, and then increases to 420 ohms at 15MHz. It's
parallel resonance is around 17.9MHz. With a 4:1 BalUn transformer,
such an antenna can be easily used for the 25M SWBC band without an
amplifier.
>
> I went through months of building and testing loops of various
diamters, turns, and conductor diameters for my 2-part series on
active loops in the Jul/Aug and Sep/Oct 2003 issues of QEX.
>
>
>
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.4.3/1526 - Release Date: 30/6/2008 08:43

[Non-text portions of this message have been removed]

5345. Re: ***SPAM*** [loopantennas] Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-30 15:40:22 UTC
From: RexR
Topic: 5344 Message: 5345

Greetings from Jamestown, CA

I'd be interested in seeing the schematic and any construction notes you'd care to share,

Rex in Jamestown, CA

Hello,

We are using antenna to OT and OC made with ferrite, frequency coverage of 1500 khz ~ 16 Mhz. Its construction is simple, and use the device to signal with inducer. The results were satisfactory. If you have interest can send the scheme.

Respectfully,

Eduardo
SP-Brasil
GG66qq
----- Original Message -----
From: Adam E.
To: loopantennas@yahoogroups.com
Sent: Monday, June 30, 2008 12:27 AM
Subject: ***SPAM*** [loopantennas] Re: Shortwave Loop Antenna Construction

That sounds pretty hard, oops, my mistake, I got the wrong one. Ok
let me explain, there is a shortwave loop antenna that I want to plan
on building soon a company called MTM Scientific made and they sell it
as a kit and I wanted to learn more about how to build one with
readably available parts . I saw this kit and I thought it would be
fun to build since there is a frame and wire and other parts and
pieces. If not possible I guess I will have to buy this kit soon. I
am still considering getting myself a copy of the JJ Carrs Loop
Antenna Handbook for me to study when I am bored. Thanks for the
help, its really appreciated.

link: http://www.mtmscientific.com/swloop.html

Adam E.
Virginia Beach VA

SWL Radios: Grundig YB-400PE, G5, Mini 300, S-350DL, FR-200. Radio
Shack DX-380, 390, 392, 398. RY-611 and CF-1888

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > >

> > > > Sorry but there is no link there except a Spanish forum that
does not
> > > > have any instructions in building a SW loop antenna. If
anyone else
> > > > can help that would be greatly appreciated thanks.
> > > >
> > > >
> > > > Adam E.
> > >
> > > Adam; I agree with Jim. What do you want to build? ... untuned
passive
> > > loop? active loop? tuned passive loop? resonant cut loop/folded
> > > dipole?
> >
> >
> > Tuned passive loop for to hang around by the window.
> >
>
> A wideband tuned passive loop will be very difficult to
implement as the impedance of the loop will vary significantly. For
instance, a 1 meter diameter loop consisting of 1 turn of 1/4"
diameter copper tubing will have a resistance of about 0.5 ohms at
4MHz, 10 ohms at 12MHz, and then increases to 420 ohms at 15MHz. It's
parallel resonance is around 17.9MHz. With a 4:1 BalUn transformer,
such an antenna can be easily used for the 25M SWBC band without an
amplifier.
>
> I went through months of building and testing loops of various
diamters, turns, and conductor diameters for my 2-part series on
active loops in the Jul/Aug and Sep/Oct 2003 issues of QEX.
>
>
>
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask

> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.4.3/1526 - Release Date: 30/6/2008 08:43

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG.
Version: 8.0.101 / Virus Database: 270.4.3/1525 - Release Date: 6/29/2008 3:09 PM

[Non-text portions of this message have been removed]

5346. Re: ***SPAM*** [loopantennas] Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-30 15:59:50 UTC
From: Chris Trask
Topic: 5344 Message: 5346

```
>
> We are using antenna to OT and OC made with ferrite, frequency
> coverage of 1500 khz ~ 16 Mhz. Its construction is simple, and use
> the device to signal with inducer. The results were satisfactory.
> If you have interest can send the scheme.
>
```

I have an active ferrite rod antenna with remote tuning that covers 5.5MHz to 15MHz:

http://tinyurl.com/ys293g

Chris

```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```

Graphics by Loek Frederiks

5347. Re: [loopantennas] Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-30 17:13:26 UTC
From: Jim Dunstan
Topic: 5335 Message: 5347

At 03:27 AM 6/30/2008 +0000, you wrote:

>That sounds pretty hard, oops, my mistake, I got the wrong one. Ok
>let me explain, there is a shortwave loop antenna that I want to plan
>on building soon a company called MTM Scientific made and they sell it
>as a kit and I wanted to learn more about how to build one with
>readably available parts . I saw this kit and I thought it would be
>fun to build since there is a frame and wire and other parts and
>pieces. If not possible I guess I will have to buy this kit soon. I
>am still considering getting myself a copy of the JJ Carrs Loop
>Antenna Handbook for me to study when I am bored. Thanks for the
>help, its really appreciated.
>
>link:
><http://www.mtmscientific.com/swloop.html>http://www.mtmscientific.com/swloop.html
>
>Adam E.
>Virginia Beach VA

Hi,

The example you give is a tuned loop hung a few feet from the listening position. All you need are 2 sticks, a bit or wire, a bit of coax with an appropriate connector (connects to your receiver antenna input), a tuning capacitor (looks like a standard 350 pfd ... which you can scrounge from old mantel radios). Some tape, some tie wraps and a couple of solder connections. The diagram and photos on web site are pretty accurate. Size is not critical ... but approx 2' to 3' per side will do. I guarantee it will work better than a whip antenna. I have used similar antennae and I usually orient the loop for minimum RFI noise and tune the capacitor for maximum noise. I used tie wraps to fasten the 2 sticks in the cross ... and drill holes in the ends of the sticks and use tie wraps again to fasten the wire.

The small loop in the center is the pickup loop ... rule of thumb is 20% the size of the larger loop. It does not have to be in the center ... and you can experiment on the best placement .... again the good old tie wraps hold it and the coax feed line in place. I don't know how much they are charging for the kit .... if it is reasonable ... it saves looking around for the individual pieces.

Jim

>SWL Radios: Grundig YB-400PE, G5, Mini 300, S-350DL, FR-200. Radio
>Shack DX-380, 390, 392, 398. RY-611 and CF-1888
>

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Chris
>Trask <christrask@...> wrote:
> >
> > >
> > > >
> > > > > Sorry but there is no link there except a Spanish forum that
>does not
> > > > > have any instructions in building a SW loop antenna. If
>anyone else
> > > > > can help that would be greatly appreciated thanks.
> > > > > >
> > > > > >
> > > > > > Adam E.
> > > > >
> > > > > Adam; I agree with Jim. What do you want to build? ... untuned
>passive
> > > > > loop? active loop? tuned passive loop? resonant cut loop/folded
> > > > > dipole?
> > > >
> > > >
> > > > Tuned passive loop for to hang around by the window.
> > > >
> > >
> > > A wideband tuned passive loop will be very difficult to
>implement as the impedance of the loop will vary significantly. For
>instance, a 1 meter diameter loop consisting of 1 turn of 1/4"
>diameter copper tubing will have a resistance of about 0.5 ohms at
>4MHz, 10 ohms at 12MHz, and then increases to 420 ohms at 15MHz. It's
>parallel resonance is around 17.9MHz. With a 4:1 BalUn transformer,
>such an antenna can be easily used for the 25M SWBC band without an
>amplifier.
> >
> > I went through months of building and testing loops of various
>diamters, turns, and conductor diameters for my 2-part series on
>active loops in the Jul/Aug and Sep/Oct 2003 issues of QEX.
> >
> >
> >
> >
> >
> > Chris
> >
> > ,----------------------. High Performance Mixers and
> > / What's all this \ Amplifiers for RF Communications
> > / extinct stuff, anyhow? /
> > \ _______,--------------' Chris Trask / N7ZWY
> > _ |/ Principal Engineer
> > oo\ Sonoran Radio Research
> > (__)\ _ P.O. Box 25240

> > \ \ .' `. Tempe, Arizona 85285-5240
> > \ \ / \
> > \ '" \ IEEE Senior Member #40274515
> > . ( ) \
> > '-|)__| :. \ Email: christrask@...
> > | | | | \ '.
> <http://www.home.earthlink.net/~christrask>http://www.home.earthlink.net/~christrask
> > c__; c__; '-..'>.__
> >
> > Graphics by Loek Frederiks
> >
>
>
>No virus found in this incoming message.
>Checked by AVG.
>Version: 8.0.101 / Virus Database: 270.4.3/1526 - Release Date: 6/30/2008
>8:43 AM

[Non-text portions of this message have been removed]

5348. Re: ***SPAM*** [loopantennas] Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-30 19:39:24 UTC
From: aimo ruoho
Topic: 5344 Message: 5348

Would you like to send the schematic for all us to see to remain permanently in the "Files"- section of our group?
Aimo

--- On Mon, 6/30/08, RexR <rexr@...> wrote:
From: RexR <rexr@...>
Subject: Re: ***SPAM*** [loopantennas] Re: Shortwave Loop Antenna Construction
To: loopantennas@yahoogroups.com
Date: Monday, June 30, 2008, 5:40 PM

Greetings from Jamestown, CA

I'd be interested in seeing the schematic and any construction notes you'd care to share,

Rex in Jamestown, CA

Hello,

We are using antenna to OT and OC made with ferrite, frequency coverage of 1500 khz ~ 16 Mhz. Its construction is simple, and use the device to signal with inducer. The results were satisfactory. If you have interest can send the scheme.

Respectfully,

Eduardo

SP-Brasil

GG66qq

----- Original Message -----

From: Adam E.

To: loopantennas@ yahoogroups. com

Sent: Monday, June 30, 2008 12:27 AM

Subject: ***SPAM*** [loopantennas] Re: Shortwave Loop Antenna Construction

That sounds pretty hard, oops, my mistake, I got the wrong one. Ok

let me explain, there is a shortwave loop antenna that I want to plan

on building soon a company called MTM Scientific made and they sell it

as a kit and I wanted to learn more about how to build one with

readably available parts . I saw this kit and I thought it would be fun to build since there is a frame and wire and other parts and pieces. If not possible I guess I will have to buy this kit soon. I am still considering getting myself a copy of the JJ Carrs Loop Antenna Handbook for me to study when I am bored. Thanks for the help, its really appreciated.

link: http://www.mtmscien tific.com/ swloop.html

Adam E.

Virginia Beach VA

SWL Radios: Grundig YB-400PE, G5, Mini 300, S-350DL, FR-200. Radio Shack DX-380, 390, 392, 398. RY-611 and CF-1888

--- In loopantennas@ yahoogroups. com, Chris Trask <christrask@ ...> wrote:

>

> >

> > >

> > > > Sorry but there is no link there except a Spanish forum that does not

> > > > have any instructions in building a SW loop antenna. If anyone else

> > > > can help that would be greatly appreciated thanks.

> > > >

> > > >

> > > > Adam E.

> > >

> > > Adam; I agree with Jim. What do you want to build? ... untuned passive

> > > loop? active loop? tuned passive loop? resonant cut loop/folded

> > > dipole?

> >

> >

> > Tuned passive loop for to hang around by the window.

> >

>

> A wideband tuned passive loop will be very difficult to

implement as the impedance of the loop will vary significantly. For

instance, a 1 meter diameter loop consisting of 1 turn of 1/4"

diameter copper tubing will have a resistance of about 0.5 ohms at

4MHz, 10 ohms at 12MHz, and then increases to 420 ohms at 15MHz. It's

parallel resonance is around 17.9MHz. With a 4:1 BalUn transformer,

such an antenna can be easily used for the 25M SWBC band without an

amplifier.

>

> I went through months of building and testing loops of various

diamters, turns, and conductor diameters for my 2-part series on

active loops in the Jul/Aug and Sep/Oct 2003 issues of QEX.

>

>

>

>

>

> Chris

>

> ,---------- --------- --. High Performance Mixers and

> / What's all this \ Amplifiers for RF Communications

> / extinct stuff, anyhow? /

> \ _______,---- --------- -' Chris Trask / N7ZWY

> _ |/ Principal Engineer

> oo\ Sonoran Radio Research

> (__)\ _ P.O. Box 25240

> \ \ .' `. Tempe, Arizona 85285-5240

> \ \ / \

> \ '" \ IEEE Senior Member #40274515

> . ( ) \

> '-|)__| :. \ Email: christrask@. ..

> | | | | \ '. http://www.home. earthlink. net/~christrask

> c__; c__; '-..'>.__

>

> Graphics by Loek Frederiks

>

------------ --------- --------- ------

If you've got links, post them in the Links section!

http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.

http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

--

No virus found in this incoming message.

Checked by AVG.

Version: 7.5.524 / Virus Database: 270.4.3/1526 - Release Date: 30/6/2008 08:43

[Non-text portions of this message have been removed]

------------ --------- --------- --------- --------- --------- -

No virus found in this incoming message.

Checked by AVG.

Version: 8.0.101 / Virus Database: 270.4.3/1525 - Release Date: 6/29/2008 3:09 PM

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5349. Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-30 20:38:04 UTC
From: hlslvy
Topic: 5335 Message: 5349

--- In loopantennas@yahoogroups.com, "Adam E." <gccradioscience@...>
wrote:
>
>
> I need information on how to build my first working shortwave loop
> antenna. Also what are the parts required for building it?
>
> Adam E.
>
Try the following links. I did some experimenting a while back and
these were still in my bookmark file. All were valid as I typed this.

http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=10173
http://home.paonline.com/dsarraf/Mag_Loops.htm
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=10174
http://user.netonecom.net/~swordman/Radio/re-loop-article.htm
http://hps.infolink.com.br/py1ahd/gallery15.htm
http://www.swdxer.co.nr/
http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

Hal S.

5350. Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-01 17:57:06 UTC
From: gmcjetpilot
Topic: 5335 Message: 5350

That is a nice LOOP kit and it is for MW or for AM radio broadcast, not SW.

Yea you can copy that very easy, make an X frame with 2' sides, wrap some wire (magnet, insulated, almost any really) around it to a AIR Capacitor and you have a tunable passive loop. Here is a GOOD BASIC LOOP LINK:

http://www.mindspring.com/~loop_antenna/

You can copy his design exactly. The kit you talk of saves you from scrounging for all the parts. There are not that many parts, but if you don't have it you have to get it. THE DESIGN IS 100 YEARS OLD, no state secret.

You can make an untuned LOOP with out the capacitor. I just made one out of a 1' x 1' pizza box and about 22' of wire, no capacitor. It works well for my needs, to bring in a few near by AM stations. The radio in question has no internal loop or loop-stick so I needed something. It probably came with an untuned loop, no doubt that I lost. Here is a link to the ultimate AM antenna and a pic of one I built like it (I went 5 turns because I had the wire):

http://members.cox.net/rwagoner/columns/am_antenna.html

Here is my last post of thread on this antenna with pictures:
http://groups.yahoo.com/group/loopantennas/message/5333

HOW DOES IT (tuned passive loops) WORK. The best explanation is a swinging pendulum held in you hand. For a given weight hanging off a string of given length, if you move your hand back and forth at a certain rate (frequency) the weight at the end will react in a given way. If you get the rate of hand moving back and forth just right (for the string length & weight) it will swing wide (resonance). If you move your hand back and forth faster or slower, the pendulum will not move as vigorously or with regular movement. If you increase or decrease the weight or length of string, it will react differently to different freq of hand movement. SO WHAT DOES THAT HAVE TO DO WITH A LOOP. Well the input or hand movement is the radio signal (frequency). The string length is the length of the loop, and the weight is the CAPACITOR! If you get the length of loop (number of wraps around a frame of X circumference) and capacitor (weight at end of string) just right for a given radio freq (hand movement) you get the most resonance.

If you google LOOP antenna you will find web links for calculating the range of "resonance" for a given loop, size, number of turns and

capacitor (capacitance) range.

The kit in question, if you varnish it and take your time will be
nice to look at and listen to. Like all passive loops, you have to
aim them and tune them. Of course you can make your own for cheaper.
The most expensive part is the air capacitor which is about $15-$20.

Cheers George

--- In loopantennas@yahoogroups.com, "Adam E." <gccradioscience@...>
wrote:
>
>
> That sounds pretty hard, oops, my mistake, I got the wrong one.
Ok
> let me explain, there is a shortwave loop antenna that I want to
plan
> on building soon a company called MTM Scientific made and they sell
it
> as a kit and I wanted to learn more about how to build one with
> readably available parts . I saw this kit and I thought it would
be
> fun to build since there is a frame and wire and other parts and
> pieces. If not possible I guess I will have to buy this kit soon.
I
> am still considering getting myself a copy of the JJ Carrs Loop
> Antenna Handbook for me to study when I am bored. Thanks for the
> help, its really appreciated.
>
> link: http://www.mtmscientific.com/swloop.html
>
> Adam E.
> Virginia Beach VA
>
> SWL Radios: Grundig YB-400PE, G5, Mini 300, S-350DL, FR-200. Radio
> Shack DX-380, 390, 392, 398. RY-611 and CF-1888
>
>
>
>
>
>
> --- In loopantennas@yahoogroups.com, Chris Trask <christrask@>
wrote:
> >
> > >
> > > >
> > > > Sorry but there is no link there except a Spanish forum that
> does not
> > > > > have any instructions in building a SW loop antenna. If
> anyone else

> > > > > can help that would be greatly appreciated thanks.
> > > > >
> > > > >
> > > > > Adam E.
> > > >
> > > > Adam; I agree with Jim. What do you want to build? ... untuned
> passive
> > > > loop? active loop? tuned passive loop? resonant cut
loop/folded
> > > > dipole?
> > >
> > >
> > > Tuned passive loop for to hang around by the window.
> > >
> >
> > A wideband tuned passive loop will be very difficult to
> implement as the impedance of the loop will vary significantly. For
> instance, a 1 meter diameter loop consisting of 1 turn of 1/4"
> diameter copper tubing will have a resistance of about 0.5 ohms at
> 4MHz, 10 ohms at 12MHz, and then increases to 420 ohms at 15MHz.
It's
> parallel resonance is around 17.9MHz. With a 4:1 BalUn transformer,
> such an antenna can be easily used for the 25M SWBC band without an
> amplifier.
> >
> > I went through months of building and testing loops of
various
> diamters, turns, and conductor diameters for my 2-part series on
> active loops in the Jul/Aug and Sep/Oct 2003 issues of QEX.
> >
> >
> >
> >
> >
> > Chris
> >
> > ,----------------------. High Performance Mixers and
> > / What's all this \ Amplifiers for RF Communications
> > / extinct stuff, anyhow? /
> > \ _______,--------------' Chris Trask / N7ZWY
> > _ |/ Principal Engineer
> > oo\ Sonoran Radio Research
> > (__)\ _ P.O. Box 25240
> > \ \ .' `. Tempe, Arizona 85285-5240
> > \ \ / \
> > \ '" \ IEEE Senior Member #40274515
> > . ( ) \
> > '-|)__| :. \ Email: christrask@
> > | | | | \ '.
http://www.home.earthlink.net/~christrask

> > c__; c__; '-..'>.__
> >
> > Graphics by Loek Frederiks
> >
>

5351. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-01 22:23:47 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 5351

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

5352. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-01 22:23:47 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 5352

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

5353. experience with this "new" broadband loop ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-06-30 15:49:32 UTC
From: Gerhard Baumgartner
Topic: 5353 Message: 5353

hi from austria,

i would like to build a broadband loop (50khz - 30 mhz) for my perseus sdr.
i found a very interesting curcuit- and building plan here
http://wl1030.com/content/ and there was a group which has build several
broadband loops http://www.ng-ronde.nl/wl1030/ . those who are interested in
this loop can download the general info of this loop here, it´s the file
"WL1030":
http://www.4shared.com/account/dir/6459794/8254f480/sharing.html?rnd=0

does anyone of you already built such a loop or heard something about it´s
usefulness in practice? any comment is welcome!

thx
gerhard

5354. Re: [loopantennas] experience with this "new" broadband loop ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 01:54:55 UTC
From: Paul V Birke PEng
Topic: 5353 Message: 5354

Hallo Gerhard

my only comment is that the OP AMPs while very good do not offer the noise floor obtainable with other circuits such as those of Chris Trask and the original Norton ampifiers. Lankford in a recent post shows his remaining interest in push pull Norton amps.

However, as Chris has pointed out we need a solution wherein the amplifier's characteristics need to be somewhat constant with the frequency varying value of the loop impedance to be optimally useful.

so after some consideration a year back I decided to wait after I can looked carefully at the Dutch site.

best

Paul in Guelph von KANADA

----- Original Message ----
From: Gerhard Baumgartner <gjmb@...>
To: loopantennas@yahoogroups.com
Sent: Monday, June 30, 2008 11:49:32 AM
Subject: [loopantennas] experience with this "new" broadband loop ?

hi from austria,

i would like to build a broadband loop (50khz - 30 mhz) for my perseus sdr.
i found a very interesting curcuit- and building plan here
http://wl1030. com/content/ and there was a group which has build several
broadband loops http://www.ng- ronde.nl/ wl1030/ . those who are interested in
this loop can download the general info of this loop here, it´s the file
"WL1030":
http://www.4shared. com/account/ dir/6459794/ 8254f480/ sharing.html? rnd=0

does anyone of you already built such a loop or heard something about it´s
usefulness in practice? any comment is welcome!

thx
gerhard

[Non-text portions of this message have been removed]

5355. Re: [loopantennas] experience with this "new" broadband loop ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 02:23:21 UTC
From: Chris Trask
Topic: 5353 Message: 5355

```
>
> > i would like to build a broadband loop (50khz - 30 mhz) for my perseus
> > sdr. i found a very interesting curcuit- and building plan here
> > http://wl1030.com/content/ and there was a group which has build several
> > broadband loops http://www.ng- ronde.nl/ wl1030/ . those who are
interested
> > in this loop can download the general info of this loop here, it?s the
file
> >
"WL1030":http://www.4shared.com/account/dir/6459794/8254f480/sharing.html?rn
d=0
> >
> > does anyone of you already built such a loop or heard something about
it?s
> > usefulness in practice? any comment is welcome!
> >
>
>
> my only comment is that the OP AMPs while very good do not offer the noise
> floor obtainable with other circuits such as those of Chris Trask and the
> original Norton ampifiers. Lankford in a recent post shows his remaining
> interest in push pull Norton amps.
>
> However, as Chris has pointed out we need a solution wherein the
amplifier's
> characteristics need to be somewhat constant with the frequency varying
value
> of the loop impedance to be optimally useful.
>
> so after some consideration a year back I decided to wait after I can
looked
> carefully at the Dutch site.
>

I've been looking at the loop impedance problem. There is a paper by a
group of Russian HF radio astronomers who have a procedure for matching
short dipoles to 75-ohms over a wide bandwidth, and I'm going to see if
their synthesis procedure can be used to match a loop over a wide bandwidth.
Problem is that the loop is a low resistance in series with an inductance,
whereas the dipole is a large resistance in series with a small capacitor.
At first glance, it seems that the synthesis procedure for the loop is a
dual of the one for the dipole. If that proves to be true, then it should
be relatively simple.
```

The Russians followed the matching network with a two-stage balanced lossless feedback amplifier. That's a bit ambitious, but they are dealing with extremely small signal levels and they need a good high dynamic range amplfier to accomplish their goal.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5356. Re: [loopantennas] experience with this "new" broadband loop ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 02:39:14 UTC
From: Paul V Birke PEng
Topic: 5353 Message: 5356

Problem is that the loop is a low resistance in series with an inductance,
whereas the dipole is a large resistance in series with a small capacitor.
At first glance, it seems that the synthesis procedure for the loop is a
dual of the one for the dipole. If that proves to be true, then it should
be relatively simple.

****

My gut feel here Chris is likely you have it in the dual mathematics as you have noted above. Very good.

It can be a most important result to recognize "duals" in problems as sometimes the dual is easier to implement.However here I guess we are changing capacitance for inductance but perhaps resistance for mhos (some JFET configuration as it is a transconductance device). So look at the paper and see if this makes sense. An inverse dual? is another notion here

best wishes and good thinking

Paul

[Non-text portions of this message have been removed]

5357. AW: experience with this "new" broadband loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 08:11:59 UTC
From: Gerhard Baumgartner
Topic: 5357 Message: 5357

chris and paul,

thx for your comments to this very interesting and delicate topic. now i
don´t wonder anymore why i didn´t find much in the internet about broadband
loops for selfbuilders.

info for the other members of this group. have a look in this group
"Shortwave-SWL-Antenna@...m", i posted there the question too and
chris chris answered, might be of interest to you.

paul you wrote:
>so after some consideration a year back I decided to wait after I can
looked carefully at the Dutch site.
don´t understand the meaning, would you please explain? hope i asked
politely, don´t know how to use the subtle nuances in the english language.

looking forward what comes next in this amp-topic. it would be great if
there is a selftuning broadband loop for selfbuilders.

best
gerhard

5358. Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 13:30:38 UTC
From: tenorman1952
Topic: 5335 Message: 5358

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:
>
> That is a nice LOOP kit and it is for MW or for AM radio broadcast,
> not SW.

He's referring to this loop at MTM Scientific:

http://www.mtmscientific.com/swloop.html

No, actually that loop is for SW. It is a 1 turn loop with a 9.5-365
pf variable cap. If your run 1 turn loops of various reasonable
sizes through the calculators online, including Bruce Carter's, they
will fall in the SW range.

http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

Using that calculator, 1 turn, 36" sides, gives 3.8 mhz - 23.6 mhz.

With 1 turn, 30" sides, it gives 4.2 mhz - 27.2 mhz.

If 1 turn, 24" sides, it gives 4.8 mhz -29.8 mhz.

MTM scientific has a 15 turn tuned loop, 17" sides, that covers the
MW/AM band:

http://www.mtmscientific.com/loop.html

I have photos of my MTM AM loop in the Photos section in the Loop
Kits folder.

Paul C.
tenorman1952

5359. Re: [loopantennas] AW: experience with this "new" broadband loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 16:20:58 UTC
From: Paul V Birke PEng
Topic: 5357 Message: 5359

paul you wrote:
>so after some consideration a year back I decided to wait after I can
looked carefully at the Dutch site.
don´t understand the meaning, would you please explain? hope i asked
politely, don´t know how to use the subtle nuances in the english language.

****

sorry the problem was my english

I meant to say I looked very closely at the design of the Dutch amp and decided it was not good enough on noise as compared to existing other amps such as those of Chris and Dallas. It was the noise in the OP AMP that bother me. The OP AMP is a good solution except for the noise floor being to high.

hope that helps

Paul

[Non-text portions of this message have been removed]

5360. circuit for the selftuning broadband loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 18:43:13 UTC
From: Gerhard Baumgartner
Topic: 5360 Message: 5360

paul wrote:
>It can be a most important result to recognize "duals"
>in problems as sometimes the dual is easier to implement.
>However here I guess we are changing capacitance for
>inductance but perhaps resistance for mhos
>(some JFET configuration as it is a transconductance device).
>So look at the paper and see if this makes sense.
>An inverse dual? is another notion here

>I meant to say I looked very closely at the design of the Dutch amp and
>decided it was not good enough on noise as compared to existing
>other amps such as those of Chris and Dallas.
>It was the noise in the OP AMP that bother me.
>The OP AMP is a good solution except for the noise floor being to high.
>best wishes and good thinking

paul,
your comments sound promising, but i can´t transform them to the reality
of a working circuit. i simply miss the knowledge do to that for myself.

can you tell me exactly (part and value) what has to be changed in the
published circuit of the wl1030 to make it work properly.

or can you tell me which amp circuit i should take instead. but i need a
circuit with exact values.

i will have a look at chris paper http://tinyurl.com/ytsf6k the next days to
see if i can handle
anything of it alone. i am used to do some math as i work also on noise
analysis of random
processes - found out that there are structures in the noise but they are
fractally
dispersed and correlated with cosmic attractors, cause of noise it not
(always) anisotropic - but this
has basically nothing to do with the knowledge of electronic circuits. so
will see what i
can bring out for myself of chris paper.

gerhard

5361. Re: [loopantennas] circuit for the selftuning broadband loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 18:54:18 UTC
From: Paul V Birke PEng
Topic: 5360 Message: 5361

----- Original Message ----
From: Gerhard Baumgartner <gjmb@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, July 2, 2008 2:43:13 PM
Subject: [loopantennas] circuit for the selftuning broadband loop

paul wrote:
>It can be a most important result to recognize "duals"
>in problems as sometimes the dual is easier to implement.
>However here I guess we are changing capacitance for
>inductance but perhaps resistance for mhos
>(some JFET configuration as it is a transconductance device).
>So look at the paper and see if this makes sense.
>An inverse dual? is another notion here

>I meant to say I looked very closely at the design of the Dutch amp and
>decided it was not good enough on noise as compared to existing
>other amps such as those of Chris and Dallas.
>It was the noise in the OP AMP that bother me.
>The OP AMP is a good solution except for the noise floor being to high.
>best wishes and good thinking

paul,
your comments sound promising, but i can´t transform them to the reality
of a working circuit. i simply miss the knowledge do to that for myself.

can you tell me exactly (part and value) what has to be changed in the
published circuit of the wl1030 to make it work properly.

It will work but just might be more noisy. What I can suggest is to tackle the other end by purchasing a DSP audio filter like the West Mountain ClearSpeech from hamcity.com.

This is what Chris is now trying to do to define a circuit that would work well so I think I will defer to Chris here.but I do suggest anyways for listening to have a good modern DSP and certainly the ClearSpeech is a good one

http://www.hamcity.com/detail.aspx?ID=1878
here is where you can buy it best price, with your High EURO it might be a good deal.
I also use a Sounds Sweet speaker on my audio output as well.http://www.soundssweet.com/

this does not address the noise problem per se in the rf amp but can help with the audio noise reduction available via the DSP and the good less hiss speaker

best
Paul

[Non-text portions of this message have been removed]

5362. Re: [loopantennas] experience with this "new" broadband loop ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-02 15:05:09 UTC
From: Jon Maguire
Topic: 5353 Message: 5362

Hi Chris,

Do you have a pointer to the Russian document?

Thanks, Jon W1MNK

>
>
> I've been looking at the loop impedance problem. There is a paper by a
> group of Russian HF radio astronomers who have a procedure for matching
> short dipoles to 75-ohms over a wide bandwidth, and I'm going to see if
> their synthesis procedure can be used to match a loop over a wide
> bandwidth.
> Problem is that the loop is a low resistance in series with an inductance,
> whereas the dipole is a large resistance in series with a small capacitor.
> At first glance, it seems that the synthesis procedure for the loop is a
> dual of the one for the dipole. If that proves to be true, then it should
> be relatively simple.
>
> The Russians followed the matching network with a two-stage balanced
> lossless feedback amplifier. That's a bit ambitious, but they are dealing
> with extremely small signal levels and they need a good high dynamic range
> amplfier to accomplish their goal.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> <mailto:christrask%40earthlink.net>
> | | | | \ '. http://www.home.earthlink.net/~christrask
> <http://www.home.earthlink.net/%7Echristrask>
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
> __.-._'-.__

> .
>
>

[Non-text portions of this message have been removed]

5363. Re: [loopantennas] experience with this "new" broadband loop ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-03 02:42:51 UTC
From: Chris Trask
Topic: 5353 Message: 5363

>
> Hi Chris,
>
> Do you have a pointer to the Russian document?
>
> Thanks, Jon W1MNK
>

No, it's out of the journal "Experimental Astronomy" and you can't access it online except with an account. I access it at the university engineering library. I just tried uploading it into the group files section, but it didn't accept it, probably because it's a little more than 3M in size.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5364. Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-03 07:57:26 UTC
From: Bill McGraw
Topic: 5335 Message: 5364

Hal S. said, "4. Twist the wire ends together approximately 2 turns per inch (I made a change here. On the base, I installed a two-wire terminal so I could easily connect a different length lead wire. I connected the ends of the wire from the loop to the terminal block and then connected a shielded wire to the terminal block to act as a lead-in. The ground (shield) lead connects to the ground terminal of the radio, the center wire connects to the "external AM antenna" terminal of the radio. You may have to experiment with your own radio to find what works best)."

Hal,
1. Do I understand you twist the antenna loop ends together?
2. What is "approximately 2 turns per inch?"
3. What is the "two-wire terminal" and how do you fashion two wires if the antenna ends are twisted together?
4. What kind of terminal block do you describe?
5. What kind of shielded wire do you use for the terminal block?
6. Once built, is there any kind of tuning, V-cap or does the radio receiver need to be in close proximity?

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

5365. Re: [loopantennas] Re: Shortwave Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-03 10:00:30 UTC
From: gandalfg8@aol.com
Topic: 5335 Message: 5365

In a message dated 03/07/2008 08:57:48 GMT Daylight Time,
mcgr3799@... writes:

Hal S. said, "4. Twist the wire ends together approximately 2 turns per
inch.....

Hal,
1. Do I understand you twist the antenna loop ends together?
2. What is "approximately 2 turns per inch?"

Hi Bill

I'm not sure what the original reference was, so don't have any details of
this particular loop and can't comment on any of the other questions, but this
won't mean twist together in the sense of a tight twist just to join right at
the very end.

The implication seems to me that you should expect to have some wire "ends",
let's say each two feet long just for example, presumably after constructing
the loop, and it's these you're supposed to twist together along their
length so you end up with a twisted pair of wires.
Approximately two turns per inch will mean just that, as you twist it
together allow approx two turns every inch of wire, ie don't twist it too tight.

Not knowing the original source, I can't say exactly what you're supposed to
with it after that nor if these "ends" are from a main loop or coupling loop,
but would guess that could be the connection to your radio:-)

regards

Nigel
GM8PZR

5366. Two Passive loops in ONE - how to - design review

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-07 01:46:18 UTC
From: gmcjetpilot
Topic: 5366 Message: 5366

ANY HELP OR ADVICE.

I want to make a passive loop with a high and low
range by tapping into the inductive winding in the
middle and using a using a two-in-one ganged capacitor
(some how).

Size: 2' x 2' square loop on a X wood frame.
Edge wound: 18 turns (144')
Width: 3.5" (approx)
Capacitor: 12 - 390 pf x 2 (ganged together)
Connection: Inductive and/or direct feed w/ sense loop'(s)

The AM loop calculator says the low end is about 400- 2250Khz.

Tap 1/2 way (9 turns) the high end is 800 - 4500 Khz (in theory).

I will have a secondary "sense" winding (single loop).
Not sure if one or two separate senese loops are needed for
each the high and the low ranges?

I'm not sure if I should put that SENSE wire in line
with the inductive winding, or inside the the windings.

I could put the sense loop in middle of inductive windings side,
with 8 windings on each side. However when I tap 1/2 the windings
the sense wire will be on the edge.

A better idea might be put the sense wire inside the
2' x 2' frame, for example a 1.5 foot diameter (round or
square) sense wire. That could handle both bands.

To switch between the HI and LO freq I could just
use two feed lines or have a terminal block and
connect the coaxial feed to different terminals as
needed.

I'm not sure if I need a switch to open the circuit to
the two ranges.

Any help or advice would be nice for my idea of
having a two in one loop.

Thanks George

5367. Re: [loopantennas] Two Passive loops in ONE - how to - design review

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-07 01:56:33 UTC
From: John Popelish
Topic: 5366 Message: 5367

gmcjetpilot wrote:
> ANY HELP OR ADVICE.
>
> I want to make a passive loop with a high and low
> range by tapping into the inductive winding in the
> middle and using a using a two-in-one ganged capacitor
> (some how).
>
> Size: 2' x 2' square loop on a X wood frame.
> Edge wound: 18 turns (144')
> Width: 3.5" (approx)
> Capacitor: 12 - 390 pf x 2 (ganged together)
> Connection: Inductive and/or direct feed w/ sense loop'(s)
>
> The AM loop calculator says the low end is about 400- 2250Khz.
>
> Tap 1/2 way (9 turns) the high end is 800 - 4500 Khz (in theory).
>
> I will have a secondary "sense" winding (single loop).
> Not sure if one or two separate senese loops are needed for
> each the high and the low ranges?
>
> I'm not sure if I should put that SENSE wire in line
> with the inductive winding, or inside the the windings.
>
> I could put the sense loop in middle of inductive windings side,
> with 8 windings on each side. However when I tap 1/2 the windings
> the sense wire will be on the edge.
>
> A better idea might be put the sense wire inside the
> 2' x 2' frame, for example a 1.5 foot diameter (round or
> square) sense wire. That could handle both bands.
>
> To switch between the HI and LO freq I could just
> use two feed lines or have a terminal block and
> connect the coaxial feed to different terminals as
> needed.
>
> I'm not sure if I need a switch to open the circuit to
> the two ranges.
>
> Any help or advice would be nice for my idea of
> having a two in one loop.

To range switch, have you considered breaking the loop into two 9 turn sections and use a DPDT switch or relay to connect them in series or parallel? With one tuning capacitor this should jump the frequency range about 2:1. I think this gives you a higher Q and better tuning range than just letting 9 turns hang on the end of the 9 you are using.

--
Regards,

John Popelish

5368. Re: [loopantennas] Two Passive loops in ONE - how to - design review

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-07 15:19:12 UTC
From: Jim Dunstan
Topic: 5366 Message: 5368

At 01:46 AM 7/7/2008 +0000, you wrote:

>ANY HELP OR ADVICE.
>
>I want to make a passive loop with a high and low
>range by tapping into the inductive winding in the
>middle and using a using a two-in-one ganged capacitor
>(some how).
>
>Size: 2' x 2' square loop on a X wood frame.
>Edge wound: 18 turns (144')
>Width: 3.5" (approx)
>Capacitor: 12 - 390 pf x 2 (ganged together)
>Connection: Inductive and/or direct feed w/ sense loop'(s)
>
>The AM loop calculator says the low end is about 400- 2250Khz.
>
>Tap 1/2 way (9 turns) the high end is 800 - 4500 Khz (in theory).
>
>I will have a secondary "sense" winding (single loop).
>Not sure if one or two separate senese loops are needed for
>each the high and the low ranges?
>
>I'm not sure if I should put that SENSE wire in line
>with the inductive winding, or inside the the windings.
>
>I could put the sense loop in middle of inductive windings side,
>with 8 windings on each side. However when I tap 1/2 the windings
>the sense wire will be on the edge.
>
>A better idea might be put the sense wire inside the
>2' x 2' frame, for example a 1.5 foot diameter (round or
>square) sense wire. That could handle both bands.
>
>To switch between the HI and LO freq I could just
>use two feed lines or have a terminal block and
>connect the coaxial feed to different terminals as
>needed.
>
>I'm not sure if I need a switch to open the circuit to
>the two ranges.
>
>Any help or advice would be nice for my idea of
>having a two in one loop.
>

>Thanks George

Hi George,

Yes, it is possible to use a 2 gang capacitor to simultaneously tune 2 separate inductors. One inductor ... usually the one tuning the higher frequencies will be tuned by the 2 capacitors in a series configuration. The second inductor is connected across one of the gangs. If you are using a standard 2 gang capacitor which is 350 pfd each .... then the first inductor (usually the smaller one for higher frequencies) is connected across the 2 gangs in series ... eg maximum value of 365 pfd / 2 = 182.5 while the second inductor would be connected across one of the 2 gangs eg 365 pfd.

The output would be via a link winding or link windings. It is certainly not a common method .... at least not in recent times. However, in the past this was a common method of constructing a mult-band output load for RF transmitters .... which reduces or avoids switching. You would have to look for this circuit in Radio Handbooks of a late 40's or early 50's vintage to see examples. It is also a similar concept for a version of antenna tuner (known as the Z-match) which is also a relatively old configuration (back when parallel open wire feed lines were standard). Now that multiband antennas fed with open wire line are starting to become popular again the Z-match is experiencing a resurgence. I have never seen the concept applied to small receiving loops.

I think it would be an interesting project.

Jim

5369. Re: Two Passive loops in ONE - how to - design review

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-07 15:34:21 UTC
From: tenorman1952
Topic: 5366 Message: 5369

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:
>
> ANY HELP OR ADVICE.
>
> I want to make a passive loop with a high and low
> range by tapping into the inductive winding in the
> middle and using a using a two-in-one ganged capacitor
> (some how).
>
> Size: 2' x 2' square loop on a X wood frame.
> Edge wound: 18 turns (144')
> Width: 3.5" (approx)
> Capacitor: 12 - 390 pf x 2 (ganged together)
> Connection: Inductive and/or direct feed w/ sense loop'(s)
>
> The AM loop calculator says the low end is about 400- 2250Khz.
>
> Tap 1/2 way (9 turns) the high end is 800 - 4500 Khz (in theory).

Why tap in the middle, 9 tunrs. You would have a lot of wasted
overlap of the two ranges.

If instead you tapped off just 3 turns, you would have a range of
about 2000 khz - 11,000 khz. I am probablly using the same
calculator you are,

http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

and using 24" x 24", .75" wide, 3 turns, 12-390 pf.

So your low range would be 18 turns, and cover 400 - 2250 khz, and
high range would be 3 turns, and cover 2000 - 11,000 khz.

Paul C.
tenorman1952

5370. Re: [loopantennas] Two Passive loops in ONE - how to - design review

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-07 16:01:12 UTC
From: Jim Dunstan
Topic: 5366 Message: 5370

At 11:19 AM 7/7/2008 -0400, you wrote:

>At 01:46 AM 7/7/2008 +0000, you wrote:
>
> >ANY HELP OR ADVICE.
> >
> >I want to make a passive loop with a high and low
> >range by tapping into the inductive winding in the
> >middle and using a using a two-in-one ganged capacitor
> >(some how).
> >
> >Size: 2' x 2' square loop on a X wood frame.
> >Edge wound: 18 turns (144')
> >Width: 3.5" (approx)
> >Capacitor: 12 - 390 pf x 2 (ganged together)
> >Connection: Inductive and/or direct feed w/ sense loop'(s)
> >
> >The AM loop calculator says the low end is about 400- 2250Khz.
> >
> >Tap 1/2 way (9 turns) the high end is 800 - 4500 Khz (in theory).
> >
>
>
>Yes, it is possible to use a 2 gang capacitor to simultaneously tune 2
>separate inductors. One inductor ... usually the one tuning the higher
>frequencies will be tuned by the 2 capacitors in a series
>configuration. The second inductor is connected across one of the
>gangs. If you are using a standard 2 gang capacitor which is 350 pfd each
>.... then the first inductor (usually the smaller one for higher
>frequencies) is connected across the 2 gangs in series ... eg maximum value
>of 365 pfd / 2 = 182.5 while the second inductor would be connected across
>one of the 2 gangs eg 365 pfd.
>
>The output would be via a link winding or link windings. It is certainly
>not a common method .... at least not in recent times. However, in the
>past this was a common method of constructing a mult-band output load for
>RF transmitters .... which reduces or avoids switching. You would have to
>look for this circuit in Radio Handbooks of a late 40's or early 50's
>vintage to see examples. It is also a similar concept for a version of
>antenna tuner (known as the Z-match) which is also a relatively old
>configuration (back when parallel open wire feed lines were standard). Now
>that multiband antennas fed with open wire line are starting to become
>popular again the Z-match is experiencing a resurgence. I have never seen
>the concept applied to small receiving loops.
>

>I think it would be an interesting project.
>
>Jim

This is an addendum to my last posting .... I suggest a possible strategy would to consider the Z-match antenna tuner circuit. In that circuit 2 separate inductors are tuned by a single 2 gang capacitor as outlined above ... However, since you are using the inductors as antennas themselves (loops) you do not need the input link windings. In the Z-match circuit the inductors/loops are coupled to the receiver via a series capacitor which in effect produces a L match circuit. You would need a second single gang capacitor. You would then have no switching at all.

You could wind a standard loop for MW and second loop for SW ..... fit one inside the other and put them at right angles to each other to avoid interaction. Heh it sounds so good I may try it myself hi hi.

One capacitor (the 2 gang) would tune the loops, and the second capacitor would match the input to the receiver. You can find the Z-match circuit on-line. The number of turns on each loop would be experimental to some degree. It would also be possible to use a single loop with an appropriate tap ... however adjusting the relative inductances would take much more careful experimentation.

Jim

5371. 10 meter full wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-07 19:02:29 UTC
From: dannousa2002
Topic: 5371 Message: 5371

I have a 10 meter full wave loop. Apex at 25 foot each lower leg of loop is 10 foot off the ground. It works real good what you hear you can work. The only thing wrong is the rf in the shack it gets into my rotor control box and a small tv monitor next to the radio transmitter. This is the w5sdc Delta loop for hf with a 4to1 balum and fed with RG-8 coax it is also wound with 8 turns of the feed line under the antenna. No tunner needed on all of the 10 meter band. My radio yeasu 847 is grounded and the antenna tunner is also grounded but still some rf in shack. Any Idea on what to do to keep the rf outside?
Thanks
Dan
N6TKW

5372. Re: [loopantennas] 10 meter full wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-08 00:52:54 UTC
From: Jim Dunstan
Topic: 5371 Message: 5372

At 07:02 PM 7/7/2008 +0000, you wrote:

>I have a 10 meter full wave loop. Apex at 25 foot each lower leg of
>loop is 10 foot off the ground. It works real good what you hear you
>can work. The only thing wrong is the rf in the shack it gets into my
>rotor control box and a small tv monitor next to the radio transmitter.
>This is the w5sdc Delta loop for hf with a 4to1 balum and fed with RG-8
>coax it is also wound with 8 turns of the feed line under the antenna.
>No tunner needed on all of the 10 meter band. My radio yeasu 847 is
>grounded and the antenna tunner is also grounded but still some rf in
>shack. Any Idea on what to do to keep the rf outside?
>Thanks
>Dan
>N6TKW

Hi Dan,

I believe W5SDC feeds his loop at the apex .... I assume you are doing so as well. I suggest you try feeding it at one of the lower corners and move the feed line out of the loop aperture. Since the bottom is only 10 ft off the ground you should have little difficulty with the experiment.

Jim, VE3CI

5373. Re: Two Passive loops in ONE - how to - design review

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-08 18:31:44 UTC
From: gmcjetpilot
Topic: 5366 Message: 5373

To Jim & Paul.....

>Posted by: "Jim Dunstan" dunstan@confederationc.on.ca norlink88
>
>Mon Jul 7, 2008 8:21 am (PDT)
>
>Yes, it is possible to use a 2 gang capacitor to simultaneously tune
>2 separate inductors. One inductor ... >usually the one tuning the
>higher frequencies will be tuned >by the 2 capacitors in a series
>configuration. The second >inductor is connected across one of the
>gangs. If you are >using a standard 2 gang capacitor which is 350
>pfd each

Good idea I did not think of ganging the two together.

>It is also a similar concept for a version of antenna tuner (known
>as the Z-match) which is also a relatively old configuration (back
>when parallel open wire feed lines were standard). Now that
>multiband antennas fed with open wire line are starting to become
>popular again the Z-match is experiencing a resurgence. I have
>never seen the concept applied to small receiving loops.

You lost me a little but I'll do research. I really want to keep it simple. I would love to have a two band loop. The going in position is keep it simple, min parts, switches and so on.

I guess one way would be just make two loops on one frame with two feed lines or may be a toggle switch to switch from a single to ganged capacitor and loop A or B, but thanks for the great advice.

>Posted by: "tenorman1952" tenorman1952@... tenorman1952
>
>Mon Jul 7, 2008 8:34 am (PDT)
>
>Why tap in the middle, 9 tunrs. You would have a lot of wasted
>overlap of the two ranges.

Thanks Paul makes sense. So if its just 3 turns, I'll just have a full 3 turns + 18 turns, I have 900 feet of wire to play with. Great thanks.

>Posted by: "Jim Dunstan" dunstan@....ca norlink88
>
>Mon Jul 7, 2008 9:01 am (PDT)
>consider the Z-match antenna tuner circuit. In that circuit 2
>separate inductors are tuned by a single 2 gang capacitor as
>outlined above ... However, since you are using the inductors as

>antennas themselves (loops) you do not need the input link
>windings. In the Z-match circuit the inductors/loops are coupled to
>the receiver via a series capacitor which in effect produces a L
>match circuit. You would need a second single gang capacitor. You
>would then have no switching at all.

Thanks Jim that sounds interesting. Since this is my first real LOOP (I'm going to try and may nice looking and sounding) I may set my sights lower for a simple loop. However I'll save you post for my next loop.

I leaning to just having too loops (really quite separate) on the same frame, may be only sharing the same capacitor and sense loop wire. I may use manual switching or a terminal to swap, changing from Low to High range.

Cheers George

5374. Re: experience with this "new" broadband loop ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-08 21:54:39 UTC
From: bob71741
Topic: 5353 Message: 5374

Chris e-mail the file to me, and I'll convert it to PDFs and then
split them so that they will load up on the site.

Best Regards
Bob

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Hi Chris,
> >
> > Do you have a pointer to the Russian document?
> >
> > Thanks, Jon W1MNK
> >
>
> No, it's out of the journal "Experimental Astronomy" and you can't
> access it online except with an account. I access it at the university
> engineering library. I just tried uploading it into the group files
> section, but it didn't accept it, probably because it's a little
more than
> 3M in size.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

5375. The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-11 08:57:44 UTC
From: gmcjetpilot
Topic: 5375 Message: 5375

ANY INPUT COMMENTS OR SUGGESTIONS WOULD BE APPRECIATED
(please to not cut and past this whole long post in reply)

How should I test these three loops?

The tale of three Chinese loops
http://img525.imageshack.us/img525/7522/slide3copymh0.jpg

Terk and Tucsun MW/AM passive loops
http://img522.imageshack.us/img522/4841/slide2hh6.jpg

Kaito TG34 Active MW/SW loop
http://img522.imageshack.us/img522/1176/slide1fx3.jpg

I have more experience with the (DEGEN) TG34 loop, which I have owned for many months. I have to say I am pleased with it and it always impresses me, especially since it was only a $20 option bundled with a DEGEN DE1103 radio I bought on eBay.

The two passive MW loops are the Terk AM Advantage and TECSUN AN-200. I paid about the same $30 to $34 for them. The Terk is widely avaiable in the US and the Tecsun is china and found on eBay (from seller: liypn)

The TG34 can fit in a small bag when collapse and folded up, and it has both MW and SW capability. It is not free standing and needs to be hung from something, preferably in a window. The TG34 is an active loop powered with two AAA batteries. My initial opinion or gut says the TG34 is probably better than the two passive loops overall? I still have to do some A, B & C comparisons.

All loops have the ability to connect direct or by "proximity" to the radio. The active TG34 loop has the ability to directly connect to the radio or passively with a repeater loop-stick.

The passive MW loops may do better than the TG34 when directly connected to an AM radio with antenna terminals (I think). For passive boost the TG34 may be better with it's cool little loopstick repeater you can put right on-top of the radio, for best position near the internal loop stick. On the other hand you have wires and have to tape or hold that loop-stick repeater onto the radio. The passive MW/AM loops sit next to the radio on one of 4 sides. I tried putting them on top of a Sony (where I know the internal loopstick was located). It did not work well with the loop sitting on the radio, at least with this radio. It was better off to the front or back with the edge of the loop ending where the loop stick started. If I tried to "frame" the internal loop stick in the middle it did

not work well either.

QUALITY

The two passive loops are well made but the Terk seems a little more stout (heavier) and has a nice rubberized base. The tuning knob on the Terk is thumb type in the middle with a nice pointer and freq scale (530-1600 but range goes past the scale). The rubberized thumb tuning dial is nice but a little harder to get at than the Tecsun.

The TECSUN AN-200 is pretty to look at (beauty in the eye of beholder). They both have the same dia or very close, about 9" dia. Counting the Tecsun it has 28 turns which is about 66 feet of magnetic wire, 18 gauge? The winding is tight and may have some adhesive holding them in position? The Terk winding is hidden and assembled with recessed screws. The Tecsun has no visible fasteners and looks snapped or glued together.

The Terk base is wider but not much more stable because of the higher weight of the loop housing and the base is not symmetric, in stops short on the back side and is flat, not extending past the loop as far as the base extends on the front. Minor point but it makes it want to tip backwards more. The Tecsun is more symmetric and being lighter helps, but has about the same overall stability. Neither are going to fall over on their own.

Both have 1/8" jacks to connect a cable for direct connect to the radio. The Terk AM Advantage's cable is long and terminates to bare wire. The Tecsun supplies a short cable with 1/8" phone plugs at both ends, which may or may not work with many radios AM/MW antenna connection jacks. No big deal there are workarounds for that.

TEST SO FAR

My first test was trying the passive loops on my home mini stereo that has an AM radio and no internal antenna but does have two terminals to attach an AM antenna. The results where as expected, very good with both. I really can't say one shine above the other, may be the Terk had an edge but the Tecsun AN-200 was easier to tune. For one the knob on the side was easier to get at and tune than the thumb knob. However the Terk does have a Freq scale that is pretty good. When I saw the scale I thought it might be a joke and planned on ignoring it. However its not bad for getting close. Most will just spin the knob for best signal but I can see where the scale can improve that shotgun technique add some quasi precision guessing at where to set it.

One thing I notice is the Terk seems to have a sharper null node and sweet spot. The Tecsun was not as sharp and had broader sweet spot or less sensitive. Terk with its thumb knob and freq scale was surpisingly close as I said. The Tecsun has a generic 0 - 10 scale. Both had about 180 degrees of rotation. The Tecsun tuning knob was

easier to get at and easier turn, but may be more susceptible to accidentally being changed. The Terk knob had more resistance or friction. The Tecsun was easy to spin. The Terk feel was not bad or hard to use, just not as easy.

I tried both loops in passive mode as well. I used a Sony AM/FM portable/table AC/DC radio. The results where also as expected, good, but nothing definitive yet.

I'm always impressed with LOOPS, its like PFM, Pure Freaking Magic. I could pull in a whole new station (on a different freq) by just tuning the antennas. That is amazing (can some one explain that to me)? I have had the experience where the directional nature of a loop has rejected a weak station and brought in a new station, but they both where on the same freq.

I have not had a chance to really try them out and will report back. Please let me know what you think.

Questions?

Can any one tell my why the Tecsun tuning is more mellow and seems less sensitive or wider sweet spot? It is affective but different than the Terk which is like the TG34, very sharp null and sweet.

Not enough experience to tell yet which one is better, but like I said for the money, wider band, portability, with the experience I do have so far. The TG34 sold under different names like Kaito, Degen or Generic as I have is a deal and better for a radio hobbyist. However the TG34 has many parts and has to be hung-up, and its not pretty to look at. It looks like a hanger. Behind blinds in a window its not bad.

The MW/AM Loops are very simple and free standing. When boosting a radio by proximity there are no wires or batteries. For just AM radio, home use, the passive loops are better in the MW band. The Tecsun is pretty to look at (to me). The Terk is not bad looking either; it sits lower on its base. Also the Turk's med gray tends to blend with typically gray or black radios well. The Tecsun red magnetic wire yells LOOK.

Overall all these antennas are bargains and do what you expect and probably a more, especially for the money.

I don't think these store bought passive MW/AM loops are going to be as good as a LARGE well made home-brew loop. However its hard to fit a 2-foot-by-2-foot loop on the coffee table or next to the radio on the night-stand. I recommend all three antennas, and if I get any more info I'll pass it along.

ANY INPUT COMMENTS OR SUGGESTIONS WOULD BE APPRECIATED

Cheers George

5376. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-11 14:32:47 UTC
From: aircheckIover
Topic: 5375 Message: 5376

> Can any one tell my why the Tecsun tuning is more mellow and seems
> less sensitive or wider sweet spot? It is affective but different
> than the Terk which is like the TG34, very sharp null and sweet.
>

An educated guess says the Tecsun is not as sharp because they used (from looks of picture) many many turns of small gauge wire. They probably chose this approach for aesthetic appeal (sure looks good doesn't it) because it actually works against the performance of the antenna.

5377. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-11 19:58:37 UTC
From: tenorman1952
Topic: 5375 Message: 5377

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:
>
> ANY INPUT COMMENTS OR SUGGESTIONS WOULD BE APPRECIATED
> (please to not cut and past this whole long post in reply)
>

Thanks, George... very nice reviews!

Paul C.

5378. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-11 20:18:26 UTC
From: gmcjetpilot
Topic: 5375 Message: 5378

CORRECTION I mislabled the pics

How should I test these three loops?

The tale of three Chinese loops
http://img525.imageshack.us/img525/7522/slide3copymh0.jpg

Terk and Tecsun MW/AM passive loops
http://img522.imageshack.us/img522/1176/slide1fx3.jpg

Kaito TG34 Active MW/SW loop
http://img522.imageshack.us/img522/4841/slide2hh6.jpg

5379. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-12 06:58:29 UTC
From: gmcjetpilot
Topic: 5375 Message: 5379

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
>
> > Can any one tell my why the Tecsun tuning is more mellow and
seems
> > less sensitive or wider sweet spot? It is affective but different
> > than the Terk which is like the TG34, very sharp null and sweet.
> >
>
> An educated guess says the Tecsun is not as sharp because they used
> (from looks of picture) many many turns of small gauge wire. They
> probably chose this approach for aesthetic appeal (sure looks good
> doesn't it) because it actually works against the performance of the
> antenna.
>

** TOO MANY TURNS **

???????? "many many turns of small gauge wire" ????????

It has 28 turns, which is about right according to the Loop Antenna
Calculator.

I just noticed on the inside of the loop there are three turns in the
middle, under the induction winding; this must be the sense wire for
the direct connection.

You say too many turns of small gage wire? Does wire gage have
anything to do with it? If limited to 9" dia loop than how many turns
do you need? With the loop calculator a 10-365 pf cap 28 turns gives
550 Khz -3380 Khz around a 7" x 7" frame (the calculator is for
square loops, so 7"x7" is equiv to 9" round in circumference or wire
length per turn).

I wounder what the TERK has inside. There are screws to disassemble
but something tells me not to to take this one apart.

** TUNING SENSITIVITY **

I have to say the Tecsun AN-200 has about the same gain as the Terk
in performance, from what I can tell. I am hard pressed to say there
is a big difference between the two passive loops. It is just that
the Tecsun has a less sharp edge tuning characteristic. I don't want
to say less sensitive, just not AS SENSITIVE to tuning the CAP.

Speaking of tuning sensitivity, the TG34 active loop is SUPER
SENSITIVE and with a tiny thumbnail tuning dial, it takes a precise

touch to get it dialed in.

** TEST CONTINUES **

Since I last wrote, I tried all three loops with my Degen DE1103. The Degen must be maxed out already with the existing internal loop stick, because none of the loops produce a significant gain. The DE1103 does have an antenna jack input but not for MW, only for SW. I'll try the MW loops on 160 meter.

I also revisited the Sony AM/FM portable/table radio. All loops produce obvious and some times dramatic difference. I got the TG34 out for side-by-side comparison to the passive loops.

** UPDATED CONCLUSION SO FAR **

As I thought and remembered, the TG34 does a little better with its amplification and loop-stick repeater for "proximity" signal boosting on the Sony table AM radio. The down side are the exta wires and trying to position the soft loop in the window, which can be a pain. Some stations are better with the loop perpendicular to the window (N-S), other stations are better with loop flush to the window (E-W) direction. I have to jury rig a support out from the top of the window to hang the loop from, than tether to keep it from turning.

Tuning sensitivity of the TG34 with a small thumbnail dial on the small amplifier module (the size of a large pack of gum) makes tuning more touchy and harder than the others, at least with out practice. Its easy to overshoot (again). Very small movement of tuning dial makes a big difference. Of course the TG34 can do SW and is pretty good up to about 9-13Mhz.

The passive loops are just right for the portable or table top AM radio on a table. They are both nice, the Terk AM advantage and Tecsun AN-200 are worth a look. I'm probably going to keep both, and if have to decide on one, the choice would be hard. I would lean more towards the Terk only because it comes with a better cord to connect to radio and may be (?) a tad bit more gain (may be). However style wise, the Tecsun AN-200 is pretty flashy. If the wife is involved this would be a good one for her to decide based on style aesthetics alone, since they perform pretty close.

MORE test to come? I'll keep you posted if I find anything else.

Cheers George

5380. Re: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-12 15:55:37 UTC
From: Jay Heyl
Topic: 5375 Message: 5380

On Sat, Jul 12, 2008 at 2:58 AM, gmcjetpilot <gmcjetpilot@...> wrote:

>
> ** TEST CONTINUES **
>
> Since I last wrote, I tried all three loops with my Degen DE1103. The
> Degen must be maxed out already with the existing internal loop
> stick, because none of the loops produce a significant gain. The
> DE1103 does have an antenna jack input but not for MW, only for SW.
> I'll try the MW loops on 160 meter.
>

You haven't really described how you're testing the loops. For MW, the testing should be done during the day, preferably in the early afternoon. Skywave reception at night makes accurate testing virtually impossible. In the day time you're getting almost all ground wave, which will not vary significantly during the time of the test.

To test gain, find a station that's just barely perceptible on the radio with the internal antenna. Even better, tune to a station you know is there but is just out of range on the barefoot radio. This gives you enough head room to get some idea of how much gain the antennas are providing.

Another important characteristic of a MW antenna is the ability to null interfering stations. For this you need to find a fairly strong station that's masking another station. Rotate the antennas until the strong station begins to fade. Keep adjusting to minimize the strong station. Can you know get a decent signal from the station that was masked? The masked station will need to be at an angle to the stronger station. The closer to 90 degrees, the easier it will be to null one and receive the other.

Finally, the sharpness of the null produced by an antenna can be an important characteristic. For this you need to find two interfering stations that form a fairly narrow angle from your location. You'll probably have to experiment to find a situation where at least one of the antennas makes a difference in reception and compare the others to that.

Hope this helps.

-- Jay

[Non-text portions of this message have been removed]

5381. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-12 22:03:13 UTC
From: airchecklover
Topic: 5375 Message: 5381

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:
>
> --- In loopantennas@yahoogroups.com, "airchecklover" <mdh@> wrote:
> >
> >
> > > Can any one tell my why the Tecsun tuning is more mellow and
> seems
> > > less sensitive or wider sweet spot? It is affective but different
> > > than the Terk which is like the TG34, very sharp null and sweet.
> > >
> >
> > An educated guess says the Tecsun is not as sharp because they used
> > (from looks of picture) many many turns of small gauge wire. They
> > probably chose this approach for aesthetic appeal (sure looks good
> > doesn't it) because it actually works against the performance of the
> > antenna.
> >
>
> ** TOO MANY TURNS **
>
> ???????? "many many turns of small gauge wire" ????????
>
> It has 28 turns, which is about right according to the Loop Antenna
> Calculator.
>
> I just noticed on the inside of the loop there are three turns in the
> middle, under the induction winding; this must be the sense wire for
> the direct connection.
>
> You say too many turns of small gage wire? Does wire gage have
> anything to do with it? If limited to 9" dia loop than how many turns
> do you need? With the loop calculator a 10-365 pf cap 28 turns gives
> 550 Khz -3380 Khz around a 7" x 7" frame (the calculator is for
> square loops, so 7"x7" is equiv to 9" round in circumference or wire
> length per turn).
>
> I wounder what the TERK has inside. There are screws to disassemble
> but something tells me not to to take this one apart.
>
>
>
> ** TUNING SENSITIVITY **
>
> I have to say the Tecsun AN-200 has about the same gain as the Terk

> in performance, from what I can tell. I am hard pressed to say there
> is a big difference between the two passive loops. It is just that
> the Tecsun has a less sharp edge tuning characteristic. I don't want
> to say less sensitive, just not AS SENSITIVE to tuning the CAP.
>
> Speaking of tuning sensitivity, the TG34 active loop is SUPER
> SENSITIVE and with a tiny thumbnail tuning dial, it takes a precise
> touch to get it dialed in.
>
>
>
>
> ** TEST CONTINUES **
>
> Since I last wrote, I tried all three loops with my Degen DE1103. The
> Degen must be maxed out already with the existing internal loop
> stick, because none of the loops produce a significant gain. The
> DE1103 does have an antenna jack input but not for MW, only for SW.
> I'll try the MW loops on 160 meter.
>
> I also revisited the Sony AM/FM portable/table radio. All loops
> produce obvious and some times dramatic difference. I got the TG34
> out for side-by-side comparison to the passive loops.
>
>
> ** UPDATED CONCLUSION SO FAR **
>
> As I thought and remembered, the TG34 does a little better with its
> amplification and loop-stick repeater for "proximity" signal boosting
> on the Sony table AM radio. The down side are the exta wires and
> trying to position the soft loop in the window, which can be a pain.
> Some stations are better with the loop perpendicular to the window (N-
> S), other stations are better with loop flush to the window (E-W)
> direction. I have to jury rig a support out from the top of the
> window to hang the loop from, than tether to keep it from turning.
>
> Tuning sensitivity of the TG34 with a small thumbnail dial on the
> small amplifier module (the size of a large pack of gum) makes tuning
> more touchy and harder than the others, at least with out practice.
> Its easy to overshoot (again). Very small movement of tuning dial
> makes a big difference. Of course the TG34 can do SW and is pretty
> good up to about 9-13Mhz.
>
> The passive loops are just right for the portable or table top AM
> radio on a table. They are both nice, the Terk AM advantage and
> Tecsun AN-200 are worth a look. I'm probably going to keep both, and
> if have to decide on one, the choice would be hard. I would lean more
> towards the Terk only because it comes with a better cord to connect
> to radio and may be (?) a tad bit more gain (may be). However style
> wise, the Tecsun AN-200 is pretty flashy. If the wife is involved

> this would be a good one for her to decide based on style aesthetics
> alone, since they perform pretty close.
>
> MORE test to come? I'll keep you posted if I find anything else.
>
> Cheers George
>

George;

Nice job reporting test results. I need to embellish my statement about the Tecsun having many many turns (I was tired and did not say it correctly).

I've only built larger loops, starting at 2 ft. They need 15 turns or so for a std. 15pf-360pf capacitor. 28 turns seems like alot but given it resonates, the number of turns is obviously matched with the correct value variable capacitor. A possible reason why the "Q" is low and tuning is wide is because the turns are very close together. It is a known fact inter-winding capacitance plays a role in loops and Q is reduced (ie, bandwidth is wider) with closer spacing of windings. As to why the Terk's bandwidth is tighter than the Tecsun, given the width of the loops appears to be about the same - I don't know without seeing the windings. One possibility is the Terk uses Litz wire which, by it's design, reduces inter-winding capacitance.

Keep us posted if you take the Terk apart.

Mark

5382. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-12 23:10:33 UTC
From: gmcjetpilot
Topic: 5375 Message: 5382

Hi Mark:

Roger that, the turns are close together (touching) and clearly spreading them out improves the low end.

I just did my final test this time with a Ten Tec RX320D (PC radio).

Using the S-meter was better. I ran all of them through a 30:1 balun.

I also compared the three loops to may main antenna, a 60 foot random wire, approx 15-20 feet above ground, with 30:1 balun, grounded of course.

The pecking order (MW band) is:

Random wire
TG34 amplified loop
Terk Am Advantage
Tecsun AN-200

The random wire is better than the TG34 and both passove loops. The random wire random wire is significantly better than the two passive loops. The TG34 was also much better than the two passive loops.

The two passive loops are close, but clearly of the two passive table top loops, the Terk has a bit more uhumph, based on my S-meter. Sound wise it was hard to tell, but on one station I though the Terk had lower noise or static.

Surprisingly the random wire was more quiet, at least on the few stations I checked, but not always. Keeping in mind the random wire is outside and the two loops I had in a 2nd floor window sill, but near by CRT computer monitor, which no doubt added noise.

Conclusion loops are awesome but just one tool in the antenna bag of tricks.

My next antenna actually will be a 2' x 2' loop on an "X" frame. I just got the air capacitor in the mail. I expect to blow the 9" loops away. Bigger is better.

One day I'll have room for a real long wire and/or a
Wellbrook Loop on a rotor.

Thanks for the input.

George

>--- "aircheckloverr" <mdh@...> wrote:
>
> George;
>
> Nice job reporting test results. I need to
>embellish my statement about the Tecsun having
>many many turns (I was tired and did not say
>it correctly).
>
> I've only built larger loops, starting at 2 ft. They
>need 15 turns or so for a std. 15pf-360pf
>capacitor. 28 turns seems like alot but given it
>resonates, the number of turns is obviously
>matched with the correct value variable capacitor.
>A possible reason why the "Q" is low and tuning
>is wide is because the turns are very close
>together. It is a known fact inter-winding
>capacitance plays a role in loops and Q is reduced
>(ie, bandwidth is wider) with closer spacing of
>windings. As to why the Terk's bandwidth is
>tighter than the

>Tecsun, given the width of the loops appears to be
>about the same - I don't know without seeing the
>windings. One possibility is the Terk uses Litz
>wire which, by it's design, reduces inter-winding
>capacitance.
>
> Keep us posted if you take the Terk apart.
>
> Mark

5383. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-13 15:52:14 UTC
From: airchecklover
Topic: 5375 Message: 5383

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:
>
> Hi Mark:
>
> Roger that, the turns are close together (touching)
> and clearly spreading them out improves the low end.
>
> I just did my final test this time with a Ten Tec
> RX320D (PC radio).
>
> Using the S-meter was better. I ran all of them
> through a 30:1 balun.
>
> I also compared the three loops to may main
> antenna, a 60 foot random wire, approx 15-20 feet
> above ground, with 30:1 balun, grounded of course.
>
> The pecking order (MW band) is:
>
> Random wire
> TG34 amplified loop
> Terk Am Advantage
> Tecsun AN-200
>
>
> The random wire is better than the TG34 and both
> passove loops. The random wire random wire is
> significantly better than the two passive loops.
> The TG34 was also much better than the two passive
> loops.
>
> The two passive loops are close, but clearly of the
> two passive table top loops, the Terk has a bit more
> uhumph, based on my S-meter. Sound wise it was
> hard to tell, but on one station I though the Terk had
> lower noise or static.
>
> Surprisingly the random wire was more quiet, at
> least on the few stations I checked, but not always.
> Keeping in mind the random wire is outside and the two
> loops I had in a 2nd floor window sill, but near by CRT
> computer monitor, which no doubt added noise.
>
> Conclusion loops are awesome but just one tool in

> the antenna bag of tricks.
>
> My next antenna actually will be a 2' x 2' loop on
> an "X" frame. I just got the air capacitor in the
> mail. I expect to blow the 9" loops away. Bigger is
> better.
>
> One day I'll have room for a real long wire and/or a
> Wellbrook Loop on a rotor.
>
> Thanks for the input.
>
> George

George; Sounds like you are having fun :)

Couple thingies to pass on ... a) I have found a practical limit to "bigger is better" .... my 2 ft loop (15 turns of 20 ga (or is it 22 ga) solid copper is my best BCB loop 9 out of 10 times as opp to my 3.5 ft loop. Why? Combination of ease of use (rotation/placement) and enough gain to grab the really weak ones (daytime signals). The big loop with much bigger aperture and more gain seems to hit a theretical point of "no more returns" at my QTH where residual noise becomes the bigger issue. Have I "maxxed out" for my QTH? Perhaps. But maybe not. I've yet to get my end-fed sloper up - perhaps that will surprise me. But what really surprised me was this setup: I have a CCrane Twin-Ferrite as well as the 2 ft loop and 3.5 ft loop. Each on it's own gives me a significant gain and better s/n ratio on BCB than a barefoot radio. I'd been using inductive coupling with the loops, direct coupling with the T-F. One day I got a little crazy and direct-connected the T-F, setting its ferrite head next to the 2 ft loop which was sitting on a Lazy Susan. --> YES!!!!!! <--
The sum betters each individual contribution. I am now getting more gain & improved s/n ratio using a combo of the two antennas. I mostly spin the loop for direction but sometimes orienting the T-F head and playing it's sweet/null points against the loops seems to give me more null options. At any rate, this is a DX setup and not too gangly and unwieldy. Perhaps someday I'll have a chance to put this setup against a Quantum to see how it fairs for gain and null. The Quantum, with it's Q multiplier, will always win in the Q department.

b) I wonder about the performance difference between loops and long wire and the 30:1 balun. I'm still attempting to become an antenna expert (I'll let you know if/when I ever get there :) but from reading, most end-fed long wires use a balun ranging from 4:1 to 9:1. 30:1 seems like a huge ratio. Can you elaborate on that? Is this a store-bought or a home brew antenna? Did you wind the balun? Where did you get plans?

And I wonder about using the 30:1 balun with your loops. They both have sense loops for direct-connect, correct? Wouldn't

direct-connecting yield more gain? Or is your rcvr loading down the sense loop so you've connected a balun in between? I ask also because I have a TG 34 and although I've never done a side-by-side with a BCB loop, it never struck me as being as good a BCB antenna compared to the multi-turn passive loops. Hmmm. Maybe I need to re-evaluate? Or is the use of a 30:1 balun with the Terk & Tecsun hurting performance?

Hope you can post more results. Good so far.

Mark

5384. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-13 15:54:27 UTC
From: Fraser
Topic: 5375 Message: 5384

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:
>
> Hi Mark:
>
> Roger that, the turns are close together (touching)
> and clearly spreading them out improves the low end.
>
> I just did my final test this time with a Ten Tec
> RX320D (PC radio).
>
> Using the S-meter was better. I ran all of them
> through a 30:1 balun.
>
> I also compared the three loops to may main
> antenna, a 60 foot random wire, approx 15-20 feet
> above ground, with 30:1 balun, grounded of course.
>
> The pecking order (MW band) is:
>
> Random wire
> TG34 amplified loop
> Terk Am Advantage
> Tecsun AN-200
>
>
> The random wire is better than the TG34 and both
> passove loops. The random wire random wire is
> significantly better than the two passive loops.
> The TG34 was also much better than the two passive
> loops.
>
> The two passive loops are close, but clearly of the
> two passive table top loops, the Terk has a bit more
> uhumph, based on my S-meter. Sound wise it was
> hard to tell, but on one station I though the Terk had
> lower noise or static.
>
> Surprisingly the random wire was more quiet, at
> least on the few stations I checked, but not always.
> Keeping in mind the random wire is outside and the two
> loops I had in a 2nd floor window sill, but near by CRT
> computer monitor, which no doubt added noise.
>
> Conclusion loops are awesome but just one tool in

> the antenna bag of tricks.
>
> My next antenna actually will be a 2' x 2' loop on
> an "X" frame. I just got the air capacitor in the
> mail. I expect to blow the 9" loops away. Bigger is
> better.
>
> One day I'll have room for a real long wire and/or a
> Wellbrook Loop on a rotor.
>
> Thanks for the input.
>
> George
>
>
>

Just read this and was interested to see the results. Only a couple of comments on this test though....

1. I am not sure what was meant by the comment "Using the S-meter was better. I ran all of them through a 30:1 balun."

The TG34 has an output impedance of approx 50 Ohms so why would you put it into an impedance transformer ? (30:1 is one heck of an impedance change)

2. Why was the S-Meter the measurement tool of choice ? An S-Meter does not deliver a Signal to Noise ratio indication. It is well known that Loops, active or passive, often produce less Signal strength but that really is not the point. The signal to noise ratio is the key performance indicator, provided the loop produces enough RF output to overcome the noise floor of the receiver. Most modern HF receivers are quiet enough and have enough AGC range to cope with the low RF output of a decent loop. It is also worth noting that the Ten-Tec is "hobbled" on frequencies below 2 MHz as a feature of it's design so sensitivity is greatly reduced (I own an RX320 as well)

Jut some food for thought and don't forget that when comparing a long wire aerial (antenna) with a loop, you are comparing E field and an H field aerials ..... they behave totally differently when placed in noisy (i.e domestic) RF environments ;-)

Best Wishes

Fraser

5385. Re: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-13 18:47:18 UTC
From: Jim Dunstan
Topic: 5375 Message: 5385

At 03:52 PM 7/13/2008 +0000, you wrote:

>Couple thingies to pass on ... a) I have found a practical limit to
>"bigger is better" .... my 2 ft loop (15 turns of 20 ga (or is it 22
>ga) solid copper is my best BCB loop 9 out of 10 times as opp to my
>3.5 ft loop. Why? Combination of ease of use (rotation/placement) and
>enough gain to grab the really weak ones (daytime signals). The big
>loop with much bigger aperture and more gain seems to hit a theretical
>point of "no more returns" at my QTH where residual noise becomes the
>bigger issue. Have I "maxxed out" for my QTH? Perhaps. But maybe
>not. I've yet to get my end-fed sloper up - perhaps that will surprise
>me. But what really surprised me was this setup: I have a CCrane
>Twin-Ferrite as well as the 2 ft loop and 3.5 ft loop. Each on it's
>own gives me a significant gain and better s/n ratio on BCB than a
>barefoot radio. I'd been using inductive coupling with the loops,
>direct coupling with the T-F. One day I got a little crazy and
>direct-connected the T-F, setting its ferrite head next to the 2 ft
>loop which was sitting on a Lazy Susan. --> YES!!!!!! <--
>The sum betters each individual contribution. I am now getting more
>gain & improved s/n ratio using a combo of the two antennas. I mostly
>spin the loop for direction but sometimes orienting the T-F head and
>playing it's sweet/null points against the loops seems to give me more
>null options. At any rate, this is a DX setup and not too gangly and
>unwieldy. Perhaps someday I'll have a chance to put this setup
>against a Quantum to see how it fairs for gain and null. The Quantum,
>with it's Q multiplier, will always win in the Q department.
>
>b) I wonder about the performance difference between loops and long
>wire and the 30:1 balun. I'm still attempting to become an antenna
>expert (I'll let you know if/when I ever get there :) but from
>reading, most end-fed long wires use a balun ranging from 4:1 to 9:1.
>30:1 seems like a huge ratio. Can you elaborate on that? Is this a
>store-bought or a home brew antenna? Did you wind the balun? Where
>did you get plans?
>
>And I wonder about using the 30:1 balun with your loops. They both
>have sense loops for direct-connect, correct? Wouldn't
>direct-connecting yield more gain? Or is your rcvr loading down the
>sense loop so you've connected a balun in between? I ask also because
>I have a TG 34 and although I've never done a side-by-side with a BCB
>loop, it never struck me as being as good a BCB antenna compared to
>the multi-turn passive loops. Hmmm. Maybe I need to re-evaluate? Or
>is the use of a 30:1 balun with the Terk & Tecsun hurting performance?
>

>Hope you can post more results. Good so far.
>
>Mark

Hi Mark,

The multi-inductor (loop) front end is superior to most single loop systems. There is a lot of good reading about this in 'crystal radio' web sites. I have experimented extensively with long wire antennas on MW (out at the farm) where there is no local RFI to deal with. I used direct connection to MW antenna terminals on such radios as the SRIII etc. and the normal 50 ohm input of radios such as the TS-50. There is some improvement using a RF transformer. However, My eyes were opened when I used the wire in conjunction with a HighQ loop. If you configure the loop as an 'antenna tuner' with a second wire as a counterpoise. It is possible to get the same performance with small (non-loop) High Q inductors in conjunction with the long wire.

However, in an environment with RFI the performance of the long wire is diminished as the S/N ratio is not as good as with a tuned loop alone. to maximize MW performance from a long wire a High Q antenna tuner with counterpoise is required. I have not been able to achieve the same level with RF transformers ... eg wound on ferrite cores.

Jim

5386. Re: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-13 19:58:48 UTC
From: aimo ruoho
Topic: 5375 Message: 5386

Oh, oh!

I was just wondering by myself, that if people have their PC Monitor opened, when they are testing such small loops or other active or non-active antennas situated in their room, are they not able to think, that that may not be the most wise method to do things? At least it is not fair for those tests, not at all!

So, let us close all possible sources of RFI (Radio Frequency Interference) in our home, when possible, if we want to receive just results, when doing such comparisons.
I just counted, how many pairs of outputs (electricity holes) I have in my radio room. 52! How many computers and Monitors? 3. How many lamps? 9. How many Radio Receivers? 14. Plus 3 printers, 1 paper tearing machine, 3 pairs of active loudspeakers. 3 telephones.Then about antennas, how many? 9 coaxial cables coming from the upper and lower roofs. 32 different active and non-active loops and other types of antennas. (I am a very enthusiastic home-brewer of antennas and crystal receivers and other radio device.)

This just to tell the reader, that there really may be a lot of things in use or not in one room to do the antenna-tests in a right or wrong manner.....
Best wishes!
Aimo

--- On Sun, 7/13/08, Fraser <fraser.castle@...> wrote:
From: Fraser <fraser.castle@...>
Subject: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures
To: loopantennas@yahoogroups.com
Date: Sunday, July 13, 2008, 5:54 PM

--- In loopantennas@ yahoogroups. com, "gmcjetpilot" <gmcjetpilot@ ...>

wrote:

>

> Hi Mark:

>

> Roger that, the turns are close together (touching)

> and clearly spreading them out improves the low end.

>

> I just did my final test this time with a Ten Tec

> RX320D (PC radio).

>

> Using the S-meter was better. I ran all of them

> through a 30:1 balun.

>

> I also compared the three loops to may main

> antenna, a 60 foot random wire, approx 15-20 feet

> above ground, with 30:1 balun, grounded of course.

>

> The pecking order (MW band) is:

>

> Random wire

> TG34 amplified loop

> Terk Am Advantage

> Tecsun AN-200

>

>

> The random wire is better than the TG34 and both

> passove loops. The random wire random wire is

> significantly better than the two passive loops.

> The TG34 was also much better than the two passive

> loops.

>

> The two passive loops are close, but clearly of the

> two passive table top loops, the Terk has a bit more

> uhumph, based on my S-meter. Sound wise it was

> hard to tell, but on one station I though the Terk had

> lower noise or static.

>

> Surprisingly the random wire was more quiet, at

> least on the few stations I checked, but not always.

> Keeping in mind the random wire is outside and the two

> loops I had in a 2nd floor window sill, but near by CRT

> computer monitor, which no doubt added noise.

>

> Conclusion loops are awesome but just one tool in

> the antenna bag of tricks.

>

> My next antenna actually will be a 2' x 2' loop on

> an "X" frame. I just got the air capacitor in the

> mail. I expect to blow the 9" loops away. Bigger is

> better.

>

> One day I'll have room for a real long wire and/or a

> Wellbrook Loop on a rotor.

>

> Thanks for the input.

>

> George

>

>

>

Just read this and was interested to see the results. Only a couple

of comments on this test though....

1. I am not sure what was meant by the comment "Using the S-meter was

better. I ran all of them through a 30:1 balun."

The TG34 has an output impedance of approx 50 Ohms so why would you

put it into an impedance transformer ? (30:1 is one heck of an

impedance change)

2. Why was the S-Meter the measurement tool of choice ? An S-Meter does not deliver a Signal to Noise ratio indication. It is well known that Loops, active or passive, often produce less Signal strength but that really is not the point. The signal to noise ratio is the key performance indicator, provided the loop produces enough RF output to overcome the noise floor of the receiver. Most modern HF receivers are quiet enough and have enough AGC range to cope with the low RF output of a decent loop. It is also worth noting that the Ten-Tec is "hobbled" on frequencies below 2 MHz as a feature of it's design so sensitivity is greatly reduced (I own an RX320 as well)

Jut some food for thought and don't forget that when comparing a long wire aerial (antenna) with a loop, you are comparing E field and an H field aerials ..... they behave totally differently when placed in noisy (i.e domestic) RF environments ;-)

Best Wishes

Fraser

[Non-text portions of this message have been removed]

5387. Re: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-13 21:36:03 UTC
From: aimo ruoho
Topic: 5375 Message: 5387

What about if the compared antennas all have the same advantage of height?
Should they not be tested equally?
Only then we could see and hear, what they are capable of!
Just my humble opinion.
It is said to be a fact, that on BCB the corresponding loop will give the best results, when it is near the earth level, right?
But if we test a random wire on the same level, what might be the results?
I have been testing the small Chinese loops from Degen on my roof with good results...

Most of the radio listeners are not able to put their antennas outside. So, we are very often just talking for the people, who have a lot of room outside and permission to erect a decent antenna, are we not? But they are a very small minority of the whole lot of people on this planet, right?
Best regards!

Aimo

--- On Sun, 7/13/08, gmcjetpilot <gmcjetpilot@...> wrote:
From: gmcjetpilot <gmcjetpilot@yahoo.com>
Subject: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures
To: loopantennas@yahoogroups.com
Date: Sunday, July 13, 2008, 1:10 AM

Hi Mark:

Roger that, the turns are close together (touching)

and clearly spreading them out improves the low end.

I just did my final test this time with a Ten Tec

RX320D (PC radio).

Using the S-meter was better. I ran all of them

through a 30:1 balun.

I also compared the three loops to may main

antenna, a 60 foot random wire, approx 15-20 feet

above ground, with 30:1 balun, grounded of course.

The pecking order (MW band) is:

Random wire

TG34 amplified loop

Terk Am Advantage

Tecsun AN-200

The random wire is better than the TG34 and both passove loops. The random wire random wire is significantly better than the two passive loops.

The TG34 was also much better than the two passive loops.

The two passive loops are close, but clearly of the two passive table top loops, the Terk has a bit more uhumph, based on my S-meter. Sound wise it was hard to tell, but on one station I though the Terk had lower noise or static.

Surprisingly the random wire was more quiet, at least on the few stations I checked, but not always.

Keeping in mind the random wire is outside and the two loops I had in a 2nd floor window sill, but near by CRT computer monitor, which no doubt added noise.

Conclusion loops are awesome but just one tool in the antenna bag of tricks.

My next antenna actually will be a 2' x 2' loop on an "X" frame. I just got the air capacitor in the mail. I expect to blow the 9" loops away. Bigger is better.

One day I'll have room for a real long wire and/or a Wellbrook Loop on a rotor.

Thanks for the input.

George

>--- "aircheckclover" <mdh@...> wrote:

>

> George;

>

> Nice job reporting test results. I need to

>embellish my statement about the Tecsun having

>many many turns (I was tired and did not say

>it correctly).

>

> I've only built larger loops, starting at 2 ft. They

>need 15 turns or so for a std. 15pf-360pf

>capacitor. 28 turns seems like alot but given it

>resonates, the number of turns is obviously

>matched with the correct value variable capacitor.

>A possible reason why the "Q" is low and tuning

>is wide is because the turns are very close

>together. It is a known fact inter-winding

>capacitance plays a role in loops and Q is reduced

>(ie, bandwidth is wider) with closer spacing of

>windings. As to why the Terk's bandwidth is

>tighter than the

>Tecsun, given the width of the loops appears to be

>about the same - I don't know without seeing the

>windings. One possibility is the Terk uses Litz

>wire which, by it's design, reduces inter-winding

>capacitance.

>

> Keep us posted if you take the Terk apart.

>

> Mark

[Non-text portions of this message have been removed]

5388. An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-13 23:56:57 UTC
From: Chris Trask
Topic: 5388 Message: 5388

I've been working steadily on this project ever since it came up. Paul Birke, a member of this list, has been stirring the pot with various ideas, and last week I had a fully working active loop antenna:

http://tinyurl.com/5zeewv

I have not tested the first one shown in this document, only the second one as it had much more favourable mechanical aspects that were well worth pursuing. These active loops do not have any frequency compensation as that part of the task proved to be much more demanding than I had anticipated.

I'm presently working on a more advanced version that is frequency compensated, but it may be some time before I have it completed. In the meantime, these amplifiers are both usable, the only difference between them being the loop coupling transformer. That transformer isolates the loop from the electronics (an essential design consideration), as well as providing the first defense against common-m?de EMI and IMD products from strong nearby MW broadcast stations.

You will notice that the parts cost for both of these is around $30, which is far less expensive than the WL1030 or any of the Wellbrook products. That was the essential goal of this project.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5389. AW: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-14 05:06:18 UTC
From: Gerhard Baumgartner
Topic: 5389 Message: 5389

hello chris and paul,

just a few words before i have to leave on a trip. tnx for your efforts and studies on the alternative loop design!! next Sunday i will look with the help of a friend for the parts here in austria/central europe and in the next weeks - probably it won´t be in a single day - i will build this loop also and will post the result here.

gerhard

5390. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-14 15:44:57 UTC
From: gmcjetpilot@yahoo.com
Topic: 5375 Message: 5390

MISTAKE.....good catch.

Yea I meant 9:1 and I hand wound a toroid 31:11 turns (interlaced or overlapped). Usually the balun ratio is 30:10 so I had 30 on my mind.

As far as the loops I was playing around more at night where some normally strong stations don't peg the needle because they drop power and go directional so I am on the back side of the main target.

The Terk loop did pull in more signal than the random wire/end fed.

Good catch 9:1 not 30.....30 turns is what I had on my mind.

>b) I wonder about the performance difference between loops and long
>wire and the 30:1 balun. I'm still attempting to become an antenna
>expert (I'll let you know if/when I ever get there :) but from
>reading, most end-fed long wires use a balun ranging from 4:1 to 9:1.
>30:1 seems like a huge ratio. Can you elaborate on that? Is this a
>store-bought

[Non-text portions of this message have been removed]

5391. Re: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-14 16:05:07 UTC
From: John Popelish
Topic: 5375 Message: 5391

gmcjetpilot@... wrote:
> MISTAKE.....good catch.
>
> Yea I meant 9:1 and I hand wound a toroid 31:11 turns
(interlaced or overlapped). Usually the balun ratio is 30:10
so I had 30 on my mind.
(snip)

I calculate an impedance ratio of 7.94:1 for a 31:11 turn
balun. (31^2)/(11^2)=7.94

--
Regards,

John Popelish

5392. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-14 16:22:03 UTC
From: tenorman1952
Topic: 5375 Message: 5392

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:

(snip)

> Couple thingies to pass on ... a) I have found a practical limit to
> "bigger is better" .... my 2 ft loop (15 turns of 20 ga (or is it 22
> ga) solid copper is my best BCB loop 9 out of 10 times as opp to my
> 3.5 ft loop. Why? Combination of ease of use (rotation/placement) and
> enough gain to grab the really weak ones (daytime signals). The big
> loop with much bigger aperture and more gain seems to hit a theretical
> point of "no more returns" at my QTH where residual noise becomes the
> bigger issue. Have I "maxxed out" for my QTH? Perhaps. But maybe
> not. I've yet to get my end-fed sloper up - perhaps that will surprise
> me.

You are not the first to report this. I have read this before,
diminishing returns, etc.

And just when I was going to start on some big loops. Food for
thought, for sure.

Paul C.
tenorman1952

5393. AOR LA390 Active Loop Antenna Appraisal

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-14 15:16:28 UTC
From: w_w_williamson
Topic: 5393 Message: 5393

I posted this message on the Eton E1 Group and I thought it might be of interest to people here so I've copied it:

My LA390 has arrived safely and is working well. It is solidly built with a heavy metal base unit which keeps everything stable with no risk of falling over. The band selector knob is large and very positive. The fine tune knob is smooth and covers a wide range with a sharp gain peak which makes tuning easy. Both knobs are marked to show their positions. The Loop swivels freely on it's BNC connector, so there is no need to move the base. AORUK made me a "patch lead" with a PAL connector for the E1 and a BNC connector for the LA390 so there was no need for an adapter.

The Wall Wart is larger than the E1's and it's output is rated at 12V 500mA and claims to be "low noise". There is also a 9V regulator built-in the base unit. The Loop draws just 80mA so the power supply is not over-stretched at all.

The frequency bands chosen are very convenient and cover the following ranges:

1. 150-800kHz (Longwave 148.5-283.5kHz).
2. 700khz-3Mhz (Mediumwave 520-1710khz).
3. 3-10Mhz (Shortwave bands 100-30 meters).
4. 10-30MHz (Shortwavw bands 30-7.5 meters).
5. 10kHz-500MHz (Loop acts as amplified whip).

RFI is significantly less on all bands and I'm even able to sit the Loop next to my wireless router without interference. Interestingly, the reduction in RFI is much greater than that achieved by using my multi-socket mains adapter with it's built-in smoothing.

Selecting the correct Loop band and using the tuning knob for maximum signal gives better results than the E1 whip. Rotating the loop gives further gain and/or nulls unwanted noise/signals. Switching between the Loop and the Whip highlights the difference in performance with signals on the E1 Whip being much lower or missing in the RFI.

There was a Ham DX contest last Saturday and I was able to listen to them on the 160 meter and 15 meter bands for the first time.

The LA390 shows a significant improvement over the E1 Whip in terms of RFI and performance and would suit anyone looking for an indoor or portable solution.

Bill

5394. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-14 22:45:23 UTC
From: gmcjetpilot
Topic: 5375 Message: 5394

Again 9:1 not 30:1 my bad......

Good point why use the balun with the loop. Don't know I'll try with out. I was thinking wire input = 300 ohm, like a TV. I as also thinking 66 feet of wire but forgot about the SENSE wire couple. I really don't know what the impedance of the loop, but you say its already 50 ohm? Cool. The AM radio does not say what input impedance is? The FM is labeled 75 ohm.

S-meter? Yea why use it? Because it is the only thing I had to use besides my ear. As I said my Mark IV calibrated ear says: Less static, louder (aka stronger signal), better S/N etc...... Often its too close to tell by ear.

As I was saying, on a strong station (turned down the juice at night they don't peg the needle) the loop was better than the wire. However any antenna will bring it in. With the S-meter I was able to make a quantitative reading. However your comment about signal and S/N is well taken and why my calibrates Mk IV-E ears are a good indicator.

The LOOP did better with the "stong" case in Par above, "soft pegged" the needle (this is a RX320D, PC Radio so its all on the computer), where the wire was floating around in the S-7's. Very small difference really. The AN-200 was about the same as the wire and did not soft peg the 10 on the **point-tee-thing (ha-ha). So I can only gather the Terk AM Advantage has more Q than the AN-200. Again the EAR said all same.

**(Note: S-meter on DX320D is software dependant - on the software I was using, the signal strength meter scale was out of 10. Also most RX320D software allows the user to "calabrate" or put a scale factor in, so the actual number means nothing, relative to spacific "S-meter" standards. However it is excellent for A-B comparisons.)

Radio RX320D: I know the radio is intentionally de-tuning for the MW to avoid over-driving with strong AM BCB. There are two mods that make it a MW and LF king monster. One, a very simple Cap bypass on the antenna input, which makes it have significant gain to 100khz (and below but most software controllers only allow tuning to 100Khz). The other mod is a different transformer, which, a little more involved mod. The Euro crowd loves LF and VLF more than the US radio market. They do these mods on this radio all the time. I know there are LF stations in the EU. In the states with so many 50KW AM stations they can overdrive the radio and cause problems on LF and SW freqs. My radio is stock.

Good point on the E and M type antenna. I know bairly enough the
understand what you are saying. With my experience I understand what
you mean. Since a wrote as I said the LOOP showed better S/N than the
end fed, but you are right they are different and switching between
the two I am getting the hang of what they can do or not do.

Cheers George

2 MHz as a feature of it's design
> so sensitivity is greatly reduced (I own an RX320 as well)

--- In loopantennas@yahoogroups.com, "Fraser" <fraser.castle@...>
wrote:
>
> --- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@>
> wrote:
> >
> > Hi Mark:
> >
> > Roger that, the turns are close together (touching)
> > and clearly spreading them out improves the low end.
> >
> > I just did my final test this time with a Ten Tec
> > RX320D (PC radio).
> >
> > Using the S-meter was better. I ran all of them
> > through a 30:1 balun.
> >
> > I also compared the three loops to may main
> > antenna, a 60 foot random wire, approx 15-20 feet
> > above ground, with 30:1 balun, grounded of course.
> >
> > The pecking order (MW band) is:
> >
> > Random wire
> > TG34 amplified loop
> > Terk Am Advantage
> > Tecsun AN-200
> >
> >
> > The random wire is better than the TG34 and both
> > passove loops. The random wire random wire is
> > significantly better than the two passive loops.
> > The TG34 was also much better than the two passive
> > loops.
> >
> > The two passive loops are close, but clearly of the
> > two passive table top loops, the Terk has a bit more
> > uhumph, based on my S-meter. Sound wise it was
> > hard to tell, but on one station I though the Terk had
> > lower noise or static.
> >

> > Surprisingly the random wire was more quiet, at
> > least on the few stations I checked, but not always.
> > Keeping in mind the random wire is outside and the two
> > loops I had in a 2nd floor window sill, but near by CRT
> > computer monitor, which no doubt added noise.
> >
> > Conclusion loops are awesome but just one tool in
> > the antenna bag of tricks.
> >
> > My next antenna actually will be a 2' x 2' loop on
> > an "X" frame. I just got the air capacitor in the
> > mail. I expect to blow the 9" loops away. Bigger is
> > better.
> >
> > One day I'll have room for a real long wire and/or a
> > Wellbrook Loop on a rotor.
> >
> > Thanks for the input.
> >
> > George
> >
> >
> >
>
> Just read this and was interested to see the results. Only a couple
> of comments on this test though....
>
> 1. I am not sure what was meant by the comment "Using the S-meter
was
> better. I ran all of them through a 30:1 balun."
>
> The TG34 has an output impedance of approx 50 Ohms so why would you
> put it into an impedance transformer ? (30:1 is one heck of an
> impedance change)
>
>
> 2. Why was the S-Meter the measurement tool of choice ? An S-Meter
> does not deliver a Signal to Noise ratio indication. It is well
known
> that Loops, active or passive, often produce less Signal strength
but
> that really is not the point. The signal to noise ratio is the key
> performance indicator, provided the loop produces enough RF output
to
> overcome the noise floor of the receiver. Most modern HF receivers
> are quiet enough and have enough AGC range to cope with the low RF
> output of a decent loop. It is also worth noting that the Ten-Tec
> is "hobbled" on frequencies below 2 MHz as a feature of it's design
> so sensitivity is greatly reduced (I own an RX320 as well)
>

> Jut some food for thought and don't forget that when comparing a
long
> wire aerial (antenna) with a loop, you are comparing E field and an
H
> field aerials ..... they behave totally differently when placed in
> noisy (i.e domestic) RF environments ;-)
>
> Best Wishes
>
> Fraser
>

5395. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-14 23:19:48 UTC
From: gmcjetpilot
Topic: 5375 Message: 5395

Yes, they all are the same height. The loops where all "tested" in a second floor, south facing, window, hanging or sitting on the sill.

The window frame is all plastic and the window screen and screen frame are also plastic. There may be some metal clips in there.

The Loops had a pretty good clear view of the south and to the E-W (which seems to be the location of most stations due to larger radio markets at the same latitude. Although there are many stations to the south, requiring turning the loop 90 degrees. I suspect the North stations are attenuated somewhat due to house structure, but that radio waves can bounce around anyway.

The wire is coming out the same second floor window where the loops. are. I tried to keep the loop away from the antenna wire and ground wire, and doubt there was much if any interaction. The wire goes from house to a tree. The feed line is coaxial through same window. GOOD FEEDBACK!

As I was saying the Loops where near a CRT computer monitor. However I unplugged and it did not seem to make a difference. Also per my previous post there where some stations where clearly the LOOPS noise rejection characteristic shinned more then the random wire, which may have had stronger signal (s-meter or loudness) but also sometimes a higher noise floor, aka S/N ratio. BE SURE LOOPS ROCK. Now to the PLUS column of random wire, you don't NEED to point it or tune it (although you can / should for max performance).

I think every loop should have an omni-directional antenna buddy on an antenna switch for serious scanning. Loops are more work in some ways than random listening. However for targeted freqs, loops rock for size, cost and the performance possible. It is also ideal if you can fit a random wire. I was challenged to get the random wire I have in onto my small lot, and I still worry the HOA will send me a letter telling me to take it down. (I just read the rules and they go into satellite dish size, but states they require "architectural plans" and approval of any out door antenna! May be I should submit it. You can hardly see it. Its 22 awg stranded with white PTFE insulation. I am thinking of putting a LOOP in the tree with a rotor and remote tuning! The HOA does not allow antenna above the roof line. There is the attic but I think out door and away for house (RFI) is goodness.

Cheers George

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> What about if the compared antennas all have the same advantage of

height?
> Should they not be tested equally?
> Only then we could see and hear, what they are capable of!
> Just my humble opinion.
> It is said to be a fact, that on BCB the corresponding loop will
give the best results, when it is near the earth level, right?
> But if we test a random wire on the same level, what might be the
results?
> I have been testing the small Chinese loops from Degen on my roof
with good results...
>
> Most of the radio listeners are not able to put their antennas
outside. So, we are very often just talking for the people, who have
a lot of room outside and permission to erect a decent antenna, are
we not? But they are a very small minority of the whole lot of people
on this planet, right?
> Best regards!
>
> Aimo
>

5396. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-14 23:51:34 UTC
From: gmcjetpilot
Topic: 5375 Message: 5396

I am not be wise (ha-ha) but I had the CRT off with the portable radio. I eliminated the the CRT by unplugging it.

Also I can and do actually run my PC RADIO (Ten Tec RX320D) with out CRT or computer running some times. I have a Palm Pilot with software that allows me to tune the RX320D, and it even has a S-meter display.

The other method to run the RX320D with out computer is tune it with the computer and turn the computer CRT and computer off (unplug). The radio will continue to run at last freq and settings, but you don't have any control of vol or have a S-meter. The RX320D is turned on and off with a toggle switch on the black box itself.

The test I did with a AM/FM/CD/Tape Awia mini-stereo (with no internal AM antenna) was tested was down stairs, away from the CRT. There is a LCD TV, which does give off noise if real close. Fortunately is out of line from most of the stations. I only compared the Terk and Tecsun on the Stereo. All other comparisons with the portable and RX320D was done upstairs. I wrote about the 1' x 1' pizza box non-tuned loop I made for this Aiwa stereo. It does pretty good on the two powerful stations to the east (and yes the wall its on is E-W), and hard pressed to tell the diff on those two stations. However after trying all the AM stations I should be able to get (according to the Radio Locate web site), I have to say the Awia is not a AM radio DX machine. Also being down stairs, not by a window and with a few internal walls in the way, reduces LOOP performance.

RFI Expert? (well at least for my installation)

A really good point about noise but let me say I have a lot experience with this. When I first got the RX320D I had a heck of a time with RFI. The RX320D is tied to a computer, so its a necessary evil. After much time and effort I found where all the noise was coming from and what worked antenna wise. I went around with a portable SW radio looking for local noise. Yes the CRT, Computer, Mouse(wireless) and even key board (wired) give off some near RFI, but you almost have to touch it with the whip antenna. The WiFi at 2.4Ghz was not a factor.

The real culprit was the scanner/printer combo, even in idle, it was a radio station from 17-23Mhz. The mouse obliterates the 11 meter 27Mhz band, but only when moving the mouse. The CRT was not bad unless you're almost touching it. The test "WINDOW" is about 6 feet away, not perfect but acceptable. I found little ore no diff with CRT on or off, but that was because the loops where not pointed right at it.

Again I did find stations and senerios where the LOOP had clearly better S/N ratio than the random wire.

When I first got my RX320D it was terrible with an indoor amplified mono poll antenna, S/N ratio wise. It was not till I strung the random wire outside, with a coaxial feed, ground with a 9:1 balun did I get it the RX320D to sing. Since I have DX'ed New Zealand and Kuwait in DRM! That blows me away. The antenna is not great just workable, but does indicate what a good radio the RX320D is.

My random wire needs help still, in that it comes up to the window before transition to coaxial, where the ground wire taps in as well. I need to move the wire antenna end feed termination on a non-conductive tether, away from the house, verse right at the window. I have been so happy and impressed with the performance, so I have not bothered to improve the wire antenna.

The CRT, if it had a large affect on the loops, it would affect the wire antenna somewhat as well, since all have some part approx the same distance from the CRT.

THANKS FOR THE GREAT COMMENTS GUYS (gals?). George

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Oh, oh!
>
> I was just wondering by myself, that if people have their PC Monitor opened, when they are testing such small loops or other active or non-active antennas situated in their room, are they not able to think, that that may not be the most wise method to do things? At least it is not fair for those tests, not at all!
>
> So, let us close all possible sources of RFI (Radio Frequency Interference) in our home, when possible, if we want to receive just results, when doing such comparisons.
> I just counted, how many pairs of outputs (electricity holes) I have in my radio room. 52!
> How many computers and Monitors? 3. How many lamps? 9. How many Radio Receivers? 14. Plus 3 printers, 1 paper tearing machine, 3 pairs of active loudspeakers. 3 telephones.Then about antennas, how many? 9 coaxial cables coming from the upper and lower roofs. 32 different active and non-active loops and other types of antennas. (I am a very enthusiastic home-brewer of antennas and crystal receivers and other radio device.)
>
> This just to tell the reader, that there really may be a lot of things in use or not in one room to do the antenna-tests in a right or wrong manner.....
> Best wishes!
> Aimo
>

> --- On Sun, 7/13/08, Fraser <fraser.castle@...> wrote:
> From: Fraser <fraser.castle@...>
> Subject: [loopantennas] Re: The Tale of three Chinese Loops -
comparison and pictures
> To: loopantennas@yahoogroups.com
> Date: Sunday, July 13, 2008, 5:54 PM
>
>
>
>
>
>
>
>
>
>
>
> --- In loopantennas@ yahoogroups. com, "gmcjetpilot"
<gmcjetpilot@ ...>
>
> wrote:
>
> >
>
> > Hi Mark:
>
> >
>
> > Roger that, the turns are close together (touching)
>
> > and clearly spreading them out improves the low end.
>
> >
>
> > I just did my final test this time with a Ten Tec
>
> > RX320D (PC radio).
>
> >
>
> > Using the S-meter was better. I ran all of them
>
> > through a 30:1 balun.
>
> >
>
> > I also compared the three loops to may main
>
> > antenna, a 60 foot random wire, approx 15-20 feet
>

> > above ground, with 30:1 balun, grounded of course.
>
> >
>
> > The pecking order (MW band) is:
>
> >
>
> > Random wire
>
> > TG34 amplified loop
>
> > Terk Am Advantage
>
> > Tecsun AN-200
>
> >
>
> >
>
> > The random wire is better than the TG34 and both
>
> > passove loops. The random wire random wire is
>
> > significantly better than the two passive loops.
>
> > The TG34 was also much better than the two passive
>
> > loops.
>
> >
>
> > The two passive loops are close, but clearly of the
>
> > two passive table top loops, the Terk has a bit more
>
> > uhumph, based on my S-meter. Sound wise it was
>
> > hard to tell, but on one station I though the Terk had
>
> > lower noise or static.
>
> >
>
> > Surprisingly the random wire was more quiet, at
>
> > least on the few stations I checked, but not always.
>
> > Keeping in mind the random wire is outside and the two
>

> > loops I had in a 2nd floor window sill, but near by CRT
>
> > computer monitor, which no doubt added noise.
>
> >
>
> > Conclusion loops are awesome but just one tool in
>
> > the antenna bag of tricks.
>
> >
>
> > My next antenna actually will be a 2' x 2' loop on
>
> > an "X" frame. I just got the air capacitor in the
>
> > mail. I expect to blow the 9" loops away. Bigger is
>
> > better.
>
> >
>
> > One day I'll have room for a real long wire and/or a
>
> > Wellbrook Loop on a rotor.
>
> >
>
> > Thanks for the input.
>
> >
>
> > George
>
> >
>
> >
>
> >
>
> >
>
> Just read this and was interested to see the results. Only a couple
>
> of comments on this test though....
>
>
>
> 1. I am not sure what was meant by the comment "Using the S-meter
was

>
> better. I ran all of them through a 30:1 balun."
>
>
>
> The TG34 has an output impedance of approx 50 Ohms so why would you
>
> put it into an impedance transformer ? (30:1 is one heck of an
>
> impedance change)
>
>
>
> 2. Why was the S-Meter the measurement tool of choice ? An S-Meter
>
> does not deliver a Signal to Noise ratio indication. It is well
known
>
> that Loops, active or passive, often produce less Signal strength
but
>
> that really is not the point. The signal to noise ratio is the key
>
> performance indicator, provided the loop produces enough RF output
to
>
> overcome the noise floor of the receiver. Most modern HF receivers
>
> are quiet enough and have enough AGC range to cope with the low RF
>
> output of a decent loop. It is also worth noting that the Ten-Tec
>
> is "hobbled" on frequencies below 2 MHz as a feature of it's design
>
> so sensitivity is greatly reduced (I own an RX320 as well)
>
>
>
> Jut some food for thought and don't forget that when comparing a
long
>
> wire aerial (antenna) with a loop, you are comparing E field and an
H
>
> field aerials ..... they behave totally differently when placed in
>
> noisy (i.e domestic) RF environments ;-)
>
>
>

> Best Wishes
>
>
>
> Fraser
>
>
>

5397. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-15 15:05:25 UTC
From: gmcjetpilot
Topic: 5375 Message: 5397

Ha-ha, OK I love a stickler for details. Good catch. Now that you brought it up, can you enlighten me how the math is derived.

I just copied a design off the web that was measured or reported to be 9:1. 30:10 is more traditional but recall the extra turn was to compensate for something, which I don't recall. I believe what he did was wind it, test it on the radio and than added turns. I suspect my shorter random wire is less than 450 ohms. No random wire is not exactly 450 ohms. I read 300-600 ohms is typical, so 450 ohm is right in the mid range.

HOW DO YOU MEASURE antenna or balun impedance? Does it take lab equipment? Is it possible to measure it exactly? I suppose it's possible, but how it reacts under a particular RF is another issue, right? (0r is it easy to measure?)

Is the ratio of turns squared (by the way math wise [31/11]^2 is the same as 31^2/11^2) accurate?

I know the torrid size is not critical but the material is for freq response. The way you wrap the Prim/Sec also affects it?

Thanks George

--- In loopantennas@yahoogroups.com, John Popelish <jpopelish@...> wrote:
>
> gmcjetpilot@... wrote:
> > MISTAKE.....good catch.
> >
> > Yea I meant 9:1 and I hand wound a toroid 31:11 turns
> (interlaced or overlapped). Usually the balun ratio is 30:10
> so I had 30 on my mind.
> (snip)
>
> I calculate an impedance ratio of 7.94:1 for a 31:11 turn
> balun. (31^2)/(11^2)=7.94
>
> --
> Regards,
>
> John Popelish
>

5398. Re: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-15 17:38:19 UTC
From: John Popelish
Topic: 5375 Message: 5398

gmcjetpilot wrote:
> Ha-ha, OK I love a stickler for details. Good catch. Now that you
> brought it up, can you enlighten me how the math is derived.

Of course, it is an approximation of reality based on the
ideal transformer assumptions of perfect magnetic coupling
of the turns and an infinite parallel inductance. but, in
reality, if the balun is well arranged on core material that
has good permeability and low losses in the frequency band
of interest, these can be pretty good approximations. Well
coupled turns have an inductance proportional to the turns
squared. Well coupled turns also share the same volts per
turn and two different well coupled windings share the same
ampere turns total. Those are the effects that cause the
impedance reflected through an ideal balun (or transformer)
to have a turns squared ratio. Less than perfectly coupled
turns have a lower power impedance ratio.

> I just copied a design off the web that was measured or reported to
> be 9:1. 30:10 is more traditional but recall the extra turn was to
> compensate for something, which I don't recall.

Again, the ratio should always be labeled as an impedance
ratio (somewhat hypothetical in the absence of accurate
measurement) or a turns ratio (pretty accurate if you can
count the turns).

> I believe what he did
> was wind it, test it on the radio and than added turns. I suspect my
> shorter random wire is less than 450 ohms. No random wire is not
> exactly 450 ohms. I read 300-600 ohms is typical, so 450 ohm is right
> in the mid range.
>
> HOW DO YOU MEASURE antenna or balun impedance? Does it take lab
> equipment? Is it possible to measure it exactly? I suppose it's
> possible, but how it reacts under a particular RF is another issue,
> right? (0r is it easy to measure?)

If you have a setup that can excite the device while it is
loaded with a known load (a low inductance resistor, for
instance), while measuring the voltage applied and the
current through its input, you can calculate the impedance.
I think the lab equipment that does this is a vector
impedance meter. Of course, this measurement varies with
frequency, so a bunch of points over a range of frequency is

needed to really quantify its performance for anything other
than single frequency operation. It is also useful to
measure its impedance with the other end both open and short
circuited.

> Is the ratio of turns squared (by the way math wise [31/11]^2 is the
> same as 31^2/11^2) accurate?

Only if the turns are well coupled, magnetically.

> I know the torrid size is not critical but the material is for freq
> response.

You generally want to use the highest permeability material
that does not have losses so high that they look like a
significant parallel load across the balun. Higher
permeability implies higher coupling, and higher inductance
in parallel with the transformed impedance, all other things
being equal.

> The way you wrap the Prim/Sec also affects it?

Yes, you have to be concerned with the stray capacitance
both across each winding, and between the turns of different
windings. details count, especially if you are pushing the
high frequency end of the balun's capability. Best winding
form at the high frequency end makes use of transmission
line effects (electric and magnetic field waves along the
wire length) in addition to just bulk magnetic field
coupling. But at the low frequency end core permeability
and turns squared dominate all other effects.

So, a good balun design begins with a set or requirements
for frequency band (both ends set limits on choices) and the
impedances needed on both sides.

--
Regards,

John Popelish

5399. Re: [loopantennas] Re: A Dream....!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-15 18:33:58 UTC
From: Bill Winkis
Topic: 5399 Message: 5399

Here is one to have fun with......

After configuring my towers and all, I find I have four points with pulleys installed 200 feet apart and 145 feet in the air.....just
about an 800 foot square in the open....

One tower is only 60 feet away from the shack if the antenna were fed at a rear corner.

The wire can be tilted in any direction.....or fed from any spot, any side.....

I want this for 80 meters primary, 40 secondary.

Idea's...??

Thanks,

-Bill
http://www.kc4pe.com/amateurshack.htm

[Non-text portions of this message have been removed]

5400. Re: A Dream....!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-16 18:49:44 UTC
From: Adam E.
Topic: 5399 Message: 5400

Go for it!, It sounds good there. I saw your website you sure have alot of equipment even minidisc recorders I wish I had. My minidisc portable recorder is broken and I need $50.00 to get it fixed at radio shack.

Good Luck!

Adam E.

--- In loopantennas@yahoogroups.com, "Bill Winkis" <kc4pe@...> wrote:
>
> Here is one to have fun with......
>
> After configuring my towers and all, I find I have four points with pulleys installed 200 feet apart and 145 feet in the air.....just
> about an 800 foot square in the open....
>
> One tower is only 60 feet away from the shack if the antenna were fed at a rear corner.
>
> The wire can be tilted in any direction.....or fed from any spot, any side.....
>
> I want this for 80 meters primary, 40 secondary.
>
> Idea's...??
>
> Thanks,
>
> -Bill
> http://www.kc4pe.com/amateurshack.htm
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

5401. Re: [loopantennas] Re: A Dream....!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-16 21:20:59 UTC
From: Roger Stein
Topic: 5399 Message: 5401

Bill,

Have you done some modeling yet with EZNEC or equal??

I have four hoist points, one at 100' and three at about 65' that will just about handle a full wave loop for 160m.

A great NVIS on 160, starting to get some 'legs' on 80 and much better on 40.

Mine is down at present in favor of a double-L for 160/80 utilizing the 100' hoist point.

I may try something again in the future. Modeling saved a lot of work!! I am going to set that arrangement of yours up just to see how good it will be!!

Very nice 'shack' btw!!

73, Roger
WA7BOC

On 7/15/08, Bill Winkis <kc4pe@...> wrote:
>
> Here is one to have fun with......
>
> After configuring my towers and all, I find I have four points with pulleys
> installed 200 feet apart and 145 feet in the air.....just
> about an 800 foot square in the open....
>
> One tower is only 60 feet away from the shack if the antenna were fed at a
> rear corner.
>
> The wire can be tilted in any direction.....or fed from any spot, any
> side.....
>
> I want this for 80 meters primary, 40 secondary.
>
> Idea's...??
>
> Thanks,
>
> -Bill
> http://www.kc4pe.com/amateurshack.htm
>
> [Non-text portions of this message have been removed]
>

>
>

[Non-text portions of this message have been removed]

5402. Re: [loopantennas] Re: A Dream....!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-17 11:01:18 UTC
From: Bill Winkis
Topic: 5399 Message: 5402

Roger ....Thanks For The reply.....

No EZNEC is a good idea, if you get a chance drop the figures in and see what happens...

Yes .. I retired about a year and a half ago, and I am redoing the shach as I always dreamerd about a but never had the time with businesss/family and the likes....but your seeing a 85% completion on the shack....Now whilr the weather is good efforts are turned to antenna's, Im good on HAFTA for the high bands but have work to do on the high ones...thus the 800 foot loop.....

Thanks,

-Bill

----- Original Message -----
From: Roger Stein
To: loopantennas@yahoogroups.com
Sent: Wednesday, July 16, 2008 5:20 PM
Subject: Re: [loopantennas] Re: A Dream....!!!!

Bill,

Have you done some modeling yet with EZNEC or equal??

I have four hoist points, one at 100' and three at about 65' that will just about handle a full wave loop for 160m.

A great NVIS on 160, starting to get some 'legs' on 80 and much better on 40.

Mine is down at present in favor of a double-L for 160/80 utilizing the 100' hoist point.

I may try something again in the future. Modeling saved a lot of work!!
I am going to set that arrangement of yours up just to see how good it will be!!

Very nice 'shack' btw!!

73, Roger
WA7BOC

On 7/15/08, Bill Winkis <kc4pe@...> wrote:
>
> Here is one to have fun with......
>
> After configuring my towers and all, I find I have four points with pulleys

> installed 200 feet apart and 145 feet in the air.....just
> about an 800 foot square in the open....
>
> One tower is only 60 feet away from the shack if the antenna were fed at a
> rear corner.
>
> The wire can be tilted in any direction.....or fed from any spot, any
> side.....
>
> I want this for 80 meters primary, 40 secondary.
>
> Idea's...??
>
> Thanks,
>
> -Bill
> http://www.kc4pe.com/amateurshack.htm
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5403. Re: [loopantennas] An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-17 20:28:20 UTC
From: Chris Trask
Topic: 5388 Message: 5403

Since I first posted this less than a week ago, I have continued working on this active loop antenna amplifier and have made a couple of imrovements. One is the use of a narrower PC board so that the assembly will fit snugly inside 1 1/4" PVC pipe. The second is the reconfiguation of two transformers and the addition of one transistor, the result being a 6dB increase in gain. The particulars can be downloaded at:

http://tinyurl.com/5zeewv

This series of wideband amplifiers does not have the noise and gain performance of my remotely tuned loop, but they do suffice as an inexpensive alternative to the WL1030. I will have a more detailed description of this last version plus a companion biasing tee in a few weeks.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Chris Trask" <christrask@...>
To: <loopantennas@yahoogroups.com>
Sent: Sunday, July 13, 2008 4:56 PM
Subject: [loopantennas] An Inexpensive Alternative to the WL1030

> I've been working steadily on this project ever since it came up.
Paul
> Birke, a member of this list, has been stirring the pot with various
ideas,
> and last week I had a fully working active loop antenna:
>
> http://tinyurl.com/5zeewv
>

> I have not tested the first one shown in this document, only the second
one
> as it had much more favourable mechanical aspects that were well worth
> pursuing. These active loops do not have any frequency compensation as
that
> part of the task proved to be much more demanding than I had anticipated.
>
> I'm presently working on a more advanced version that is frequency
> compensated, but it may be some time before I have it completed. In the
> meantime, these amplifiers are both usable, the only difference between
them
> being the loop coupling transformer. That transformer isolates the loop
> from the electronics (an essential design consideration), as well as
> providing the first defense against common-m?de EMI and IMD products from
> strong nearby MW broadcast stations.
>
> You will notice that the parts cost for both of these is around $30,
> which is far less expensive than the WL1030 or any of the Wellbrook
> products. That was the essential goal of this project.
>

5404. Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-17 21:56:50 UTC
From: Gerhard Baumgartner
Topic: 5404 Message: 5404

hi chris,
so i will wait with buying parts till you are ready with the biasing tee.
but comming Sunday i will have a first loop building discussion with my
friend.

tnx
gerhard

5405. Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-17 22:08:50 UTC
From: Chris Trask
Topic: 5404 Message: 5405

> hi chris,
> so i will wait with buying parts till you are ready with the biasing tee.
> but comming Sunday i will have a first loop building discussion with my
> friend.
>

Oh, I wouldn't hold things up just for that. It's nothing more than a
1:1 transformer, a couple of capacitors, and a fuse.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5406. I Have A Miracle Ducker TL Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 01:17:37 UTC
From: msznh
Topic: 5406 Message: 5406

I Have A Miracle Ducker TL Antenna

I purchased it from Universal Radio. It has never been used.

http://www.universal-radio.com/CATALOG/hamantht/5046.html

I'm willing to let it go for $100 + shipping. USA only.

If interested contact me off line.

Tom S

5407. Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 07:39:56 UTC
From: Patrick Reynaert
Topic: 5404 Message: 5407

Hi Chris,

any ideas on the OIP3 and OIP2 performance?

Patrick.

--- On Thu, 7/17/08, Chris Trask <christrask@...> wrote:

> From: Chris Trask <christrask@...>
> Subject: Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030
> To: loopantennas@yahoogroups.com
> Date: Thursday, July 17, 2008, 3:08 PM
> > hi chris,
> > so i will wait with buying parts till you are ready
> with the biasing tee.
> > but comming Sunday i will have a first loop building
> discussion with my
> > friend.
> >
>
> Oh, I wouldn't hold things up just for that.
> It's nothing more than a
> 1:1 transformer, a couple of capacitors, and a fuse.
>
> Chris
>
> ,----------------------. High Performance Mixers
> and
> / What's all this \ Amplifiers for RF
> Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask
> / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio
> Research
> (__)\ _ P.O. Box
> 25240
> \ \ .' `. Tempe,
> Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE
> Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email:
> christrask@...

> | | | | \ '.
> http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please
> put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos.
> Upload JPG and GIF into Photos. Please convert BMP or TIF to
> JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

5408. Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 14:08:33 UTC
From: Chris Trask
Topic: 5404 Message: 5408

Haven't gotten to that point yet. I've been looking at other alternatives, trying to find the best circuit for this appliction before doing any in-depth testing. So far, that last one has the best performance in terms of audible noise and IMD products. Since you've pointed it out, this might be a good time to do the OIP2 and OIP3 measurements as I've narrowed down the circuitry choices.

I'm contemplating adding the active augmentation transistors to that circuit, as they would improve both the noise and the IMD performance. It would, however, make the circuit a bit more complex and possibly discourage some people from taking it out for a spin. Adding those would increase the cost by about $0.50.

One thing I tried was including active negative inductors to overcome the high inductance of the loop itself. It proved to suffer from both high noise and poor IMD performance. It did, however, normalize the gain. Loops seem to work best when they are terminated with a low impedance, such as a bipolar transistor emitter. Doing so at least retains the nice deep radiation pattern null.

>
>Hi Chris,
>
>any ideas on the OIP3 and OIP2 performance?
>
>Patrick.
>
>
>--- On Thu, 7/17/08, Chris Trask <christrask@...> wrote:
>
>> From: Chris Trask <christrask@...>
>> Subject: Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030
>> To: loopantennas@yahoogroups.com
>> Date: Thursday, July 17, 2008, 3:08 PM
>> > hi chris,
>> > so i will wait with buying parts till you are ready
>> > with the biasing tee. but comming Sunday i will have
>> > a first loop building discussion with my friend.
>> >
>>
>> Oh, I wouldn't hold things up just for that.
>> It's nothing more than a 1:1 transformer, a couple of
>> capacitors, and a fuse.
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications

/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5409. Re: [loopantennas] An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 10:11:30 UTC
From: Steve Sykes
Topic: 5388 Message: 5409

Chris,
What is the frequency range? All the parts look like they are good for
HF. What would be needed to improve performance from 10 to 500 kHz?

Steve W2SES
Chris Trask wrote:
>
> Since I first posted this less than a week ago, I have continued working
> on this active loop antenna amplifier and have made a couple of
> imrovements.
> One is the use of a narrower PC board so that the assembly will fit snugly
> inside 1 1/4" PVC pipe. The second is the reconfiguation of two
> transformers and the addition of one transistor, the result being a 6dB
> increase in gain. The particulars can be downloaded at:
>
> http://tinyurl.com/5zeewv <http://tinyurl.com/5zeewv>
>
> This series of wideband amplifiers does not have the noise and gain
> performance of my remotely tuned loop, but they do suffice as an
> inexpensive
> alternative to the WL1030. I will have a more detailed description of this
> last version plus a companion biasing tee in a few weeks.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> <mailto:christrask%40earthlink.net>
> | | | | \ '. http://www.home.earthlink.net/~christrask
> <http://www.home.earthlink.net/%7Echristrask>
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
> ----- Original Message -----

> From: "Chris Trask" <christrask@...
> <mailto:christrask%40earthlink.net>>
> To: <loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>>
> Sent: Sunday, July 13, 2008 4:56 PM
> Subject: [loopantennas] An Inexpensive Alternative to the WL1030
>
> > I've been working steadily on this project ever since it came up.
> Paul
> > Birke, a member of this list, has been stirring the pot with various
> ideas,
> > and last week I had a fully working active loop antenna:
> >
> > http://tinyurl.com/5zeewv <http://tinyurl.com/5zeewv>
> >
> > I have not tested the first one shown in this document, only the second
> one
> > as it had much more favourable mechanical aspects that were well worth
> > pursuing. These active loops do not have any frequency compensation as
> that
> > part of the task proved to be much more demanding than I had
> anticipated.
> >
> > I'm presently working on a more advanced version that is frequency
> > compensated, but it may be some time before I have it completed. In the
> > meantime, these amplifiers are both usable, the only difference between
> them
> > being the loop coupling transformer. That transformer isolates the loop
> > from the electronics (an essential design consideration), as well as
> > providing the first defense against common-m?de EMI and IMD products
> from
> > strong nearby MW broadcast stations.
> >
> > You will notice that the parts cost for both of these is around $30,
> > which is far less expensive than the WL1030 or any of the Wellbrook
> > products. That was the essential goal of this project.
> >
>
>

5410. Re: [loopantennas] An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 15:46:10 UTC
From: Chris Trask
Topic: 5388 Message: 5410

The frequency range depends on the size of the loop. For 1 turn and 1M diameter, the first parallel resonance is around 18 MHz, so the antenna is usable up to 15 MHz. I'm using a 64cm diameter loop of #6 AWG copper wire for these experiments, which makes it usable up to 20 MHz.

For 500 kHz, you could use 4-5 turns and 1M diameter, with the turns spaced 4-5 wire diameters apart to avoid excessive interwinding capacitance, which would lower the first parallel resonance.

>
>Chris,
>What is the frequency range? All the parts look like they are good for
>HF. What would be needed to improve performance from 10 to 500 kHz?
>
>Steve W2SES
>Chris Trask wrote:
>>
>> Since I first posted this less than a week ago, I have continued working
>> on this active loop antenna amplifier and have made a couple of
>> imrovements.
>> One is the use of a narrower PC board so that the assembly will fit snugly
>> inside 1 1/4" PVC pipe. The second is the reconfiguation of two
>> transformers and the addition of one transistor, the result being a 6dB
>> increase in gain. The particulars can be downloaded at:
>>
>> http://tinyurl.com/5zeewv <http://tinyurl.com/5zeewv>
>>
>> This series of wideband amplifiers does not have the noise and gain
>> performance of my remotely tuned loop, but they do suffice as an
>> inexpensive
>> alternative to the WL1030. I will have a more detailed description of this
>> last version plus a companion biasing tee in a few weeks.
>>
>> Chris
>>
>> ,----------------------. High Performance Mixers and
>> / What's all this \ Amplifiers for RF Communications
>> / extinct stuff, anyhow? /
>> \ _______,--------------' Chris Trask / N7ZWY
>> _ |/ Principal Engineer
>> oo\ Sonoran Radio Research
>> (__)\ _ P.O. Box 25240
>> \ \ .' `. Tempe, Arizona 85285-5240
>> \ \ / \
>> \ '" \ IEEE Senior Member #40274515

>> . ( ) \
>> '-|)__| :. \ Email: christrask@...
>> <mailto:christrask%40earthlink.net>
>> | | | | \ '. http://www.home.earthlink.net/~christrask
>> <http://www.home.earthlink.net/%7Echristrask>
>> c__; c__; '-..'>.__
>>
>> Graphics by Loek Frederiks
>>
>> ----- Original Message -----
>> From: "Chris Trask" <christrask@...
>> <mailto:christrask%40earthlink.net>>
>> To: <loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>>
>> Sent: Sunday, July 13, 2008 4:56 PM
>> Subject: [loopantennas] An Inexpensive Alternative to the WL1030
>>
>> > I've been working steadily on this project ever since it came up.
>> Paul
>> > Birke, a member of this list, has been stirring the pot with various
>> ideas,
>> > and last week I had a fully working active loop antenna:
>> >
>> > http://tinyurl.com/5zeewv <http://tinyurl.com/5zeewv>
>> >
>> > I have not tested the first one shown in this document, only the second
>> one
>> > as it had much more favourable mechanical aspects that were well worth
>> > pursuing. These active loops do not have any frequency compensation as
>> that
>> > part of the task proved to be much more demanding than I had
>> anticipated.
>> >
>> > I'm presently working on a more advanced version that is frequency
>> > compensated, but it may be some time before I have it completed. In the
>> > meantime, these amplifiers are both usable, the only difference between
>> them
>> > being the loop coupling transformer. That transformer isolates the loop
>> > from the electronics (an essential design consideration), as well as
>> > providing the first defense against common-môde EMI and IMD products
>> from
>> > strong nearby MW broadcast stations.
>> >
>> > You will notice that the parts cost for both of these is around $30,
>> > which is far less expensive than the WL1030 or any of the Wellbrook
>> > products. That was the essential goal of this project.
>> >
>>
>>
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlink.net
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5411. Re: [loopantennas] Re: A Dream....!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 16:03:20 UTC
From: Roger Stein
Topic: 5399 Message: 5411

Gosh Bill, you have it all backwards....antenna work is supposed to be done in the dead
of winter with a 40watt soldering pencil!!!

Sounds like you are having a great time getting everything set up. I have been at
this hobby since 1964 and finally have a desk set-up just for radio!

I got some ideas out of the IKEA catalog and rolled my own.

My place of work is just three blocks from home so I can do a little antenna work at
lunch times.

With your tower and spacing set up....wow....I would be trying a pair of Lazy-H antennas, 90 degrees
to each other, wire beams, vertical loops with a reflector (quad!) sterba curtain, bruce array, etc!!

I have used the Lazy-H and Sterba curtain but they were for 20m and up. You definitely have room
for the 80/40m models and even 160. Gain antennas with a low take-off angle.

I fed mine with homemade open wire line and some commercial ladder line and a balanced tuner.

I may be preaching to the choir here but ON4UN has a great antenna book.

There is also a sloper array where the unused sloper elements act as reflectors for a multi-directional
array switch selected from the shack.

The possibilities are endless!! My difficulty has been with the bands so poor as of late, it is hard to evaluate
a particular antenna on a short term basis.

You could explore the 'diversity reception' idea with differing antenna polarization.

Have you come across the antennex website? http://www.antennex.com/

Back to the modeling, the 800 foot loop on 160 radiates straight up! on 80 about 70 degrees up off the horizon.

Good thing you are now retired!!.

Have fun and be safe!!!

73, Roger
WA7BOC

On 7/17/08, Bill Winkis <kc4pe@...> wrote:
>
> Roger ....Thanks For The reply.....
>
> No EZNEC is a good idea, if you get a chance drop the figures in and see
> what
> happens...
>
> Yes .. I retired about a year and a half ago, and I am redoing the shach as
> I always dreamerd about a but never had the time with businesss/family and
> the likes....but your seeing a 85% completion on the shack....Now whilr the
> weather is good efforts are turned to antenna's, Im good on HAFTA for the
> high bands but have work to do on the high ones...thus the 800 foot
> loop.....
>
> Thanks,
>
> -Bill
>
> ----- Original Message -----
> From: Roger Stein
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Sent: Wednesday, July 16, 2008 5:20 PM
> Subject: Re: [loopantennas] Re: A Dream....!!!!
>
> Bill,
>
> Have you done some modeling yet with EZNEC or equal??
>
> I have four hoist points, one at 100' and three at about 65' that will just
> about handle a full wave loop for 160m.
>
> A great NVIS on 160, starting to get some 'legs' on 80 and much better
> on 40.
>
> Mine is down at present in favor of a double-L for 160/80 utilizing the
> 100'
> hoist point.
>
> I may try something again in the future. Modeling saved a lot of work!!
> I am going to set that arrangement of yours up just to see how good it will
> be!!
>
> Very nice 'shack' btw!!
>
> 73, Roger
> WA7BOC
>

> On 7/15/08, Bill Winkis <kc4pe@... <kc4pe%40bellsouth.net>>
> wrote:
> >
> > Here is one to have fun with......
> >
> > After configuring my towers and all, I find I have four points with
> pulleys
> > installed 200 feet apart and 145 feet in the air.....just
> > about an 800 foot square in the open....
> >
> > One tower is only 60 feet away from the shack if the antenna were fed at
> a
> > rear corner.
> >
> > The wire can be tilted in any direction.....or fed from any spot, any
> > side.....
> >
> > I want this for 80 meters primary, 40 secondary.
> >
> > Idea's...??
> >
> > Thanks,
> >
> > -Bill
> > http://www.kc4pe.com/amateurshack.htm
> >
> > [Non-text portions of this message have been removed]
> >
> >
> >
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

5412. Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 17:08:01 UTC
From: Patrick Reynaert
Topic: 5404 Message: 5412

I thought that a high loop inductuance helps to get all loop current (the loop current and loop inductance are placed in parallel, like a norton equivalent circuit) into the low impedance of the amplifier to which the loop is connected, right ?

Patrick

--- On Fri, 7/18/08, Chris Trask <christrask@...> wrote:

> From: Chris Trask <christrask@...>
> Subject: Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030
> To: loopantennas@yahoogroups.com
> Date: Friday, July 18, 2008, 7:08 AM
> Haven't gotten to that point yet. I've been looking
> at other alternatives, trying to find the best circuit for
> this appliction before doing any in-depth testing. So far,
> that last one has the best performance in terms of audible
> noise and IMD products. Since you've pointed it out,
> this might be a good time to do the OIP2 and OIP3
> measurements as I've narrowed down the circuitry
> choices.
>
> I'm contemplating adding the active augmentation
> transistors to that circuit, as they would improve both the
> noise and the IMD performance. It would, however, make the
> circuit a bit more complex and possibly discourage some
> people from taking it out for a spin. Adding those would
> increase the cost by about $0.50.
>
> One thing I tried was including active negative
> inductors to overcome the high inductance of the loop
> itself. It proved to suffer from both high noise and poor
> IMD performance. It did, however, normalize the gain.
> Loops seem to work best when they are terminated with a low
> impedance, such as a bipolar transistor emitter. Doing so
> at least retains the nice deep radiation pattern null.
>
> >
> >Hi Chris,
> >
> >any ideas on the OIP3 and OIP2 performance?
> >
> >Patrick.
> >
> >
> >--- On Thu, 7/17/08, Chris Trask
> <christrask@...> wrote:

> >
> >> From: Chris Trask <christrask@...>
> >> Subject: Re: [loopantennas] Aw: Re: An Inexpensive
> Alternative to the WL1030
> >> To: loopantennas@yahoogroups.com
> >> Date: Thursday, July 17, 2008, 3:08 PM
> >> > hi chris,
> >> > so i will wait with buying parts till you are
> ready
> >> > with the biasing tee. but comming Sunday i
> will have
> >> > a first loop building discussion with my
> friend.
> >> >
> >>
> >> Oh, I wouldn't hold things up just for
> that.
> >> It's nothing more than a 1:1 transformer, a
> couple of
> >> capacitors, and a fuse.
> >>
>
>
> Chris
>
> ,----------------------. High Performance Mixers
> and
> / What's all this \ Amplifiers for RF
> Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask
> / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio
> Research
> (__)\ _ P.O. Box
> 25240
> \ \ .' `. Tempe,
> Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE
> Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email:
> christrask@...
> | | | | \ '.
> http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks

>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please
> put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos.
> Upload JPG and GIF into Photos. Please convert BMP or TIF to
> JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

5413. Re: [loopantennas] Re: A Dream....!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 17:14:21 UTC
From: Bill Winkis
Topic: 5399 Message: 5413

Thanks For The Return, Roger.....

Right, all kinds of good stuff can go between the four 145 foot points...I just modeled a full 800/793 ' Skyloop...I was not impressed.....

But I'll add your idea's to my list w hich at this point is small....

Have a great weekend...

-Bill

----- Original Message -----
From: Roger Stein
To: loopantennas@yahoogroups.com
Sent: Friday, July 18, 2008 12:03 PM
Subject: Re: [loopantennas] Re: A Dream....!!!!

Gosh Bill, you have it all backwards....antenna work is supposed to be done in the dead
of winter with a 40watt soldering pencil!!!

Sounds like you are having a great time getting everything set up. I have been at
this hobby since 1964 and finally have a desk set-up just for radio!

I got some ideas out of the IKEA catalog and rolled my own.

My place of work is just three blocks from home so I can do a little antenna work at
lunch times.

With your tower and spacing set up....wow....I would be trying a pair of Lazy-H antennas, 90 degrees
to each other, wire beams, vertical loops with a reflector (quad!) sterba curtain, bruce array, etc!!

I have used the Lazy-H and Sterba curtain but they were for 20m and up. You definitely have room
for the 80/40m models and even 160. Gain antennas with a low take-off angle.

I fed mine with homemade open wire line and some commercial ladder line and a balanced tuner.

I may be preaching to the choir here but ON4UN has a great antenna book.

There is also a sloper array where the unused sloper elements act as reflectors for a multi-directional
array switch selected from the shack.

The possibilities are endless!! My difficulty has been with the bands so
poor as of late, it is hard to evaluate
a particular antenna on a short term basis.

You could explore the 'diversity reception' idea with differing antenna
polarization.

Have you come across the antennex website? http://www.antennex.com/

Back to the modeling, the 800 foot loop on 160 radiates straight up! on 80
about 70 degrees up off the horizon.

Good thing you are now retired!!.

Have fun and be safe!!!

73, Roger
WA7BOC

On 7/17/08, Bill Winkis <kc4pe@...> wrote:
>
> Roger ....Thanks For The reply.....
>
> No EZNEC is a good idea, if you get a chance drop the figures in and see
> what
> happens...
>
> Yes .. I retired about a year and a half ago, and I am redoing the shach as
> I always dreamerd about a but never had the time with businesss/family and
> the likes....but your seeing a 85% completion on the shack....Now whilr the
> weather is good efforts are turned to antenna's, Im good on HAFTA for the
> high bands but have work to do on the high ones...thus the 800 foot
> loop.....
>
> Thanks,
>
> -Bill
>
> ----- Original Message -----
> From: Roger Stein
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Sent: Wednesday, July 16, 2008 5:20 PM
> Subject: Re: [loopantennas] Re: A Dream....!!!!
>
> Bill,
>
> Have you done some modeling yet with EZNEC or equal??
>
> I have four hoist points, one at 100' and three at about 65' that will just
> about handle a full wave loop for 160m.
>
> A great NVIS on 160, starting to get some 'legs' on 80 and much better
> on 40.

>
> Mine is down at present in favor of a double-L for 160/80 utilizing the
> 100'
> hoist point.
>
> I may try something again in the future. Modeling saved a lot of work!!
> I am going to set that arrangement of yours up just to see how good it will
> be!!
>
> Very nice 'shack' btw!!
>
> 73, Roger
> WA7BOC
>
> On 7/15/08, Bill Winkis <kc4pe@... <kc4pe%40bellsouth.net>>
> wrote:
> >
> > Here is one to have fun with......
> >
> > After configuring my towers and all, I find I have four points with
> pulleys
> > installed 200 feet apart and 145 feet in the air.....just
> > about an 800 foot square in the open....
> >
> > One tower is only 60 feet away from the shack if the antenna were fed at
> a
> > rear corner.
> >
> > The wire can be tilted in any direction.....or fed from any spot, any
> > side.....
> >
> > I want this for 80 meters primary, 40 secondary.
> >
> > Idea's...??
> >
> > Thanks,
> >
> > -Bill
> > http://www.kc4pe.com/amateurshack.htm
> >
> > [Non-text portions of this message have been removed]
> >
> >
> >
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5414. Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 18:23:30 UTC
From: Chris Trask
Topic: 5404 Message: 5414

```
>
> I thought that a high loop inductuance helps to get all loop current (the
loop
> current and loop inductance are placed in parallel, like a norton
equivalent
> circuit) into the low impedance of the amplifier to which the loop is
connected,
> right ?
>
```

I've been going back and forth between the Norton (current source) and Thevenin (voltage source) equivalents of the lumped element circuit model of the loop antenna. And yes, it should be just as you've said. However, when I designed my series-tuned active loop I used the Thevenin model, and that has proven to be more useful. I've stayed with that perspective since then as it's easier to mentally conceive matching networks.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5415. Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-18 18:44:46 UTC
From: Chris Trask
Topic: 5404 Message: 5415

>
> any ideas on the OIP3 and OIP2 performance?
>

I just completed doing that series of tests, and make a slight circuit modification in the process. In the schematics, the 200-ohm emitter resistors are now 68-ohms, which has each side of the circuit drawing 25mA. At this current level, the OIP3 is +32.5dBm and the OIP2 is +60dBm. Not bad for something this simple and inexpensive.

I don't care much for drawing this much current through the 2N2222, but the power dissipation of the input devices (Q1 and Q2) is still below 0.06W at this level. I might consider something heftier for the output devices (Q3 and Q4), such as the 2N5109. The 2N2222 is still best suited for the input devices in terms of ninearity, but the 2N5109 may have some advantage in terms of noise.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5416. Re: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-19 20:17:11 UTC
From: richard woltmann
Topic: 5375 Message: 5416

Lightning burnt a TV antenna,so need a loop suggest one to use with 320 tentac,please

Richard Woltmann

--- On Sun, 7/13/08, Fraser <fraser.castle@...> wrote:

From: Fraser <fraser.castle@...>
Subject: [loopantennas] Re: The Tale of three Chinese Loops - comparison and pictures
To: loopantennas@yahoogroups.com
Date: Sunday, July 13, 2008, 11:54 AM

--- In loopantennas@yahoogroups.com, "gmcjetpilot"
<gmcjetpilot@...>
wrote:
>
> Hi Mark:
>
> Roger that, the turns are close together (touching)
> and clearly spreading them out improves the low end.
>
> I just did my final test this time with a Ten Tec
> RX320D (PC radio).
>
> Using the S-meter was better. I ran all of them
> through a 30:1 balun.
>
> I also compared the three loops to may main
> antenna, a 60 foot random wire, approx 15-20 feet
> above ground, with 30:1 balun, grounded of course.
>
> The pecking order (MW band) is:
>
> Random wire
> TG34 amplified loop
> Terk Am Advantage
> Tecsun AN-200
>
>
> The random wire is better than the TG34 and both
> passove loops. The random wire random wire is
> significantly better than the two passive loops.
> The TG34 was also much better than the two passive
> loops.
>
> The two passive loops are close, but clearly of the

> two passive table top loops, the Terk has a bit more
> uhumph, based on my S-meter. Sound wise it was
> hard to tell, but on one station I though the Terk had
> lower noise or static.
>
> Surprisingly the random wire was more quiet, at
> least on the few stations I checked, but not always.
> Keeping in mind the random wire is outside and the two
> loops I had in a 2nd floor window sill, but near by CRT
> computer monitor, which no doubt added noise.
>
> Conclusion loops are awesome but just one tool in
> the antenna bag of tricks.
>
> My next antenna actually will be a 2' x 2' loop on
> an "X" frame. I just got the air capacitor in the
> mail. I expect to blow the 9" loops away. Bigger is
> better.
>
> One day I'll have room for a real long wire and/or a
> Wellbrook Loop on a rotor.
>
> Thanks for the input.
>
> George
>
>
>

Just read this and was interested to see the results. Only a couple of comments on this test though....

1. I am not sure what was meant by the comment "Using the S-meter was better. I ran all of them through a 30:1 balun."

The TG34 has an output impedance of approx 50 Ohms so why would you put it into an impedance transformer ? (30:1 is one heck of an impedance change)

2. Why was the S-Meter the measurement tool of choice ? An S-Meter does not deliver a Signal to Noise ratio indication. It is well known that Loops, active or passive, often produce less Signal strength but that really is not the point. The signal to noise ratio is the key performance indicator, provided the loop produces enough RF output to overcome the noise floor of the receiver. Most modern HF receivers are quiet enough and have enough AGC range to cope with the low RF output of a decent loop. It is also worth noting that the Ten-Tec is "hobbled" on frequencies below 2 MHz as a feature of it's design
so sensitivity is greatly reduced (I own an RX320 as well)

Jut some food for thought and don't forget that when comparing a long wire aerial (antenna) with a loop, you are comparing E field and an H field aerials ..... they behave totally differently when placed in noisy (i.e domestic) RF environments ;-)

Best Wishes

Fraser

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

5417. Hello new to the Group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-19 02:50:41 UTC
From: David
Topic: 5417 Message: 5417

I am David and I could use some advice. I am wanting to learn about loop antennas, however everything I have read suggest that they must be very high to be efficient. That is my problem I have the space my lot is 296 x 402 but I have no trees or tower. I have however access to push up mast that are 30 feet in height. I would like to be able to reliably be able to check into a net on 7.251 MHz and also work DX would a loop antenna be a good match for my situation and restrictions. (not home owner restrictions) I want to say up front while I have an extra class license I do not have the Technical knowledge so I may ask questions that are not quite to the point, I do learn quick. So Can you help me build a loop antenna that would not require a height over 30 to 35 feet and also be simple in design but work efficiently on 80, 40, and hopefully 20 meters? Again not to savvy in this area

5418. Re: [loopantennas] Hello new to the Group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-19 22:01:59 UTC
From: Tom
Topic: 5417 Message: 5418

Hi David and the Loop Group,

I've been running an 80 meter, horizontal, loop for a year. It is made from a discarded inverted V. See:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2
and
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=3
for a more detailed look at the ATR-30 tuner I use to easily match the loop to my transmitter on 80 through 10 meters.

I use only fiberglass or wood supports. No metal!

My feedline is entirely low loss, 450 ohm ladder line and yes I do use the 1:1, 3 core, balun inside the tuner with no problems at all.

My best DX contact with the one turn loop antenna is New Zealand on 75 meters. Not bad for a 30 to 40 feet high and 250 feet long loop antenna.

If you are short of room, you might want to try my compact, three turn loop design at:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=5

Cheers.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: David
To: loopantennas@yahoogroups.com
Sent: Friday, July 18, 2008 7:50 PM
Subject: [loopantennas] Hello new to the Group

I am David and I could use some advice. I am wanting to learn about loop antennas, however everything I have read suggest that they must be very high to be efficient. That is my problem I have the space my lot is 296 x 402 but I have no trees or tower. I have however access to push up mast that are 30 feet in height. I would like to be able to reliably be able to check into a net on 7.251 MHz and also work DX would a loop antenna be a good match for my situation and restrictions. (not home owner restrictions) I want to say up front while I have an extra class license I do not have the Technical knowledge so I may ask questions that are not quite to the point, I do learn quick. So Can you help me build a loop antenna that would not require a height over 30 to 35 feet and also be simple in design but

work efficiently on 80, 40, and hopefully 20 meters? Again not to savvy in this area

[Non-text portions of this message have been removed]

5419. Re: [loopantennas] Hello new to the Group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-19 22:54:19 UTC
From: david rix
Topic: 5417 Message: 5419

Hello Tom Thanks for the info I have plenty of room but as I said earlier I am vertically challenged here no tree over 20 feet high so it is push up mast for all right now. I am looking for the one do all antenna to serve and have yet to find it. I have been through Vs, flat top, G5RV, and NVIS antennas and I am still looking so any help that I can get is appreciated
73
David

Tom <tgleeman@...> wrote:
Hi David and the Loop Group,

I've been running an 80 meter, horizontal, loop for a year. It is made from
a discarded inverted V. See:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2
and
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=3
for a more detailed look at the ATR-30 tuner I use to easily match the loop to
my transmitter on 80 through 10 meters.

I use only fiberglass or wood supports. No metal!

My feedline is entirely low loss, 450 ohm ladder line and yes I do use the 1:1, 3
core, balun inside the tuner with no problems at all.

My best DX contact with the one turn loop antenna is New Zealand
on 75 meters. Not bad for a 30 to 40 feet high and 250 feet long loop
antenna.

If you are short of room, you might want to try my compact, three turn loop
design at:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=5

Cheers.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: David
To: loopantennas@yahoogroups.com
Sent: Friday, July 18, 2008 7:50 PM
Subject: [loopantennas] Hello new to the Group

I am David and I could use some advice. I am wanting to learn about
loop antennas, however everything I have read suggest that they must be
very high to be efficient. That is my problem I have the space my lot

is 296 x 402 but I have no trees or tower. I have however access to push up mast that are 30 feet in height. I would like to be able to reliably be able to check into a net on 7.251 MHz and also work DX would a loop antenna be a good match for my situation and restrictions. (not home owner restrictions) I want to say up front while I have an extra class license I do not have the Technical knowledge so I may ask questions that are not quite to the point, I do learn quick. So Can you help me build a loop antenna that would not require a height over 30 to 35 feet and also be simple in design but work efficiently on 80, 40, and hopefully 20 meters? Again not to savvy in this area

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

5420. Re: [loopantennas] Hello new to the Group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-19 23:45:51 UTC
From: Tom
Topic: 5417 Message: 5420

Hi David and the Group,

The best heavy duty, fiberglass, push up poles for loops
are made by Max Gain Systems. The MK-8 is their tallest
telescoping mast at 43 feet.

The very top section is a bit weak, so I retract it and extend
the mast from the bottom with a Max Gain, fiberglass, 1 3/4" X 8' tube.

MFJ sells the same mast called an MFJ-1908, but it costs more.

See http://www.mgs4u.com/fiberglass-push-up-mast.htm

Best regards.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: david rix
To: loopantennas@yahoogroups.com
Sent: Saturday, July 19, 2008 3:54 PM
Subject: Re: [loopantennas] Hello new to the Group

Hello Tom Thanks for the info I have plenty of room but as I said earlier I am vertically challenged here no tree over 20 feet high so it is push up mast for all right now. I am looking for the one do all antenna to serve and have yet to find it. I have been through Vs, flat top, G5RV, and NVIS antennas and I am still looking so any help that I can get is appreciated
73
David

Tom <tgleeman@...> wrote:
Hi David and the Loop Group,

I've been running an 80 meter, horizontal, loop for a year. It is made from
a discarded inverted V. See:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2
and
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=3
for a more detailed look at the ATR-30 tuner I use to easily match the loop to
my transmitter on 80 through 10 meters.

I use only fiberglass or wood supports. No metal!

My feedline is entirely low loss, 450 ohm ladder line and yes I do use the 1:1, 3
core, balun inside the tuner with no problems at all.

My best DX contact with the one turn loop antenna is New Zealand
on 75 meters. Not bad for a 30 to 40 feet high and 250 feet long loop
antenna.

If you are short of room, you might want to try my compact, three turn loop
design at:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=5

Cheers.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: David
To: loopantennas@yahoogroups.com
Sent: Friday, July 18, 2008 7:50 PM
Subject: [loopantennas] Hello new to the Group

I am David and I could use some advice. I am wanting to learn about
loop antennas, however everything I have read suggest that they must be
very high to be efficient. That is my problem I have the space my lot
is 296 x 402 but I have no trees or tower. I have however access to
push up mast that are 30 feet in height. I would like to be able to
reliably be able to check into a net on 7.251 MHz and also work DX
would a loop antenna be a good match for my situation and
restrictions. (not home owner restrictions) I want to say up front
while I have an extra class license I do not have the Technical
knowledge so I may ask questions that are not quite to the point, I do
learn quick. So Can you help me build a loop antenna that would not
require a height over 30 to 35 feet and also be simple in design but
work efficiently on 80, 40, and hopefully 20 meters? Again not to savvy
in this area

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5421. newbie

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-19 23:02:51 UTC
From: alan
Topic: 5421 Message: 5421

hi group my name is alan and i live in ayrshire scotland iam trying to put a radio room together and need some advice from the experts.i have a yaesu frg 7700 reciever and the matching atu i also have a longwire loop running round the perimeter of my loft can i somehow connect the atu to this and the reciever if i can could somone advise me how you go about doing so thanks for all help alan

5422. Don't forget to trim when replying

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-20 13:35:43 UTC
From: Steve
Topic: 5422 Message: 5422

Please be kind, rewind... er, please trim when you reply. Many of the list members in Europe must pay for their internet by the minute and long unnecessary messages cost them money. And it makes it very difficult for those of us on digest to read the messages.

So please just take a few seconds to delete what isn't necessary when replying.

Thank you,
Your Friendly Neighborhood Moderator
Steve Greenfield

5423. Re: Hello new to the Group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-20 15:22:30 UTC
From: dldorrance
Topic: 5417 Message: 5423

--- In loopantennas@yahoogroups.com, "David" <rus1ngle@...> wrote:
>

> I have read suggest that they must be
> very high to be efficient.

Hi David,

The height above the ground for a loop antenna depends on its polarization. The so-called "sky wire", whose plane is parallel to the ground, must indeed be up 1/2 wavelength to be effective for long distance (vs NVIS) contacts, similar to a dipole. However, a loop whose plane is perpendicular to the ground works well even with the lower horizontal part very close to the ground. The "sky-wire" is omni-directional like a vertical antenna, while the second loop is bidirectional with a figure 8 pattern (peaks are perpendicular to the plane of the loop) with deep nulls off the ends. Ground losses are minimal because the predominant field is magnetic, not electric.

For your setup you could erect a rectangular loop with the the horizontal ends of the top and bottom horizontal sections attached to two vertical posts a suitable distance apart. Or, using a triangular configuration with one pole, the apex of the loop would be at the top of the pole with the base perhaps 6 feet off the ground on each side. This is called a delta loop.

You might want to Google "loop antenna". There are plenty of sites.

Have you considered a vertical antenna? Easier to erect, omnidirectional.

Good luck,

Dave

5424. Re: The Tale of three Chinese Loops - comparison and pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-20 19:59:56 UTC
From: gmcjetpilot
Topic: 5375 Message: 5424

*Please do not cut and past whole post *

Hi Richard:

I don't follow your question. Also PLEASE no need to cut and past
whole post, especially my overly long ones, :)

You say TenTec 320? I use a nice random wire about 15' off the ground
about 50 feet long through a 9:1 balun. Works great.

I like the Wellbrook loops but they cost a lot.
http://www.wellbrook.uk.com/ALA1530.html

What band are you targeting? If you want from 100-30,000 than
something like the wellbrook. So you want to make one?

More info needed.

What does TV antenna have to do with it?

Cheers
George

* Please do not cut and past whole whole post *

--- In loopantennas@yahoogroups.com, richard woltmann <rwoltmann@...>
wrote:
>
> Lightning burnt a TV antenna,so need a loop suggest one to use with
320 tentac,please
>
> Richard Woltmann
>

5425. Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-21 00:42:00 UTC
From: crabtreejr@aol.com
Topic: 5404 Message: 5425

In a message dated 7/18/08 1:25:10 PM Central Daylight Time,
christrask@... writes:
> >
> > I thought that a high loop inductuance helps to get all loop current (the
> loop
> > current and loop inductance are placed in parallel, like a norton
> equivalent
> > circuit) into the low impedance of the amplifier to which the loop is
> connected,
> > right ?
> >
>
> I've been going back and forth between the Norton (current source) and
> Thevenin (voltage source) equivalents of the lumped element circuit model of
> the loop antenna. And yes, it should be just as you've said. However, when
> I designed my series-tuned active loop I used the Thevenin model, and that
> has proven to be more useful. I've stayed with that perspective since then
> as it's easier to mentally conceive matching networks.
>
> Chris
>

Back in message #3411,
http://groups.yahoo.com/group/loopantennas/messages/3411
I showed that if the loop is terminated in a resistance which is less than
the inductive reactance, then the power which can be extracted from the loop is
proportional to the inverse of the square of the inductance. Hence the lower
the inductance the more power you can extract from the loop.

If you want to keep the low frequency cut off frequency the same you then
need to reduce the teminating resistance, which might not be easy to do.

Forster, in his patent GB 2,235,337, showed a loop being made up as a series
of segments to reduce the loop inductance. According to the UK patent office,
the patent has now ceased.

The amount of mismatch which is desirable between the loop depends upon the
frequency in question, the atmospheric noise, and the receiver noise factor.
Somewhere I have an interesting paper by Sosin on the subject. The way I look
at the matching issue is to consider the power attenuation at the input to the
amplifier, ie:
Actual power input, divided by the power which could be extracted assuming
a perfectly matched and lossless antenna.

I saw Chris's comments re the matching technique for short dipoles developed
by some Russians. The input impedance of a short dipole varies with the

square of the frequency, whereas the input impedance of a small loop varies as the fourth power of the frequency. This could add to the challenge. However with a small loop at low frequencies, you might consider the ohmic losses, which might make the task less onerous.

Chris's desigb is very interesting. Chris - have you measured the input impedance?

73 John KC0G

****
Get fantasy football with free live scoring. Sign
up for FanHouse Fantasy Football today.

(http://www.fanhouse.com/fantasyaffair?ncid=aolspr00050000000020)

[Non-text portions of this message have been removed]

5426. Re: [loopantennas] Aw: Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-21 02:22:49 UTC
From: Chris Trask
Topic: 5404 Message: 5426

>
> The amount of mismatch which is desirable between the loop depends upon
the
> frequency in question, the atmospheric noise, and the receiver noise
factor.
> Somewhere I have an interesting paper by Sosin on the subject. The way I
look
> at the matching issue is to consider the power attenuation at the input to
the
> amplifier, ie:
> Actual power input, divided by the power which could be extracted
assuming
> a perfectly matched and lossless antenna.
>
> I saw Chris's comments re the matching technique for short dipoles
developed
> by some Russians. The input impedance of a short dipole varies with the
> square of the frequency, whereas the input impedance of a small loop
varies as the
> fourth power of the frequency. This could add to the challenge. However
with
> a small loop at low frequencies, you might consider the ohmic losses,
which
> might make the task less onerous.
>
> Chris's desigb is very interesting. Chris - have you measured the input
> impedance?
>

If you should find that Sosin paper, let me know. I don't show that as being in my files here.

Trying to devise a dual of the Russian matching network for a loop proved to be unrewarding, at best. I looked at a number of passive matching techniques, as well as using active negative inductors. That last one normalized the voltage gain, but it was far too noisy to be of any value other than a demonstration of using a negative impedance converter.

I've been testing this amplifier exhaustively over the weekend, looking for opportunities to improve the performance. So far, I have the OIP3 up to +39.5dBm, and it was mostly a matter of increasing the bias current to 35mA per side. Some linearity improvement was found by adding a small resistor to each input transistor emitter, and that needs to be looked into further after some low value resistors arrive in the next couple of days. Resistors were also added to the output device emitters to improve the bias current balance of that stage.

The 2N2222 is proving to be a real champion in this design. I have tried the 2N3866 and 2N5109, and found virtually no improvement in OIP3 or noise. That plus they did not like the low impedances together with the transformer leakage inductances, and tended to break into oscillation. Power dissipation in the output devices was a bit of a concern (0.245W), but it's well within the TO-92 device maximum (0.625W) and even more so with the TO-18 package (0.8W). The margin can be improved by adding a heat radiator to the TO-18 package, bringing the ambient maximum up to about 1.0-1.2W. The 2N2219 is essentially a 2N2222 in a TO-39 package, and that can be used as well and there's a good variety of slip-on heat sinks for that package. With the 2N2222 working so well and costing so little ($0.05), why bother with devices that cost around $2 with little or no performance improvement?

BTW: Do NOT substitute the 2N2222A or 2N2219A for these devices as their maximum dissipation is only half that of the 2N2222 and/or 2N2219.

The amplifier input impedance is very small, thanks in no small part to the effects of using passive augmentation. According to PSpice, the input impedance is about 0.20 ohms for each side, which is a good match for a loop. It's difficult to measure this to an agreeable degree of accuracy due to the small value, but looking at the test results I can say that there's a reasonably good agreement with the PSpice simulation.

Total parts costs is still in the vicinity of $30. We keep making it better, not more expensive.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5427. Inkjet printing of resist onto copper to make printed circuit boards

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-23 18:08:48 UTC
From: Steve Greenfield
Topic: 5427 Message: 5427

Although this is on topic for the Homebrew_PCBs list, this is going to cover a very -broad- area of hardware, firmware, software, inks, printhead driving signals, etc. So with that in mind, I've created the Inkjet_PCB_Construction group. Volkan, and everyone else involved or interested in modifying or building such a beast, I hope you'll join there.

http://tech.groups.yahoo.com/group/Inkjet_PCB_Construction/

Monthly Reminder for the Inkjet_PCB_Construction group, please read:

Messages and threads:
Please do NOT start a new thread by replying to another message. Even if you change the subject line completely and trim all the original messages off, there is information in the hidden header that Yahoogroups detects and then lists it as if it were part of that thread. To start a new thread, start a new message to the list address.
Inkjet_PCB_Construction@yahoogroups.com

On Topic vs off topic:
The list is meant to be quite specific to the subject of inkjet printing resist directly onto copper for acid etching. However, within that is a very broad area covering modification of existing printers, printhead/printer selection, ink selection, design and construction of flatbed plotters, proper drive to inkjet printheads, firmware, software, baking/post-processing of resist, suitable acids/temperatures, etc. So I ask that any questions or comments whose purpose is not strictly on topic to take place off the list or on another more suitable list.
General electronics questions not related to the above should go to the Electronics_101 list:
http://groups.yahoo.com/group/Electronics_101
For other topics about making printed circuit boards such as toner transfer, photosensitive boards, scratch 'n etch, etc. please join the Homebrew_PCBs list:
http://groups.yahoo.com/group/Homebrew_PCBs/

Subject lines:
Remember to change the subject line if you are straying from the original thread. Please change the subject line if you are on digest, as "Digest 1044" means nothing to anyone. If you are on digest, I suggest changing yourself to "new and improved" so you can more easily reply to individual messages.
If you want an answer to a question, use a descriptive subject line. "Help Me" is bad subject line. "Will my Canon BJC 3000 work?" is a better subject line.
Subject lines affect whether or not people even read your message, and affect people searching the archives for help at a later date.

Trim messages- especially if you are receiving messages in digest form. By the same token, quote enough so we know what you are responding to. "Yeah, I agree" means nothing if no one knows who you are answering or what you are agreeing with. And it is just irritating if it is added to an untrimmed huge long quoted message(s).

Uploading files and photos:
Please use the Description field. Think of a future member finding this, and put enough description so they'll know why it is on the Homebrew_PCBs list out of context of any messages you may have posted about it. Examples: "Test with HP pigmented black ink #15 cartridge baked at 240F for 5 minutes" is good, "My latest project" is bad. I may at any time delete files and photos with insufficient description.

Remember to check the Links and Files if you have questions, you may find the answer there already. Don't be shy about asking, but keep in mind people are more likely to be helpful if they feel you've done some homework before asking. "What is a printed circuit board?" shows you didn't even try, but "I have an HP inkjet printer, will its black printheads work for resist printing?" shows you have put some effort in first.

Do not send "unsubscribe" messages to the list. Either send an email to "Inkjet_PCB_Construction-unsubscribe@yahoogroups.com" or log onto your groups at http://groups.yahoo.com/mygroups to edit your groups. If you are unable to unsubscribe following these instructions, email the listowner at Inkjet_PCB_Construction-owner@yahoogroups.com

Please do -not- post virus warnings. This has been hashed to death on this list and others. If we want to hear about soccer, we'll sign up on a soccer list, if we want to hear about virii we'll sign up on a virus list. Sports, religion, and politics are OFF TOPIC for the list, feelings run high and it is too easy for a passing comment to flare up into a flame war.

Suggestions, recommendations and such, to and from professionals and companies are welcome. If you are posting for your own business, please limit ads to once a month and feel free to post your site in the Links area. Company representatives are encouraged to respond to legit requests for information as long as you identify your connection. IE, don't pretend to be an unconnected customer, there are enough savvy people here that you'll be found out quickly. Just use common sense about replying or people might think you are flogging your business.

Spam- Spammers will be treated with all the respect they deserve. Off Topic sale ads, links, uploads, etc. will be treated as spam and may result in your removal from the list and banning from every other list I am listowner or moderator of.

Thank you,
Steve Greenfield
listowner Homebrew_PCBs, Inkjet_PCB_Construction, and Electronics_101

--- End forwarded message ---

5428. 5gang Vari-Cap with a Loop, need help.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-23 19:58:34 UTC
From: cqdx5nn
Topic: 5428 Message: 5428

I have a 5gang(see NOTE)air Vari-Cap I removed from a radio that was broke, and not fixable.

I do not know the capacitance of it, and have no way to test it, it works, and I have tested it with a loop antenna, but need to know if I should tie all the gangs together, or use different coils(turns or wire) on each gang?

Im using it with am Icom R75, for the MW band, use a single turn of wire in the middle, being feed with coax.
The reason I am using this 5gang cap is because its the toughFFF-est one I could find. I will taking this loop with me everywhere.

Or could I use some resistors, coils, other caps, etc, on the bigger gangs?

Any help and comments are appreciated.

NOTE: 2 gangs have 13 plates, 3 gangs have 3 plates.

Thank you

5429. Re: [loopantennas] 5gang Vari-Cap with a Loop, need help.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-24 04:04:52 UTC
From: Werner Funkenhauser
Topic: 5428 Message: 5429

I could be wrong but your capacitor is probably for a MW/FM set whose FM section had an RF amp, while the MW section didn't. Not sure what your loop configuration is, but the two larger sections wired together may provide you the correct capacitance. Refer to links found in this reflector for the correct size and number of turns.

--- On Wed, 7/23/08, cqdx5nn <cqdx5nn@...> wrote:

From: cqdx5nn <cqdx5nn@...>
Subject: [loopantennas] 5gang Vari-Cap with a Loop, need help.
To: loopantennas@yahoogroups.com
Date: Wednesday, July 23, 2008, 7:58 PM

I have a 5gang(see NOTE)air Vari-Cap I removed from a radio that was
broke, and not fixable.

<snip>

[Non-text portions of this message have been removed]

5431. Wide bandwidth active loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-24 15:46:10 UTC
From: exnci2000
Topic: 5431 Message: 5431

Hi,
what do you think about this schematich:
http://www.qrss.thersgb.net/active-loop-receiving-antenna.html
Have you any idea about impedance output ? I think 2N3866 is better
than BC337.

regards

5432. Re: [loopantennas] Wide bandwidth active loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-24 16:07:10 UTC
From: Chris Trask
Topic: 5431 Message: 5432

>
>Hi,
>what do you think about this schematich:
>http://www.qrss.thersgb.net/active-loop-receiving-antenna.html
>Have you any idea about impedance output ? I think 2N3866 is better
>than BC337.
>

It's a nice, simple solution. However, since the amplifier has a high input impedance, the pattern null will be deteriorated and you will defeat most of the electric field immunity. It does, however, relieve you of having to provide an impedance match or series tuning into a low impedance amplifier, such as common-base.

An even better transistor for this would be the BFQ19, which has better noise and linearity characteristis than the 2N3866 and which is less expensive and more readily available.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5433. Re: Wide bandwidth active loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-26 14:00:09 UTC
From: deju5us
Topic: 5431 Message: 5433

Hi there ... I am normally a bit of a lurker, but have actually built this up a couple of days ago using BC338s. It works quite well and I am pleased with the results so far. Regarding degradation of the nulls, they are not as sharp as I would have wished but I do have it working on 30m of coax at the moment and I am sure there is common mode pickup there. Maybe feeding it with a separate power feed and using a balanced feeder will improve matters.

For those wishing to try something else, I have had success with an active antenna kit fed from a single small turn made of RG213 via a matching transformer wound on a ferrite core. The RG213 was fed through the core and the ends soldered together to make a single turn.The coupling winding had 15 turns on it. Any more and I had overloading issues from my local BCB station. Will search out and post the link to the site where I found the idea later.

Regards, John S.

5434. antenna rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-27 14:04:39 UTC
From: aimo ruoho
Topic: 5434 Message: 5434

Hello, loopers!

Would you English members inform me about dealers in Europe, who have antenna rotators in their program, please?

73 de Aimo

[Non-text portions of this message have been removed]

5435. Re: [loopantennas] antenna rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-27 14:21:42 UTC
From: C. Beijersbergen
Topic: 5434 Message: 5435

hello Aimo,

Conrad in Germany has a rotator in their program.
They can be found at www.conrad.de but they have websites for most european countries. The english one is under construction at the moment. You can contact them at international.sales@...

succes!

Cor Beijersbergen

Home TV, Sat, DVD SAT-Empfangstechnik SAT-Installation Antennen Rotoren AUTOMATIK ANTENNENROTOR
Artikel-Nr.: 284971 - 62
49,95 EUR

Hello, loopers!

Would you English members inform me about dealers in Europe, who have antenna rotators in their program, please?

73 de Aimo

[Non-text portions of this message have been removed]

5436. Re: antenna rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-28 13:02:25 UTC
From: m0dvo
Topic: 5434 Message: 5436

In the UK, Waters & Stanton, Martin Lynch & Sons. Both will export to Europe, both price in GB£ and Euros.

No connection with either - just a satisfied customer!

Mike M0DVO

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Hello, loopers!
>
> Would you English members inform me about dealers in Europe, who have antenna rotators in their program, please?
>
> 73 de Aimo
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

5437. Re: [loopantennas] Re: antenna rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-28 16:38:54 UTC
From: aimo ruoho
Topic: 5434 Message: 5437

Thank you very much, Mike!
Aimo

--- On Mon, 7/28/08, m0dvo <mike.maguire@btinternet.com> wrote:
From: m0dvo <mike.maguire@...>
Subject: [loopantennas] Re: antenna rotator
To: loopantennas@yahoogroups.com
Date: Monday, July 28, 2008, 3:02 PM

In the UK, Waters & Stanton, Martin Lynch & Sons. Both will export to

Europe, both price in GB£ and Euros.

No connection with either - just a satisfied customer!

Mike M0DVO

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:

>

> Hello, loopers!

>

> Would you English members inform me about dealers in Europe, who

have antenna rotators in their program, please?

>

> 73 de Aimo

>

>

>

>

>

> [Non-text portions of this message have been removed]

>

[Non-text portions of this message have been removed]

5438. Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-28 22:05:43 UTC
From: Johan-Fredrik Grøgaard
Topic: 5388 Message: 5438

Regarding Wideband Active Loop Antenna #3 in
>
> http://tinyurl.com/5zeewv
>
Do you have some details on the winding of T4 and T5?
On the picture of the #3 PCB it looks like it's only 2 transformers and
2 inductors and 6 transistors not 4 as in the schematic, any more info?

TNX.
Johan-Fredrik Grøgaard

5439. Re: [loopantennas] Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-28 23:47:21 UTC
From: Chris Trask
Topic: 5388 Message: 5439

Johan-Fredrik,
I must aplogize for that photo. I used that one to illustrate the final physical size of the design, and I should probably replace it with a photo of the larger board with the final transistor and transformer arrangement. I'll take care of that tomorrow when I have better light. I have since disassembled the amplifier in that photo to use the board and coupling transformer in a subsequent design.

Transformers T4 and T5 are both 1:1:1 ratio components made with 4 turns of #32 trifilar wire (three wires twisted together) on a Fair-Rite 2843002402 core. Transformers T2 and T3 are also 1:1:1 trifilar constructs, where two windings are connected in series to arrive at the 2:1 ratio. I design my transformers using 1:1 bifilar and 1:1:1 trifilar windings so as to get better coupling and lower leakage inductance.

BTW; I have a working prototype of Amplifier #3 with a matching network between the antenna and the first amplifier that improves the high-end gain by 15-20dB. I've also added an additional transformer identical to T4 where the end wires are connected to the antenna and the inner connections go to the amplifier. This provides an additional 9.5dB of gain. It needs a bit more work to bring it to final form.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Johan-Fredrik Gr?gaard" <johan.fredrik@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, July 28, 2008 3:05 PM
Subject: [loopantennas] Re: An Inexpensive Alternative to the WL1030

Regarding Wideband Active Loop Antenna #3 in
>
> http://tinyurl.com/5zeewv
>
Do you have some details on the winding of T4 and T5?
On the picture of the #3 PCB it looks like it's only 2 transformers and
2 inductors and 6 transistors not 4 as in the schematic, any more info?

TNX.
Johan-Fredrik Gr?gaard

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.5.6/1577 - Release Date: 7/28/08 6:55
AM

5440. Re: [loopantennas] Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-29 20:11:39 UTC
From: Chris Trask
Topic: 5388 Message: 5440

```
>
> Regarding Wideband Active Loop Antenna #3 in
>
> http://tinyurl.com/5zeewv
>
> Do you have some details on the winding of T4 and T5?
> On the picture of the #3 PCB it looks like it's only 2 transformers and
> 2 inductors and 6 transistors not 4 as in the schematic, any more info?
>
```

I just uploaded an updated version of the PDF file on my active loop antenna amplifiers, adding a correct photo for version #3 plus a parts list and cost estimate, as well as editing the caption for the amplifier on the narrower board. You can download it from:

http://tinyurl.com/5zeewv

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5441. Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-30 21:12:14 UTC
From: Johan-Fredrik Grøgaard
Topic: 5388 Message: 5441

Chris, thank you for your swift reply.

On page 3 in the PDF document you write:

"Supply voltage is 12V and is provided by way of the coaxial cable that goes to a bias tee and then the receiver"

Why not use a LM78L06 instead of the LM78L05?

In my home country (4,7 million people and less than 4500 Hams) the Communications Concepts RF800-0 Balune Core is next to impossible to obtain, so I have to make on for my self with to beads with core material 43, some thin plated copper tubing and two pieces of PCB. I just finished building the amplifier and when the last to parts for the balune core arrives I start testing it. Later I will try to use the amplifier connected to a balanced feeding loop on a tuned 1 Meter (0.5 inch) copper loop.

73 de LA7SJA

5442. Re: [loopantennas] Re: An Inexpensive Alternative to the WL1030

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-30 21:52:45 UTC
From: Chris Trask
Topic: 5388 Message: 5442

>
> Chris, thank you for your swift reply.
>

It was an oversight in that document that needed to be taken care of.

>
> "Supply voltage is 12V and is provided by way of the coaxial cable that
> goes to a bias tee and then the receiver"
>
> Why not use a LM78L06 instead of the LM78L05?
>

In the overall scheme of things, I want to provide as high a collector-emitter voltage on the output devices that I can so as to get the highest P1dB (1dB compression point) which is directly related to both OIP2 and OIP3. The LM78L05 lets me do that with a part that is commonly available almost anywhere.

>
> In my home country (4,7 million people and less than 4500 Hams) the
> Communications Concepts RF800-0 Balune Core is next to impossible to
> obtain, so I have to make on for my self with to beads with core
> material 43, some thin plated copper tubing and two pieces of PCB. I
> just finished building the amplifier and when the last to parts for the
> balune core arrives I start testing it. Later I will try to use the
> amplifier connected to a balanced feeding loop on a tuned 1 Meter (0.5
> inch) copper loop.
>

The RF800-0 and the other balun core assemblies made by Communications Concepts are easily reproduced from ferrite sleeves or toroids, as you've described. You saw in the earlier photos that I was first making a current transformer from powdered iron toroids, brass tubing, and fabricated end plates. The RF800-0 is a common point of reference, and when they are obtainable they are very convenient for all sorts of designs.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240

\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5443. Re: [loopantennas] Don't forget to trim when replying

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-31 03:45:57 UTC
From: lockmanslammin@aol.com
Topic: 5422 Message: 5443

Could you send me a link to the thread in question? I'm not sure you have the right guy, but then again I have a pretty crappy memory. I just don't remember writing anything at loopantennas lately?

-----Original Message-----
From: Steve <alienrelics@...>
To: loopantennas@yahoogroups.com
Sent: Sun, 20 Jul 2008 8:35 am
Subject: [loopantennas] Don't forget to trim when replying

Please be kind, rewind... er, please trim when you reply. Many of the list members in Europe must pay for their internet by the minute and long unnecessary messages cost them money. And it makes it very difficult for those of us on digest to read the messages.

So please just take a few seconds to delete what isn't necessary when replying.

Thank you,
Your Friendly Neighborhood Moderator
Steve Greenfield

[Non-text portions of this message have been removed]

5444. Re: Don't forget to trim when replying

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-31 13:52:03 UTC
From: Steve
Topic: 5422 Message: 5444

This wasn't written to you personally, it was sent to the entire list
to remind everyone to trim.

Steve Greenfield

--- In loopantennas@yahoogroups.com, lockmanslammin@... wrote:
>
> Could you send me a link to the thread in question? I'm not sure you
have the right guy, but then again I have a pretty crappy memory. I
just don't remember writing anything at loopantennas lately?
>
>
> -----Original Message-----
> From: Steve <alienrelics@...>

> Please be kind, rewind... er, please trim when you reply.

5445. Remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-07-31 23:18:53 UTC
From: tenorman1952
Topic: 5445 Message: 5445

So, it occurred to me that it would be good to come up with a cheap and easy way to turn a tuning capacitor on a loop that is mounted somewhere outside.

Now this is just an idea... I have flow radio control (aka R/C) model aircraft for many years.

The receiver and servos that operate the control surfaces in the plane run off 4.8 v nicad packs. Actually, they will run on anything from 4.8 v - 6.0 v. So, if power can be sent out to the antenna this could be made to work.

Tuning capacitors rotate 180*. Most servos only rotate 90*, but can be modified to rotate further.

Inside the servo is a feedback potentiometer driven by the output gear of the servo. These pots are usually 10k ohms. By attaching a 4.7 k 1/8 w resistor on each outer terminal of the pot, and connecting those leads to the resistors, the servo will now rotate 180*.

Now a direct connection can be made from the servo's output shaft to the tuner shaft with a piece of rubber or vinyl tubing.

A cheap two channel R/C car/boat radio system can be used for this, under $100.

Just a thought...

Paul C.

5446. Re: Remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-01 05:05:52 UTC
From: cmdrcosmac
Topic: 5445 Message: 5446

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...>
wrote:
>
> So, it occurred to me that it would be good to come up with a cheap
> and easy way to turn a tuning capacitor <snip>

Paul,
That's basiclly a good idea and it's probably workable if the 180
degree mod can be done
with a servo powerful enough to turn the cap. The small tuning caps
from cheap radios
are usable in loops and turn easily. But these days remote tuning is
usually done with
a varactor diode. This replaces the cap and is tuned by a DC bias
across it. This variable
voltage is usually sent up the signal feedline, isolated by
capacitors. Other posters on
this forum have given links to examples of this.
The servo would, however, be a good way to rotate the loop. You can
find circuits on the
web to operate the servo directly without the R/C stuff.

Chuck.

>

5447. Re: [loopantennas] Re: Remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-01 15:07:28 UTC
From: Chris Trask
Topic: 5445 Message: 5447

>
> > So, it occurred to me that it would be good to come up with a cheap
> > and easy way to turn a tuning capacitor <snip>
>
>
> Paul,
> That's basicly a good idea and it's probably workable if the 180
> degree mod can be done with a servo powerful enough to turn the cap.
> The small tuning caps from cheap radios are usable in loops and turn
> easily. But these days remote tuning is usually done with a varactor
> diode. This replaces the cap and is tuned by a DC bias across it.
> This variable voltage is usually sent up the signal feedline, isolated
> by capacitors. Other posters on this forum have given links to examples
> of this. The servo would, however, be a good way to rotate the loop.
> You can find circuits on the web to operate the servo directly without
> the R/C stuff.
>

I remotely tune my receiving loops with varactors. The tuning voltage is also the amplifier supply voltage, and the amplifier is designed to work with the varying supply voltage.

I'm going to be working on a remotely tuned transmitting loop where the motor is controlled with the DC voltage going up the coax. Using a variable capacitor without a stop pin on the shaft relieves me of the trouble of having to add stop switches and diodes.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5448. Re: Remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-01 17:07:51 UTC
From: tenorman1952
Topic: 5445 Message: 5448

I received a good follow up question from one of the members.

"Do servos need a continuous pulse stream to maintain a position?"

No, but if you just turn off the transmitter, the momentary drop in voltage distorts the pulses just enough to make the servos jump a bit, often as much as 15*-20* off their original position. (I'm using * for degree)

With a wheel type car/boat transmitter, the centering spring would have to be removed from the steering wheel. With a "two stick" transmitter, such as used with gliders, the centering spring would be removed from one stick, and set so it will stick in position, such as used for a throttle. This is easy to do.

http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXARP0**&P=7

If you have 12 v going out to the antenna, such as to operate an active antenna, you could come off the 12 v with a 7805 (5v) or 7806 (6v) regulator chip (TO-220 type) with a capacitor accross in and out legs to ground. I've done this with R/C gear run with higher voltage battery packs used for electric boats and with an electric powered glider. A receiver only draws about 50-80 ma, and servos draw about 50 ma at idle, and 100-200 ma moving, so this won't tax a 7805 at all, which will put out 1 amp easily. And a tuning cap has almost no resistance, so, moving the servo won't draw but about 80-100 ma.

I may be wrong on the resistors added... if the pot is 5k, use 2.2 k resistors on each side. If 10 k, use 4.7 k on each side. The feedback pot is simply a voltage divider.

The way a servo works, input pulse is stretched, and turned into a voltage. Longer the pulse, the longer the voltage. The servo circuit compares the pulse/voltage with the voltage on the feedback pot via an op amp. If one voltage is higher than the other, the op amp produces a + or - voltage, which drives the motor one way or the other until once again the two voltages are equal. So, doubling the resistance of that feedback pot will double the throw of the servo from 90* to 180*, which is the rotation of the tuning cap. Putting a resistor on each end of the feedback pot will keep it approximately centered.

Stick movement to servo movement is very precise and repeatable, otherwise it wouldn't make a good aircraft or whatever control.

Now, here's another possibility...

Instead of the whole receiver/servo in the antenna... just a servo and supply it with 5v to operate. No radio, but control it with a servo tester, which is just a little box with a knob and a battery. You would probably have to use an optocoupler or op amp buffer due to the long line.

http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXVK79&P=ML

http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXUK84&P=ML

So, no tx, no rx, just 5v for the servo tester, 5v for the servo. See the leads? Black is common or -, red is 5v, white is signal (or pulse). It would be easy to put an op amp buffer inline.

In a second email he commented:

"I asked the question as I was concerned in case the servo needed a continuous pulse stream. As you would be sending LF square waves out to control the servo I was thinking of any possible broadband interference that might result."

I replied:

That is valid a concern.

If the pulses are cut off cleanly, that is, just turn off the white signal wire, the servo stays in the last position. If the transmitter is turned off, as the voltage falls, the servos jump.

5449. Re: Remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-01 17:13:09 UTC
From: tenorman1952
Topic: 5445 Message: 5449

> The servo would, however, be a good way to rotate the loop. You can
> find circuits on the
> web to operate the servo directly without the R/C stuff.
>
> Chuck.

You are correct... a "sail control" servo, as used in R/C sailboats
would be more appropriate for rotating the loop.

And as I just posted about a controller:

http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXVK79&P=ML

Sail wench servo.

http://www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXGZU3&P=7

Paul

5450. Re: [loopantennas] Remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-01 19:30:26 UTC
From: Jim Dunstan
Topic: 5445 Message: 5450

At 11:18 PM 7/31/2008 +0000, you wrote:

>So, it occurred to me that it would be good to come up with a cheap
>and easy way to turn a tuning capacitor on a loop that is mounted
>somewhere outside.
>
>Now this is just an idea... I have flow radio control (aka R/C) model
>aircraft for many years.
>
>The receiver and servos that operate the control surfaces in the
>plane run off 4.8 v nicad packs. Actually, they will run on anything
>from 4.8 v - 6.0 v. So, if power can be sent out to the antenna this
>could be made to work.
>
>Tuning capacitors rotate 180*. Most servos only rotate 90*, but can
>be modified to rotate further.
>
>Inside the servo is a feedback potentiometer driven by the output
>gear of the servo. These pots are usually 10k ohms. By attaching a
>4.7 k 1/8 w resistor on each outer terminal of the pot, and
>connecting those leads to the resistors, the servo will now rotate
>180*.
>
>Now a direct connection can be made from the servo's output shaft to
>the tuner shaft with a piece of rubber or vinyl tubing.
>
>A cheap two channel R/C car/boat radio system can be used for this,
>under $100.
>
>Just a thought...
>
>Paul C.

Hi Paul,

Yes it can be done. Whether you use a wire connection or a wireless connection (R/C) ... the problems are mechanical in nature. I have seen some locals using remote control of the variable capacitor and the problem they had was slowing the servo motor sufficiently for smooth tuning. Often disabling switches are used at either end of the variable rotation. It is really the only way to go if you are using the loop to carry any significant power. A receive only loop is best tuned remotely with varactor diodes.

Jim, VE3CI

5451. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-01 22:17:29 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 5451

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

5452. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-01 22:17:29 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 5452

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

5453. Multi turn transmitting loop questions...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-02 00:43:05 UTC
From: David
Topic: 5453 Message: 5453

Hi, I'm about to build a transmitting loop, ~ 8M circumference, for 80-40-30 metres.

I have some 1" heliax, and a supply of 3/4" copper pipe to work with.

I have several Jennings UCS300-15S caps, and a few HV doorknob caps.

I also have several ~12VDC low RPM (geared) motors.

I have done the calculations a few different ways, used the calculators and spreadsheets that others have provided, modeled in nec and I think I have the right arrangement of parts and materials.

I have come up with a bunch of pieces of scrap lexan from the bin at the local plastic supply house, so I have made some pillow clamps,housings and mounting stuff from it.

I believe there is enough material to make several antennas, so the thought occurred to me; why don't I try a two turn loop, of approximately the same circumference (8m x2) and see if I can get it to resonate on 160 & 80M? (the space I have to put it in is limited to this)

I am assuming that the driven loop will be twice the size of that in it's one turn sibling. I am guessing that the final ratio still needs to be 1/5 for the impedance match. If my logic is faulty, please let me know what the right idea is.....

My question is, and there seems to be a lot of conflicting opinions out there, is will it be worth the trouble? Has anyone done this and made measurements that support the multi turn design or is it just a fool's errand?

Thanks,

David

5454. Re: Multi turn transmitting loop questions...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-02 13:16:57 UTC
From: m0dvo
Topic: 5453 Message: 5454

David,

In my view, experimenting with antennas is one of the few areas left to us where we can have fun.

I was looking for something to use for portable working, and have plagiarised SGC's "Stealth" product. Mine is a four-turn square loop about 5' on a side tuned by an SGC237 autotuner close to one corner. Results so far are encouraging, if not spectacular, but the simple construction has not wasted time or materials it it all comes to nought.

Modelling and measurements are all very rigorous, but will it work in practice? Build it and see. AND have fun.

73s, Mike M0DVO

--- In loopantennas@yahoogroups.com, "David" <va3ae@...> wrote:
>
> My question is, and there seems to be a lot of conflicting opinions
> out there, is will it be worth the trouble? Has anyone done this and
> made measurements that support the multi turn design or is it just a
> fool's errand?
>
> Thanks,

> David
>

5455. Re: Multi turn transmitting loop questions...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-02 14:12:57 UTC
From: dldorrance
Topic: 5453 Message: 5455

> I am guessing that the final ratio still needs
> to be 1/5 for the impedance match. If my logic is faulty, please let
> me know what the right idea is.....

This assumption will not work.

Th radiation resistance of a multi-turn loop rises exponentially with increasing number of turns. Hence it is possible to make a multi-turn loop for a single band which has near 50 ohm input impedance. The math is in Kraus: Antennas. McGraw Hill, 1950, chapter 6, section 6-8.

You need to measure the input Z with an antenna analyzer, as the one I built had a reasonable radiation resistance (?25 ohms) but had capacitative reactance, requiring a coil in parallel with several loop turns. For such a loop your capacitors will not work.

Dave WA6YSO

5456. Re: [loopantennas] Multi turn transmitting loop questions...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-02 15:38:36 UTC
From: Jim Dunstan
Topic: 5453 Message: 5456

At 12:43 AM 8/2/2008 +0000, you wrote:

>Hi, I'm about to build a transmitting loop, ~ 8M circumference, for
>80-40-30 metres.
>
>
>I believe there is enough material to make several antennas, so the
>thought occurred to me; why don't I try a two turn loop, of
>approximately the same circumference (8m x2) and see if I can get it
>to resonate on 160 & 80M? (the space I have to put it in is limited
>to this)
>
>I am assuming that the driven loop will be twice the size of that in
>it's one turn sibling. I am guessing that the final ratio still needs
>to be 1/5 for the impedance match. If my logic is faulty, please let
>me know what the right idea is.....
>
>My question is, and there seems to be a lot of conflicting opinions
>out there, is will it be worth the trouble? Has anyone done this and
>made measurements that support the multi turn design or is it just a
>fool's errand?
>
>Thanks,
>
>David

Hi David,

Some interesting questions for which I do not have answers ... just opinions. The advantage and the disadvantage of the small (1/10 wavelength) single turn loop is it's Hi-Q. When resonant and properly coupled it provides amazing performance in restrictive space. At the same time the disadvantage is its narrow band-pass and the demands put upon components due to resultant hi RF voltages. The common feed method for the small tuned loop is as you point out a small driven loop approximately 1/5 the size of the tuned loop which seems to provide the proper coupling.

I have tried multi-turn wire loops with a similar circumference, 2 and 3 turn and found the performance dramatically different. The Q is much lower ... Perhaps if I had constructed the multi-turn loop with copper pipe instead of #12 wire. The only way I could achieve sufficient coupling was to place a link coupled balanced antenna tuner right at the loop and used a noise bridge to tune the coupler. It worked well on 40m but was not very dramatic. 80m was mediocre.

As the length of the loop gets longer ... eg 2 turns at 8m ... it appears that inductive coupling becomes less effective and direct link coupling more effective.

Jim

5457. Re: Multi turn transmitting loop questions...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-02 17:12:02 UTC
From: David
Topic: 5453 Message: 5457

Hi and thanks to all for the replies.

I agree with everyone so far (and our local loop guru VE2CV) that the single turn very mall loop is the optimal choice.

I have built one already, which is a 1M diameter loop, for comparison against the MFJ1688 I picked up on eBay a couple of years ago. As you might expect, the home brew copper loop, even though it is a smaller diameter, beats the aluminum.

There are really just a few design considerations didn't mention and those are the classical ones: size, mass and cost. (and of course these are multiplied by the Wife Approval Factor)

I have an area of about ~5 metres to work with. I'd like them to be small enough that I can rotate the two loops (swing 'em round 90 would be more accurate)

It would be nice if the snow and ice won't rip them apart (we had 14 feet of snow in the yard last winter). So it needs to be strong and not have a larger span than is prudent for the pipe diameter.

I went to the local plumbing jobber supplier yesterday, inquiring about the cost of various diameter copper.
66 ft spools of type K were:
3/4" = ~$300
1 " = ~$750
1 1/2" = $1300
2" only in 12 ft sections at ~$200 each.
Larger copper pipe by special order..... and special price!

Type L is a bit cheaper, but as I recall it has a higher resistance, which is counterproductive for us....
I have on hand 16M of straight Type K 3/4", which I have already cut for an octagonal loop with 1 M segments. So, I will assemble that one shortly.

As I said, I have acquired plenty of spare parts for this, and I'd really like to see how the continuous copper will add to the efficiency. On paper it is undeniable so I am eager to test the on air results.

Since the copper is so expensive, I should opt for the coil of 3/4", based on my remaining budget.
Unfortunately, I don't' think the 3/4" will be strong enough for the 160 M loop, which has the diameter of ~5M. This is also too large for the space I have, so it is moot, really.

This was why I thought the multi turn might be practical for me. I read an interesting account of a multi turn experiment on Antennex by Anselmo Stiffan, IZ3BGJ.
His results were:
"Its performances when operated at 1.5 meters above ground against a 1/2-wave dipole at 12 meters above ground were approximately:
* -22dB on 160m band
* -18dB on 80m band
* -9dB on 40m band
* -3dB on 20m band
The bandwidth at SWR=2:1, which is a good indicator of the antenna Q factor and hence its efficiency was:
* 1.6 kHz on 160m
* 2.5 kHz on 80m
* 6.4 kHz on 40m
* 23 kHz on 20m
"
He seemed to get it to work, so that is why I went fishing for other opinions.

I haven't convinced myself yet that it is worth several hundred extra dollars to see if a two turn loop for 160 will work.

Whatever I end up with, I'll post the results.

VY 73 de va3ae

> Hi, I'm about to build a transmitting loop, ~ 8M circumference, for
.....
> I also have several ~12VDC low RPM (geared) motors.
snip.....

[Non-text portions of this message have been removed]

5458. Re: Multi turn transmitting loop questions...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-02 21:07:37 UTC
From: dldorrance
Topic: 5453 Message: 5458

--- In loopantennas@yahoogroups.com, "David" <va3ae@...> wrote:

My comments above were for a loop for 20 meter. It was about 4 feet on a side. I recall it had 4 turns which were spaced maybe 2 feet apart from each other but were essentially made with a single continuous length of 12 gauge wire. The dimensions above were chosen for a reasonable direct match to a standard tranceiver (50 ohms). This is not a small loop. As stated above, its radiation resistance was on the order of 50 ohms (not milliohms and not 25 ohms as stated above) with capacitative, not inductive reactance as would be seen in a small loop, so it requiring a coil, not a capacitor for cancelling reactance. The formulas are in the Kraus reference. It can be designed for any band using the formulas.

Dave WA6YSO

5459. NOVIDADES

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-03 11:49:07 UTC
From: EDUARDO
Topic: 5459 Message: 5459

Bom Dia!

Informo que foram feitas algumas atualiza??es no site :

www.radiodx.qsl.br

Algumas das atualiza??es est?o no link abaixo, click para visitar, em :

http://www.radiodx.qsl.br/radioescuta.htm

Referem-se ? tabelas das X-Band?s EUA, Argentia e Austr?lia.
Tambem foram acrescentadas as tabelas de frequ?ncias das emissoras da Europa (OM) bem como a Tabela das frequ?ncias tempor?rias na Europa (OM), trazendo por fim a Tabela ITU da Europa.
Tudo est? dispon?vel para "download".

Atenciosamente,

Eduardo

[Non-text portions of this message have been removed]

5460. Re: [loopantennas] NOVIDADES

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-03 11:58:39 UTC
From: Michael Stevenson
Topic: 5459 Message: 5460

Hello,

I am sorry but I only speak and understand English, however, your website looks really great and thank you for sending the links!

Best wishes!

Michael Stevenson,
Australia
----- Original Message -----
From: "EDUARDO" <adcas@...>
To: "DXCB" <radioescutas@...>; "SDR-IQ" <sdr-iq_brasil@...>
Sent: Sunday, August 03, 2008 9:49 PM
Subject: [loopantennas] NOVIDADES

Bom Dia!

Informo que foram feitas algumas atualiza??es no site :

www.radiodx.qsl.br

Algumas das atualiza??es est?o no link abaixo, click para visitar, em :

http://www.radiodx.qsl.br/radioescuta.htm

Referem-se ? tabelas das X-Band?s EUA, Argentia e Austr?lia.
Tambem foram acrescentadas as tabelas de frequ?ncias das emissoras da Europa (OM) bem como a Tabela das frequ?ncias tempor?rias na Europa (OM), trazendo por fim a Tabela ITU da Europa.
Tudo est? dispon?vel para "download".

Atenciosamente,

Eduardo

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

5461. Michael Stevenson

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-03 12:23:59 UTC
From: EDUARDO
Topic: 5461 Message: 5461

Hello,

There is no problem about the language, but I am happy to have received and liked my site.

Best wishes!
Respectfully.

Eduardo
Grid Locator: GG66qq
Mairiporã-SP- Brasil
----- Original Message -----
From: Michael Stevenson
To: loopantennas@yahoogroups.com
Sent: Sunday, August 03, 2008 8:58 AM
Subject: Re: [loopantennas] NOVIDADES

Hello,

I am sorry but I only speak and understand English, however, your website
looks really great and thank you for sending the links!

Best wishes!

Michael Stevenson,
Australia
----- Original Message -----
From: "EDUARDO" <adcas@...>
To: "DXCB" <radioescutas@...>; "SDR-IQ"
<sdr-iq_brasil@...>
Sent: Sunday, August 03, 2008 9:49 PM
Subject: [loopantennas] NOVIDADES

Bom Dia!

Informo que foram feitas algumas atualizações no site :

www.radiodx.qsl.br

Algumas das atualizações estão no link abaixo, click para visitar, em :

http://www.radiodx.qsl.br/radioescuta.htm

Referem-se à tabelas das X-Band´s EUA, Argentia e Austrália.
Tambem foram acrescentadas as tabelas de frequências das emissoras da Europa
(OM) bem como a Tabela das frequências temporárias na Europa (OM),
trazendo por fim a Tabela ITU da Europa.
Tudo está disponível para "download".

Atenciosamente,

Eduardo

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.5.10/1584 - Release Date: 31/7/2008 12:00

[Non-text portions of this message have been removed]

5462. Re: [loopantennas] NOVIDADES

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-03 16:59:45 UTC
From: randy@verizon.net
Topic: 5459 Message: 5462

Hello Michael and the group-
You can go to www.babelfish.altavista.com and paste the URL
into the "Translate Webpage" window, and select Portuguese to English
translation... still not perfect, but it helps.

73,
Randy
KZ4RV

Michael Stevenson wrote:
>
> Hello,
>
> I am sorry but I only speak and understand English, however, your website
> looks really great and thank you for sending the links!
>
> Best wishes!
>
> Michael Stevenson,
> Australia
> ----- Original Message -----
> From: "EDUARDO" <adcas@... <mailto:adcas%40sti.com.br>>
> To: "DXCB" <radioescutas@...
> <mailto:radioescutas%40yahoogrupos.com.br>>; "SDR-IQ"
> <sdr-iq_brasil@...
> <mailto:sdr-iq_brasil%40yahoogrupos.com.br>>
> Sent: Sunday, August 03, 2008 9:49 PM
> Subject: [loopantennas] NOVIDADES
>
> Bom Dia!
>
> Informo que foram feitas algumas atualiza??es no site :
>
> www.radiodx.qsl.br
>
> Algumas das atualiza??es est?o no link abaixo, click para visitar, em :
>
> http://www.radiodx.qsl.br/radioescuta.htm
> <http://www.radiodx.qsl.br/radioescuta.htm>
>
> Referem-se ? tabelas das X-Band?s EUA, Argentia e Austr?lia.
> Tambem foram acrescentadas as tabelas de frequ?ncias das emissoras da
> Europa
> (OM) bem como a Tabela das frequ?ncias tempor?rias na Europa (OM),
> trazendo por fim a Tabela ITU da Europa.

> Tudo est? dispon?vel para "download".
>
> Atenciosamente,
>
> Eduardo
>
> [Non-text portions of this message have been removed]
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
> <http://groups.yahoo.com/group/loopantennas/links>
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
> <http://groups.yahoo.com/group/loopantennas/files>
>
> You can now view images at higher resolution in Photos. Upload JPG and
> GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
> <http://ph.groups.yahoo.com/group/loopantennas/photos>
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

5463. Re: [loopantennas] NOVIDADES

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-03 18:14:09 UTC
From: EDUARDO
Topic: 5459 Message: 5463

Hello Randy,
tankyou for attencion,

Respectfully,

Eduardo
Grid Locator GG66qq
Mairiporã- SP- Brazil
----- Original Message -----
From: randy@...
To: loopantennas@yahoogroups.com
Sent: Sunday, August 03, 2008 1:59 PM
Subject: Re: [loopantennas] NOVIDADES

Hello Michael and the group-
You can go to www.babelfish.altavista.com and paste the URL
into the "Translate Webpage" window, and select Portuguese to English
translation... still not perfect, but it helps.

73,
Randy
KZ4RV

Michael Stevenson wrote:
>
> Hello,
>
> I am sorry but I only speak and understand English, however, your website
> looks really great and thank you for sending the links!
>
> Best wishes!
>
> Michael Stevenson,
> Australia
> ----- Original Message -----
> From: "EDUARDO" <adcas@... <mailto:adcas%40sti.com.br>>
> To: "DXCB" <radioescutas@yahoogrupos.com.br
> <mailto:radioescutas%40yahoogrupos.com.br>>; "SDR-IQ"
> <sdr-iq_brasil@...
> <mailto:sdr-iq_brasil%40yahoogrupos.com.br>>
> Sent: Sunday, August 03, 2008 9:49 PM
> Subject: [loopantennas] NOVIDADES
>
> Bom Dia!
>
> Informo que foram feitas algumas atualizações no site :

>
> www.radiodx.qsl.br
>
> Algumas das atualizações estão no link abaixo, click para visitar, em :
>
> http://www.radiodx.qsl.br/radioescuta.htm
> <http://www.radiodx.qsl.br/radioescuta.htm>
>
> Referem-se à tabelas das X-Band´s EUA, Argentia e Austrália.
> Tambem foram acrescentadas as tabelas de frequências das emissoras da
> Europa
> (OM) bem como a Tabela das frequências temporárias na Europa (OM),
> trazendo por fim a Tabela ITU da Europa.
> Tudo está disponível para "download".
>
> Atenciosamente,
>
> Eduardo
>
> [Non-text portions of this message have been removed]
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
> <http://groups.yahoo.com/group/loopantennas/links>
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
> <http://groups.yahoo.com/group/loopantennas/files>
>
> You can now view images at higher resolution in Photos. Upload JPG and
> GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
> <http://ph.groups.yahoo.com/group/loopantennas/photos>
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.5.10/1584 - Release Date: 31/7/2008 12:00

[Non-text portions of this message have been removed]

5464. Re: [loopantennas] NOVIDADES

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-04 08:19:33 UTC
From: Michael Stevenson
Topic: 5459 Message: 5464

Hello Randy and group,

Thank you for the suggestion, I will give it a try!

Best regards from Australia!

Michael
----- Original Message -----
From: randy@...
To: loopantennas@yahoogroups.com
Sent: Monday, August 04, 2008 2:59 AM
Subject: Re: [loopantennas] NOVIDADES

Hello Michael and the group-
You can go to www.babelfish.altavista.com and paste the URL
into the "Translate Webpage" window, and select Portuguese to English
translation... still not perfect, but it helps.

73,
Randy
KZ4RV

Michael Stevenson wrote:
>
> Hello,
>
> I am sorry but I only speak and understand English, however, your website
> looks really great and thank you for sending the links!
>
> Best wishes!
>
> Michael Stevenson,
> Australia
> ----- Original Message -----
> From: "EDUARDO" <adcas@... <mailto:adcas%40sti.com.br>>
> To: "DXCB" <radioescutas@...
> <mailto:radioescutas%40yahoogrupos.com.br>>; "SDR-IQ"
> <sdr-iq_brasil@...
> <mailto:sdr-iq_brasil%40yahoogrupos.com.br>>
> Sent: Sunday, August 03, 2008 9:49 PM
> Subject: [loopantennas] NOVIDADES
>
> Bom Dia!
>
> Informo que foram feitas algumas atualizações no site :
>

> www.radiodx.qsl.br
>
> Algumas das atualizações estão no link abaixo, click para visitar, em :
>
> http://www.radiodx.qsl.br/radioescuta.htm
> <http://www.radiodx.qsl.br/radioescuta.htm>
>
> Referem-se à tabelas das X-Band´s EUA, Argentia e Austrália.
> Tambem foram acrescentadas as tabelas de frequências das emissoras da
> Europa
> (OM) bem como a Tabela das frequências temporárias na Europa (OM),
> trazendo por fim a Tabela ITU da Europa.
> Tudo está disponível para "download".
>
> Atenciosamente,
>
> Eduardo
>
> [Non-text portions of this message have been removed]
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
> <http://groups.yahoo.com/group/loopantennas/links>
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
> <http://groups.yahoo.com/group/loopantennas/files>
>
> You can now view images at higher resolution in Photos. Upload JPG and
> GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
> <http://ph.groups.yahoo.com/group/loopantennas/photos>
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

[Non-text portions of this message have been removed]

5465. AM antenna suggestions for use in an attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-05 00:23:51 UTC
From: Zack
Topic: 5465 Message: 5465

I would like to put an AM antenna in my attic and run it to the Sony XDR-F1HD tuner in my living room. Not looking for a DX antenna, just one for local AM listening.

Can anyone suggest where I could get plans to make something like this? A simple loop antenna that would cover 540-1600 khz and fed via 75 ohm coax?

Really cannot use one that has to be retuned for different frequencies.

Thanks
Zack
N8FNR

5466. Re: [loopantennas] AM antenna suggestions for use in an attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-05 01:19:23 UTC
From: Don
Topic: 5465 Message: 5466

I've used a loop of about 10ft of wire with a coax or twisted wire
leadin - but it usually needs to be very short - like hanging in back of
the tuner. Also a shorted loop of coax works as well.

Don
Upland, CA

Zack wrote:
> I would like to put an AM antenna in my attic and run it to the Sony
> XDR-F1HD tuner in my living room. Not looking for a DX antenna, just
> one for local AM listening.
>
> Can anyone suggest where I could get plans to make something like this?
> A simple loop antenna that would cover 540-1600 khz and fed via 75 ohm
> coax?
>
> Really cannot use one that has to be retuned for different frequencies.
>
> Thanks
> Zack
> N8FNR
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG.
> Version: 8.0.138 / Virus Database: 270.5.12/1590 - Release Date: 8/4/2008 8:09 AM

>
>
>
>

No virus found in this outgoing message.
Checked by AVG.
Version: 8.0.138 / Virus Database: 270.5.12/1590 - Release Date: 8/4/2008 8:09 AM

5467. Re: NOVIDADES

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-05 02:07:09 UTC
From: airchecklover
Topic: 5459 Message: 5467

> Hello Michael and the group-
> You can go to www.babelfish.altavista.com and paste the URL
> into the "Translate Webpage" window, and select Portuguese to English
> translation... still not perfect, but it helps.
>
> 73,
> Randy
> KZ4RV
>

Another easy way to translate a page ... cut and paste the URL into
Google. A page will come back with the option to "translate page"

-Mark

5468. Re: [loopantennas] AM antenna suggestions for use in an attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-05 03:05:19 UTC
From: Jim Dunstan
Topic: 5465 Message: 5468

At 12:23 AM 8/5/2008 +0000, you wrote:

>I would like to put an AM antenna in my attic and run it to the Sony
>XDR-F1HD tuner in my living room. Not looking for a DX antenna, just
>one for local AM listening.
>
>Can anyone suggest where I could get plans to make something like this?
>A simple loop antenna that would cover 540-1600 khz and fed via 75 ohm
>coax?
>
>Really cannot use one that has to be retuned for different frequencies.
>
>Thanks
>Zack
>N8FNR

Hi,

I have an AM tuner which came with a loop for local reception. It is a simple untuned unit consisting of 5 close wound turns on a light plastic form 8 1/2 in in diameter. It uses a twisted pair of wire as a feed line ... coax would work as well. It is simply a matter of orienting it for best reception. I would think any physical design ... perhaps larger in diameter ... with 5 to 8 turns ... strategically located in the attic would work well.

Jim

5469. Re: [loopantennas] AM antenna suggestions for use in an attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-05 04:45:11 UTC
From: Jay Heyl
Topic: 5465 Message: 5469

On Mon, Aug 4, 2008 at 8:23 PM, Zack <vtnn43e@...> wrote:
> I would like to put an AM antenna in my attic and run it to the Sony
> XDR-F1HD tuner in my living room. Not looking for a DX antenna, just
> one for local AM listening.

You don't like the small loop that was included? It's actually not bad.

> Can anyone suggest where I could get plans to make something like this?
> A simple loop antenna that would cover 540-1600 khz and fed via 75 ohm
> coax?

I see two issues here. First, a loop is going to be directional, so you'd have to turn it for best reception. Perhaps most of the stations in your area lie fairly close to a single line so that wouldn't be a huge problem. Or maybe you could use a loop with a low Q so the null regions would be shallow and defuse. That should still work okay for local reception.

Second, I was just reading today that the MW antenna inputs on the XDR-F1HD are balanced. (If you look closely, you'll notice neither of the inputs is marked as ground.) The article said this was one of the reasons the little loop they include rejects noise so well. The balanced input allows it to work almost exclusively in the magnetic domain, rejecting most of those nasty electrical radio wave components that carry the majority of the local noise. I have absolutely no idea if you could accomplish the same kind of thing by going from balanced to unbalanced and back to balanced. I suppose you could always use ladder line instead of coax, staying balanced the whole way.

Nice radio, BTW. I got one last week. Amazing FM reception on that thing. It's too bad they didn't include a way to stay with pure analog reception. I think the analog signal sounds better on most of the local "HD" stations. (I got it because I heard it was an excellent FM DXing radio, not so much for the HD part.)

-- Jay

5470. Re: AM antenna suggestions for use in an attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-05 15:30:31 UTC
From: Zack
Topic: 5465 Message: 5470

Maybe I will stick a 300-75 ohm balun on it, run some coax from the attic and put another 75-300 balun to the tuner.

My issue is that the tuner is right under a Sony 36 inch HD TV that puts out a LOT of noise on AM. Hence my wanting to remote it.

It think that I will give the loop a try though!

Zack

--- In loopantennas@yahoogroups.com, "Jay Heyl" <yahoogroups@...> wrote:
>
> On Mon, Aug 4, 2008 at 8:23 PM, Zack <vtnn43e@...> wrote:
> > I would like to put an AM antenna in my attic and run it to the Sony
> > XDR-F1HD tuner in my living room. Not looking for a DX antenna, just
> > one for local AM listening.
>
> You don't like the small loop that was included? It's actually not bad.
>
> > Can anyone suggest where I could get plans to make something like this?
> > A simple loop antenna that would cover 540-1600 khz and fed via 75 ohm
> > coax?
>
> I see two issues here. First, a loop is going to be directional, so
> you'd have to turn it for best reception. Perhaps most of the stations
> in your area lie fairly close to a single line so that wouldn't be a
> huge problem. Or maybe you could use a loop with a low Q so the null
> regions would be shallow and defuse. That should still work okay for
> local reception.
>
> Second, I was just reading today that the MW antenna inputs on the
> XDR-F1HD are balanced. (If you look closely, you'll notice neither of
> the inputs is marked as ground.) The article said this was one of the
> reasons the little loop they include rejects noise so well. The

> balanced input allows it to work almost exclusively in the magnetic
> domain, rejecting most of those nasty electrical radio wave
components
> that carry the majority of the local noise. I have absolutely no
idea
> if you could accomplish the same kind of thing by going from
balanced
> to unbalanced and back to balanced. I suppose you could always use
> ladder line instead of coax, staying balanced the whole way.
>
> Nice radio, BTW. I got one last week. Amazing FM reception on that
> thing. It's too bad they didn't include a way to stay with pure
analog
> reception. I think the analog signal sounds better on most of the
> local "HD" stations. (I got it because I heard it was an excellent
FM
> DXing radio, not so much for the HD part.)
>
> -- Jay
>

5471. Re: AM antenna suggestions for use in an attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-05 16:42:49 UTC
From: Rob - W1AEX
Topic: 5465 Message: 5471

Hi Zack,

I ran into a similar situation when I picked up my Sony XDR-S3HD and installed it 2 feet away from my router and cable modem. Lots of noise pours out of those network devices all across the AM broadcast band.

What I did was to take two 25 foot lengths of #24 insulated wire and tie one set of ends to a table leg, then stuck the other ends into my cordless drill. I stepped back to put tension on the wires and then ran the drill for several minutes. It did a great job of putting about 5 or 6 turns per inch all the way along the length of wires. I used this as a feedline to place a 10 turn loop (wound around the edges of an old plastic CD case) in a closet about 20 feet away from the router and modem. As someone said previously, the loop is definitely directional, so I oriented it to favor stations north and south of me and it works great. It is noise free and very effective. Best of all, the price was right with a total investment of $0.

The 75 ohm to 300 ohm baluns used for TV coaxial use are very lossy on the AM broadcast band, and using 2 of them would make it even worse. Stick with twisted pair or even TV twinlead and you will have much better results.

Rob W1AEX

--- In loopantennas@yahoogroups.com, "Zack" <vtnn43e@...> wrote:
>
> I would like to put an AM antenna in my attic and run it to the Sony
> XDR-F1HD tuner in my living room. Not looking for a DX antenna, just
> one for local AM listening.
>
> Can anyone suggest where I could get plans to make something like this?
> A simple loop antenna that would cover 540-1600 khz and fed via 75 ohm
> coax?
>
> Really cannot use one that has to be retuned for different frequencies.
>
> Thanks
> Zack
> N8FNR
>

5472. Re: AM antenna suggestions for use in an attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-05 20:46:45 UTC
From: tenorman1952
Topic: 5465 Message: 5472

--- In loopantennas@yahoogroups.com, "Zack" <vtnn43e@...> wrote:
>
> I would like to put an AM antenna in my attic and run it to the
Sony
> XDR-F1HD tuner in my living room. Not looking for a DX antenna,
just
> one for local AM listening.
>
> Can anyone suggest where I could get plans to make something like
this?
> A simple loop antenna that would cover 540-1600 khz and fed via 75
ohm
> coax?
>
> Really cannot use one that has to be retuned for different
frequencies.
>
> Thanks
> Zack
> N8FNR

Zack: I have built a number of these loops:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=300246425307

and in the seller's blurb where he mentions this link:

http://www.audioasylum.com/forums/tuner/messages/7246.html

I am the author of that post at Audio Asylum.

These loops are nice kit versions of the "Carver Ultimate AM Loop" as
described here:

http://members.cox.net/rwagoner/columns/am_antenna.html

I have one of these loops on each of my three stereo systems. I also
made one for my brother, my sister, my brother in law for his office
system, and a some for various friends. These antennae work!

You may connect to it with 300 ohm twinlead or 75 ohm coax, or even
just a twisted pair of wires. It IS directional, so you will have to
orient it for best reception of your favorite stations.

But why put it in the attic? It works equally well right by your
stereo system and you can aim it immediately. I have a friend who
uses his in his basement ham shack with good results.

It is important to connect both leads, one to the tuner's AM antenna terminal, the other to the tuner's Ground terminal (or chassis ground).

While this simple untuned loop is not as strong as a tuned loop, it works quite well, and no tuning.

Paul

5473. Re: AM antenna suggestions for use in an attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-06 00:49:03 UTC
From: Zack
Topic: 5465 Message: 5473

Thanks to all who replied! There is a lot of great info here and it is appreciated.

Zack
N8FRN

5474. Re: [loopantennas] antenna rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-06 20:54:22 UTC
From: aimo ruoho
Topic: 5434 Message: 5474

Thanks a lot!
I purchased through them the simple and cheap rotator. It will be the cheapest way to get it.
No digital screens, just the most needed things. Suits me well.
They have sent me very prompt replies, many of them. Seems very good service!
Thanks again and continue your good attitude.
Aimo

--- On Sun, 7/27/08, C. Beijersbergen <c.beijersbergen@...> wrote:
From: C. Beijersbergen <c.beijersbergen@...>
Subject: Re: [loopantennas] antenna rotator
To: loopantennas@yahoogroups.com
Date: Sunday, July 27, 2008, 4:21 PM

hello Aimo,

Conrad in Germany has a rotator in their program.

They can be found at www.conrad.de but they have websites for most european countries. The english one is under construction at the moment. You can contact them at international. sales@conrad. de

succes!

Cor Beijersbergen

Home TV, Sat, DVD SAT-Empfangstechnik SAT-Installation Antennen Rotoren AUTOMATIK ANTENNENROTOR

Artikel-Nr.: 284971 - 62

49,95 EUR

Hello, loopers!

Would you English members inform me about dealers in Europe, who have antenna rotators in their program, please?

73 de Aimo

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5476. Re: [loopantennas] fyi

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-10 13:07:37 UTC
From: aimo ruoho
Topic: 5476 Message: 5476

THNX!
3rd time received this during a few months/weeks?

--- On Sun, 8/10/08, Paul V Birke PEng <nonlinear@...> wrote:
From: Paul V Birke PEng <nonlinear@...>
Subject: [loopantennas] fyi
To: loopantennas@yahoogroups.com
Date: Sunday, August 10, 2008, 5:57 AM

http://www.qrss. thersgb.net/ active-loop- receiving- antenna.html

not sure if I sent you this before I left

p

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5477. Just curious

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-10 13:38:16 UTC
From: WA1IBN
Topic: 5477 Message: 5477

Hello All,
I made a BCB loop antenna using a 14 inch embroidery hoop with an odd number of pegs and 19 turns of litz wire wound in a basket weave.
I use this with a Grundig S350 to receive a distant station on 1490kc, most days the loop will make it listenable.
The question is, why is it when the loop is tuned just below the desired frequency the signal dips, then peaks when tuned on frequency. This happens all across the band.
Just curious, what is happening here?
Thanks, Herb Dean WA1IBN@...

[Non-text portions of this message have been removed]

5478. Re: [loopantennas] Just curious

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-10 16:17:00 UTC
From: Chris Trask
Topic: 5477 Message: 5478

The terminal impedance of a loop antenna is best seen as a shorted transmission line, which was proposed by Terman and others over a half century ago. At low frequencies, the impedance appears much like an inductance, and then takes on the characteristics of a parallel resonance (high impedance) across the terminals as you approach the point where the apparent height of the loop is a quarter wavelength. This is the point at which you are seeing the signal peak.

At the point where the apparent height of the loop is a half wavelength, the impedance is a series resonance (low impedance) across the terminals. This is the point at which you are seeing the signal dip.

This characteristic of the loop antenna impedance repeats every half wavelength.

BTW: Could you provide us with a photo of this antenna you made? The way you constructed it sounds interesting.

>
>Hello All,
>I made a BCB loop antenna using a 14 inch embroidery hoop with an
>odd number of pegs and 19 turns of litz wire wound in a basket weave.
>I use this with a Grundig S350 to receive a distant station on 1490kc,
>most days the loop will make it listenable.
>The question is, why is it when the loop is tuned just below the desired
>frequency the signal dips, then peaks when tuned on frequency. This
>happens all across the band.
>Just curious, what is happening here?
>Thanks, Herb Dean WA1IBN@...
>
>[Non-text portions of this message have been removed]
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask

c__; c__; '-..'>.__

Graphics by Loek Frederiks

5479. Re: [loopantennas] Just curious

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-10 18:29:14 UTC
From: Jim Dunstan
Topic: 5477 Message: 5479

At 09:38 AM 8/10/2008 -0400, you wrote:

>Hello All,
>I made a BCB loop antenna using a 14 inch embroidery hoop with an
>odd number of pegs and 19 turns of litz wire wound in a basket weave.
>I use this with a Grundig S350 to receive a distant station on 1490kc,
>most days the loop will make it listenable.
>The question is, why is it when the loop is tuned just below the desired
>frequency the signal dips, then peaks when tuned on frequency. This
>happens all across the band.
>Just curious, what is happening here?
>Thanks, Herb Dean <mailto:WA1IBN%40verizon.net>WA1IBN@...
>
>[Non-text portions of this message have been removed]

Hi,

That is an interesting observation. The tuned circuit (tuned loop) takes on different impedance characteristics as it approaches resonance. At resonance it takes on a high impedance and drops off sharply on the low side . The drop off is much more gradual on the other side. This is one of the techniques used in multiple tuned circuit crystal sets to separate closely spaced MF stations. The two circuits are inductively coupled with the antenna on one side and the detector on the other. The two tuned circuits are then tweaked to maximize the desired signal and attenuate the undesired signal. I guess you could call it the ultimate pre selector.

I have also used this characteristic (in the old days) with a home brew IF Q-multiplier at 85 khz to provide rejection of undesired CW signals. You could also experience this phenomena when tuning the single xtal IF filter in old receivers. Today, someone trying out one of these old receivers would scoff at these old xtal IF filters ... however in the hands of a skilled operator they can be quite good .... but it was more of an art hi hi.

I am not sure I have a picture of your loop construction. I have constructed circular loops using a circular piece of plywood with pegs mounted around the circumference. Looks like a Crown & Anchor wheel. I then weave the winding on the pegs. However you mention an embroidery hoop ... not sure how you fasten the pegs. It sounds like they would be facing out from the hoop .... eg like the steering wheel on a ship ?

Another technique I have used is to cut slots in a circular piece of plywood ... the slots radiating out to the circumference. I then basket weave around the slots.

Jim

[Non-text portions of this message have been removed]

5480. Re: [loopantennas] Just curious

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-10 20:40:50 UTC
From: Chris Trask
Topic: 5477 Message: 5480

>
> The terminal impedance of a loop antenna is best seen as a shorted
> transmission line, which was proposed by Terman and others over a half
> century ago. At low frequencies, the impedance appears much like an
> inductance, and then takes on the characteristics of a parallel resonance
> (high impedance) across the terminals as you approach the point where the
> apparent height of the loop is a quarter wavelength. This is the point at
> which you are seeing the signal peak.
>
> At the point where the apparent height of the loop is a half
wavelength,
> the impedance is a series resonance (low impedance) across the terminals.
> This is the point at which you are seeing the signal dip.
>
> This characteristic of the loop antenna impedance repeats every half
> wavelength.
>
> BTW: Could you provide us with a photo of this antenna you made?
The
> way you constructed it sounds interesting.
>
> >
> > Hello All,
> > I made a BCB loop antenna using a 14 inch embroidery hoop with an
> > odd number of pegs and 19 turns of litz wire wound in a basket weave.
> > I use this with a Grundig S350 to receive a distant station on 1490kc,
> > most days the loop will make it listenable.
> > The question is, why is it when the loop is tuned just below the desired
> > frequency the signal dips, then peaks when tuned on frequency. This
> > happens all across the band.
> > Just curious, what is happening here?
> > Thanks, Herb Dean WA1IBN@...
> >
>

Ooops! I had my wires crossed here a bit. I should have said that the signal null occurs at the frequency where the loop is at it's parallel resonant frequency. The signal peak is the point at where you have the best match between the loop antenna and your receiver. I had my head buried in writing about loop antenna matching networks and should have given my response a bit more thought.

I'm much better now.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5481. Picture of BCB loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-10 23:52:19 UTC
From: WA1IBN
Topic: 5481 Message: 5481

Hello All,
For those that asked attached is a picture of my BCB loop.
You can see the tuning capacitor in back mostly open, only one section is used.
Just so happens I have a 1937 issue of Radio Engineering by Terman, I'll look there.
Herb Dean WA1IBN@ verizon.net

[Non-text portions of this message have been removed]

5482. Re: [loopantennas] Picture of BCB loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-11 00:34:24 UTC
From: Chris Trask
Topic: 5481 Message: 5482

```
>
> Hello All,
> For those that asked attached is a picture of my BCB loop.
> You can see the tuning capacitor in back mostly open, only one section is
used.
> Just so happens I have a 1937 issue of Radio Engineering by Terman, I'll
look there.
> Herb Dean WA1IBN@ verizon.net
>
> [Non-text portions of this message have been removed]
>

Unfortunately, you can't post messages with attachments. Could you
upload it into the files section?

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

5483. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-12 00:17:18 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 5483

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /WA1IBNs Basket Weave BCB Loop Antenna.pdf
Uploaded by : chris3trask <christrask@...>
Description : Basket Weave BCB Loop Antenna

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/WA1IBNs%20Basket%20Weave%20BCB%20Loop%20Antenna.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

chris3trask <christrask@...>

5484. bands

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-12 00:40:24 UTC
From: alan
Topic: 5484 Message: 5484

hi group i ham building a shack and trying to sort out antennaes i have run a longwire (approx) 115 feet round my loftwhich iam going to connect to my yaesu frg 7700 recieverwhich has fm usb lsb what bands could i expect to recieve on this i also have a pro 2042 scanner which has am wfm uhf and vhf could i connect the longwire loop to my scanner and what could i possibly recieve as you can probably guess iam new to this but want to learn more about this great hobby thanks alan

5485. Re: [loopantennas] New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-12 01:34:17 UTC
From: Jim Dunstan
Topic: 4 Message: 5485

At 12:17 AM 8/12/2008 +0000, you wrote:

>Hello,
>
>This email message is a notification to let you know that
>a file has been uploaded to the Files area of the loopantennas
>group.

Hi,

I found the picture very informative and interesting ... I have never seen 'basket weave' done this way. In one way it is the same loop as mine ... but i fastened all the dowels by screwing them to a circular disk. It is not clear from the photo ... how do you fasten the dowels to the embroidery hoop ? I assume you drill a hole and pass through a screw of some sort. The weave then takes place on either side of the embroidery hoop.

Jim

>

5486. Re: [loopantennas] New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-12 07:17:42 UTC
From: gandalfg8@aol.com
Topic: 238 Message: 5486

In a message dated 12/08/2008 02:34:20 GMT Daylight Time,
dunstan@... writes:

I found the picture very informative and interesting ... I have never seen
'basket weave' done this way. In one way it is the same loop as mine ...
but i fastened all the dowels by screwing them to a circular disk. It is
not clear from the photo ... how do you fasten the dowels to the embroidery
hoop ? I assume you drill a hole and pass through a screw of some
sort. The weave then takes place on either side of the embroidery hoop.

Hi Jim

From the photo I would say that the dowels have slots cut in them to fit
over the hoop and then screwed or glued in place, perhaps better the latter as
that would avoid any metal content in the loop support.

If you look closely you will see that the dowels protrude from one side of
the loop only so the weave is also just on one side.

It's certainly an attractive design.

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5487. BCB loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-13 16:24:04 UTC
From: WA1IBN
Topic: 5487 Message: 5487

Hello All,
A thanks to Chris Trask for posting my picture.
When I tried to post things defaulted to my other
e-mail address and that wasn't recognized.

You are right Nigel, glue only is used to hold
the notched pegs, no metal, pegs on one side only.

Herb Dean WA1IBN@...

[Non-text portions of this message have been removed]

5488. horizontal loop tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-13 20:15:47 UTC
From: randy zelick
Topic: 5488 Message: 5488

Hello there,

This is my first post to this group, and apologies in advance if I violate some etiquette due to being a novice.

I am trying to turn a dipole into a horizontal loop antenna to (1) get more wire in the air and (2) reduce a large amount of ambient noise. It has been suggested to me that a loop is worth a try.

The loop cannot be really horizontal, however. It will end up being close to a sloping square. The highest support point will be about 120 feet in a cedar tree, but two legs will then slope down at 90 degrees to supports maybe 35 feet from ground level. From each of these points wires will slope further to a chimney, where I plan to have an outdoor tuner.

So finally, to my question: what tuner?

My first thought was SGC, but even used ones on ebay are well over $300.00. I see that MFJ has a new outdoor tuner (model 927) which is less, but when I called them it looks like you must use a balun on the output of the tuner to drive a loop (or dipole). The MFJ is a unbalanced path from input through to output. I'm not sure the SGC would be different, but perhaps.

Does anyone have experience with the MFJ, and is it likely to work with the balun strategy? If so, then I would most appreciate a hint as to the best sort of balun to use.

I also thought of using ladder line where the loop wires come together, but I don't see a way to route to my hamshack with this feedline. So it is going to be coax to the tuner.

Thanks much for any help,

=Randy=

[Non-text portions of this message have been removed]

5489. Re: ***SPAM*** [loopantennas] horizontal loop tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-13 21:32:22 UTC
From: EDUARDO L. CASTALDELLI
Topic: 5489 Message: 5489

Hello,
New file in photos
The antenna mini Loop to MW home made.
best regards,

Ed

----- Original Message -----
From: randy zelick
To: loopantennas@yahoogroups.com
Sent: Wednesday, August 13, 2008 5:15 PM
Subject: ***SPAM*** [loopantennas] horizontal loop tuner

Hello there,

This is my first post to this group, and apologies in advance if I violate some etiquette due to being a novice.

I am trying to turn a dipole into a horizontal loop antenna to (1) get more wire in the air and (2) reduce a large amount of ambient noise. It has been suggested to me that a loop is worth a try.

The loop cannot be really horizontal, however. It will end up being close to a sloping square. The highest support point will be about 120 feet in a cedar tree, but two legs will then slope down at 90 degrees to supports maybe 35 feet from ground level. From each of these points wires will slope further to a chimney, where I plan to have an outdoor tuner.

So finally, to my question: what tuner?

My first thought was SGC, but even used ones on ebay are well over $300.00. I see that MFJ has a new outdoor tuner (model 927) which is less, but when I called them it looks like you must use a balun on the output of the tuner to drive a loop (or dipole). The MFJ is a unbalanced path from input through to output. I'm not sure the SGC would be different, but perhaps.

Does anyone have experience with the MFJ, and is it likely to work with the balun strategy? If so, then I would most appreciate a hint as to the best sort of balun to use.

I also thought of using ladder line where the loop wires come together, but I don't see a way to route to my hamshack with this feedline. So it is going to be coax to the tuner.

Thanks much for any help,

=Randy=

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.6.0/1602 - Release Date: 9/8/2008 13:22

[Non-text portions of this message have been removed]

5490. Re: [loopantennas] horizontal loop tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-13 23:00:23 UTC
From: Jim Dunstan
Topic: 5488 Message: 5490

At 01:15 PM 8/13/2008 -0700, you wrote:

>So finally, to my question: what tuner?
>
>My first thought was SGC, but even used ones on ebay are well over
>$300.00. I see that MFJ has a new outdoor tuner (model 927) which is less,
>but when I called them it looks like you must use a balun on the output of
>the tuner to drive a loop (or dipole). The MFJ is a unbalanced path from
>input through to output. I'm not sure the SGC would be different, but perhaps.
>
>Does anyone have experience with the MFJ, and is it likely to work with
>the balun strategy? If so, then I would most appreciate a hint as to the
>best sort of balun to use.
>
>I also thought of using ladder line where the loop wires come together,
>but I don't see a way to route to my hamshack with this feedline. So it is
>going to be coax to the tuner.
>
>Thanks much for any help,
>
>=Randy=

Hi,

Both tuners .... the SGC and the MFJ are unbalanced to unbalanced ATU ....
SGC would call it a 'coupler'. They are designed to be mounted at the
antenna whether it is a vertical, dipole, or loop. It is an excellent
strategy to build a multi-band antenna. In the case of a balanced antenna
such as a dipole or a loop as you propose it is a simple matter to connect
it at the feed point. The antenna terminal connects to one side of the
loop and the other side of the loop connects to the coupler ground
terminal. I don't recommend putting a balun between the tuner and the
antenna .... as they (baluns) cause more problems than they solve. They
are low impedance devices and work 50 ohm to 50 ohm (1:1) or 50 ohm to 200
ohm (4:1). As soon as you get much higher impedances they become
unpredictable in performance.

Now the only reason to talk 'balun' at all is to prevent as little RF
current to flow on the outside of the coax shield as possible. This can be
easily accomplished by placing a 'current choke' between the coax and the
coupler, 50 ohm to 50 ohm, (the correct place) ... simply coil approx. 20
ft. of the coax cable at the point it goes into the coupler and you should
have an effective current choke.

Many of the SGC couplers are sufficiently weather resistant to sit on their
own ... however it is always a good idea to keep them in a second

protective enclosure. I am not familiar with the MJF-927 ... but I note that they use a different description re weather "weather protected" and not weather proof hi hi.

Ladder line is a good alternative .... and in fact can be used in conjunction with the coupler. For example you can use ladder line between the loop and a convenient place closer to the shack and then 'couple' the balanced line to the coax in the exact manner already described. Then the coax can be routed to the shack. This method is superior to trying to couple balanced line to coax with a balun .... eg the coupler can handle the various impedances much more efficiently than the balun.

Go ahead with your plan and you will have a very good multi-band antenna.

Jim, VE3CI

5491. Re: [loopantennas] horizontal loop tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-14 02:59:33 UTC
From: Tom
Topic: 5488 Message: 5491

Hello Randy and the Loop Group.

I've been using an inverted V which has been converted
into a loop. The inverted V has basically been shorted out by
a large 3 sided horizontal piece of wire. The total length
of the resulting loop is 250 feet and 30 to 40 feet high. The tuner
is a manual type, tuned in the shack and provides a flat match
to a 1KW solid state amplifier. The loop antenna can also be
connected to any transceiver or receiver. The antenna transmits
and receives well from 80 to 10 meters.

See:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=2

http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=3

My best contact is New Zealand on 75 meters.

Cheers.

Tom
KE6YNH, 73
San Diego, CA

----- Original Message -----
From: randy zelick
To: loopantennas@yahoogroups.com
Sent: Wednesday, August 13, 2008 1:15 PM
Subject: [loopantennas] horizontal loop tuner

Hello there,

This is my first post to this group, and apologies in advance if I violate some etiquette due to being a novice.

I am trying to turn a dipole into a horizontal loop antenna to (1) get more wire in the air and (2) reduce a large amount of ambient noise. It has been suggested to me that a loop is worth a try.

The loop cannot be really horizontal, however. It will end up being close to a sloping square. The highest support point will be about 120 feet in a cedar tree, but two legs will then slope down at 90 degrees to supports maybe 35 feet from ground level. From each of these points wires will slope further to a chimney, where I plan to have an outdoor tuner.

So finally, to my question: what tuner?

My first thought was SGC, but even used ones on ebay are well over $300.00. I see that MFJ has a new outdoor tuner (model 927) which is less, but when I called them it looks like you

must use a balun on the output of the tuner to drive a loop (or dipole). The MFJ is a unbalanced path from input through to output. I'm not sure the SGC would be different, but perhaps.

Does anyone have experience with the MFJ, and is it likely to work with the balun strategy? If so, then I would most appreciate a hint as to the best sort of balun to use.

I also thought of using ladder line where the loop wires come together, but I don't see a way to route to my hamshack with this feedline. So it is going to be coax to the tuner.

Thanks much for any help,

=Randy=

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5492. Re: [loopantennas] horizontal loop tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-14 06:57:26 UTC
From: chasm@texas.net
Topic: 5488 Message: 5492

Randy, as you are of course, an ARRL member, you should have received your Sept QST by now. if not, then within the week. Therein, you will find a review of the MFJ 927. It seems to be favorable for a less than $300 feedpoint autotuner.

you might read that in the course of your decision making
73 de chas/k5dam

On Wed, 13 Aug 2008 13:15:47 -0700 (PDT), randy zelick <electrosaurus@...> wrote:

>Hello there,
>
>This is my first post to this group, and apologies in advance if I violate some etiquette due to being a novice.
>
>I am trying to turn a dipole into a horizontal loop antenna to (1) get more wire in the air and (2) reduce a large amount of ambient noise. It has been suggested to me that a loop is worth a try.
>

//

--
chamilton, k5dam, Houston
"Liberalism is a philosophy of consolation for Western Civilization as it commits suicide." Jerry Pournelle, Author, Physicist
...

5493. Re: ***SPAM*** [loopantennas] horizontal loop tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-14 09:26:47 UTC
From: aimo ruoho
Topic: 5489 Message: 5493

I did not find the photos from you. (The antenna mini loop to MW home made)

--- On Wed, 8/13/08, EDUARDO L. CASTALDELLI <adcas@...> wrote:

From: EDUARDO L. CASTALDELLI <adcas@...>
Subject: Re: ***SPAM*** [loopantennas] horizontal loop tuner
To: loopantennas@yahoogroups.com
Date: Wednesday, August 13, 2008, 11:32 PM

Hello,
New file in photos
The antenna mini Loop to MW home made.
best regards,

Ed

----- Original Message -----
From: randy zelick
To: loopantennas@ yahoogroups. com
Sent: Wednesday, August 13, 2008 5:15 PM
Subject: ***SPAM*** [loopantennas] horizontal loop tuner

Hello there,

This is my first post to this group, and apologies in advance if I violate some etiquette due to being a novice.

I am trying to turn a dipole into a horizontal loop antenna to (1) get more wire in the air and (2) reduce a large amount of ambient noise. It has been suggested to me that a loop is worth a try.

The loop cannot be really horizontal, however. It will end up being close to a sloping square. The highest support point will be about 120 feet in a cedar tree, but two legs will then slope down at 90 degrees to supports maybe 35 feet from ground level. From each of these points wires will slope further to a chimney, where I plan to have an outdoor tuner.

So finally, to my question: what tuner?

My first thought was SGC, but even used ones on ebay are well over $300.00. I see that MFJ has a new outdoor tuner (model 927) which is less, but when I called them it looks like you must use a balun on the output of the tuner to drive a loop (or dipole). The MFJ is a unbalanced path from input through to output. I'm not sure the SGC would be different, but perhaps.

Does anyone have experience with the MFJ, and is it likely to work with the balun strategy? If so, then I would most appreciate a hint as to the best sort of balun to use.

I also thought of using ladder line where the loop wires come together, but I don't see a way to route to my hamshack with this feedline. So it is going to be coax to the tuner.

Thanks much for any help,

=Randy=

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.6.0/1602 - Release Date: 9/8/2008 13:22

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5494. Antenna mini loop to MW home made

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-14 10:03:02 UTC
From: EDUARDO L. CASTALDELLI
Topic: 5494 Message: 5494

Hi,
verify in andress:
http://groups.yahoo.com/group/loopantennas/spnew

tank´s,

Eduardo
----- Original Message -----
From: aimo ruoho
To: loopantennas@yahoogroups.com
Sent: Thursday, August 14, 2008 6:26 AM
Subject: ***SPAM*** Re: ***SPAM*** [loopantennas] horizontal loop tuner

I did not find the photos from you. (The antenna mini loop to MW home made)

--- On Wed, 8/13/08, EDUARDO L. CASTALDELLI <adcas@...> wrote:

From: EDUARDO L. CASTALDELLI <adcas@...>
Subject: Re: ***SPAM*** [loopantennas] horizontal loop tuner
To: loopantennas@yahoogroups.com
Date: Wednesday, August 13, 2008, 11:32 PM

Hello,
New file in photos
The antenna mini Loop to MW home made.
best regards,

Ed

----- Original Message -----
From: randy zelick
To: loopantennas@ yahoogroups. com
Sent: Wednesday, August 13, 2008 5:15 PM
Subject: ***SPAM*** [loopantennas] horizontal loop tuner

Hello there,

This is my first post to this group, and apologies in advance if I violate some etiquette due to being a novice.

I am trying to turn a dipole into a horizontal loop antenna to (1) get more wire in the air and (2) reduce a large amount of ambient noise. It has been suggested to me that a loop is worth a try.

The loop cannot be really horizontal, however. It will end up being close to a sloping square. The highest support point will be about 120 feet in a cedar tree, but two legs will then slope down at 90 degrees to supports maybe 35 feet from ground level. From each of these points wires will slope further to a chimney, where I plan to have an outdoor tuner.

So finally, to my question: what tuner?

My first thought was SGC, but even used ones on ebay are well over $300.00. I see that MFJ has a new outdoor tuner (model 927) which is less, but when I called them it looks like you must use a balun on the output of the tuner to drive a loop (or dipole). The MFJ is a unbalanced path from input through to output. I'm not sure the SGC would be different, but perhaps.

Does anyone have experience with the MFJ, and is it likely to work with the balun strategy? If so, then I would most appreciate a hint as to the best sort of balun to use.

I also thought of using ladder line where the loop wires come together, but I don't see a way to route to my hamshack with this feedline. So it is going to be coax to the tuner.

Thanks much for any help,

=Randy=

[Non-text portions of this message have been removed]

------------ --------- --------- ------

If you've got links, post them in the Links section!
http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.6.0/1602 - Release Date: 9/8/2008 13:22

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.6.0/1602 - Release Date: 9/8/2008 13:22

[Non-text portions of this message have been removed]

5495. Re: [loopantennas] Antenna mini loop to MW home made

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-14 15:43:55 UTC
From: aimo ruoho
Topic: 5494 Message: 5495

THNX!
Very interesting!
Would you like to tell us more about this unique antenna?
How did you make it? Details, possible drawings etc?
My appreciation, 73 de Ami.

--- On Thu, 8/14/08, EDUARDO L. CASTALDELLI <adcas@...> wrote:
From: EDUARDO L. CASTALDELLI <adcas@...>
Subject: [loopantennas] Antenna mini loop to MW home made
To: loopantennas@yahoogroups.com
Cc: aimounto@...
Date: Thursday, August 14, 2008, 12:03 PM

Hi,

verify in andress:

http://groups. yahoo.com/ group/loopantenn as/spnew

tank´s,

Eduardo

----- Original Message -----

From: aimo ruoho

To: loopantennas@ yahoogroups. com

Sent: Thursday, August 14, 2008 6:26 AM

Subject: ***SPAM*** Re: ***SPAM*** [loopantennas] horizontal loop tuner

I did not find the photos from you. (The antenna mini loop to MW home made)

--- On Wed, 8/13/08, EDUARDO L. CASTALDELLI <adcas@.... br> wrote:

From: EDUARDO L. CASTALDELLI <adcas@...m. br>

Subject: Re: ***SPAM*** [loopantennas] horizontal loop tuner

To: loopantennas@ yahoogroups. com

Date: Wednesday, August 13, 2008, 11:32 PM

Hello,

New file in photos

The antenna mini Loop to MW home made.

best regards,

Ed

----- Original Message -----

From: randy zelick

To: loopantennas@ yahoogroups. com

Sent: Wednesday, August 13, 2008 5:15 PM

Subject: ***SPAM*** [loopantennas] horizontal loop tuner

Hello there,

This is my first post to this group, and apologies in advance if I violate some etiquette due to being a novice.

I am trying to turn a dipole into a horizontal loop antenna to (1) get more wire in the air and (2) reduce a large amount of ambient noise. It has been suggested to me that a loop is worth a try.

The loop cannot be really horizontal, however. It will end up being close to a sloping square. The highest support point will be about 120 feet in a cedar tree, but two legs will then slope down at 90 degrees to supports maybe 35 feet from ground level. From each of these points wires will slope further to a chimney, where I plan to have an outdoor tuner.

So finally, to my question: what tuner?

My first thought was SGC, but even used ones on ebay are well over $300.00. I see that MFJ has a new outdoor tuner (model 927) which is less, but when I called them it looks like you must use a balun on the output of the tuner to drive a loop (or dipole). The MFJ is a unbalanced path from input through to output. I'm not sure the SGC would be different, but perhaps.

Does anyone have experience with the MFJ, and is it likely to work with the balun strategy? If so, then I would most appreciate a hint as to the best sort of balun to use.

I also thought of using ladder line where the loop wires come together, but I don't see a way to route to my hamshack with this feedline. So it is going to be coax to the tuner.

Thanks much for any help,

=Randy=

[Non-text portions of this message have been removed]

------------ --------- --------- ------

If you've got links, post them in the Links section!

http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.

http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

--

No virus found in this incoming message.

Checked by AVG.

Version: 7.5.524 / Virus Database: 270.6.0/1602 - Release Date: 9/8/2008 13:22

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

------------ --------- --------- ------

If you've got links, post them in the Links section!

http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.

http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

--

No virus found in this incoming message.

Checked by AVG.

Version: 7.5.524 / Virus Database: 270.6.0/1602 - Release Date: 9/8/2008 13:22

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5496. Rock Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-15 11:54:30 UTC
From: oh6bi
Topic: 5496 Message: 5496

Hi All

I will very soon make a short one week trip to
Swizerland and I am planning to take my 817 with me.

After reading lot of MagLoop info from the net
I found RockLoop writings. One example:

http://www.qsl.net/dl1gsj/html/rockloop.html

That could be the easy start with MagLoops and it is
light and flexible in the suitcase.

Any opinnions ? Or experience ?

What kind of toroid ? iron or ferrite ?
I have T50-2 ironpowder toroid, I have used that material
for 1:4 balun in QRP tuners.

73s es GL de rami, oh6bi

5497. Re: [loopantennas] Rock Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-15 15:46:31 UTC
From: Chris Trask
Topic: 5496 Message: 5497

>
>I will very soon make a short one week trip to
>Swizerland and I am planning to take my 817 with me.
>
>After reading lot of MagLoop info from the net
>I found RockLoop writings. One example:
>
>http://www.qsl.net/dl1gsj/html/rockloop.html
>
>That could be the easy start with MagLoops and it is
>light and flexible in the suitcase.
>
>Any opinnions ? Or experience ?
>
>What kind of toroid ? iron or ferrite ?
>I have T50-2 ironpowder toroid, I have used that material
>for 1:4 balun in QRP tuners.
>

The photos on that web page just helped me solve a somewhat tricky mechanical problem that I've been struggling with. I had come to a conclusion about wideband matching networks for loops (the documentation is being reviewed), and had dug out another project for a motor-driven tuner for a QRP transmitting loop.

I don't care much for the arrangements with the variable capacitor at the top of the loop, and I'm equally at odds with the gamma-match Mini Loops. Both of these have ungainly mechanical problems that need to be addressed. The coupling transformers that people commonly use are a serious source of loss, and that also needs to be resolved to bring the efficiency up. I have a receive only varactor-tuned version of my idea on my test bench at the moment, and I'm going to toss one of my dual 365pF variables into the box for the transmitting version along with the sketch and notes that I just furiously wrote down.

Just goes to show that nobody has all the solutions.

Too bad we can't make a portable loop where the loop itself can be inflated.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240

\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5498. 40 Meter full wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-15 16:18:58 UTC
From: RAY
Topic: 5498 Message: 5498

I bulit a full waave 40 meter vertical loop the bottom is around three ft from theground and the top is about 49 ft its feed with 75 ohm coax for a matching network around 66ft a full wave then i uses rg 213 50 ohm coax to the shack on 40 to 10 the swr is flat thru the bands but 17,30 and 12 i need a tuner but what amazes me i hhave a hygaine th11dxx beam up at 85 ft and during the evenings the beam is dead no signals heard but on twenty with the 40 meter loop i work the whole pacific and get reports from new zeland of 5-10 over s-9 and the band comes alive its an amazinf antenna

Ray/wa2sei

5499. Re: [loopantennas] Rock Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-15 20:26:38 UTC
From: Tom
Topic: 5496 Message: 5499

Hi Chris, N7ZWYand the Loop Group

You wrote:

"Just goes to show that nobody has all the solutions.
Too bad we can't make a portable loop where the loop itself can be inflated."

Do you mean, fill an inflatable loop with helium gas, to make a floating
loop?

If so.......I like the idea!

Best regards.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

5500. Re: [loopantennas] Rock Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-15 22:46:44 UTC
From: Chris Trask
Topic: 5496 Message: 5500

> Hi Chris, N7ZWYand the Loop Group
>
> You wrote:
>
> "Just goes to show that nobody has all the solutions.
> Too bad we can't make a portable loop where the loop itself can be
inflated."
>
> Do you mean, fill an inflatable loop with helium gas, to make a floating
> loop?
>
> If so.....I like the idea!
>

You could use hydrogen and call it the Hindenloop. And yes, if the conducting surface had a sufficient radius to hold enough hydrogen (or helium), then it would rise in the air and give better reception.

Where's that fellow with the flying lawn chair?

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5501. Re: [loopantennas] horizontal loop tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-15 23:54:01 UTC
From: randy zelick
Topic: 5488 Message: 5501

Hi Jim,

Thanks for your help, and sorry for the delay in responding. I'll try your idea and see how it goes. Some others who responded seemed to think that a current balun was advisable, so clearly there is not a single view. I suppose you would say that the extra loss in the 20 ft of coax acting as a choke is less problematic than the loss with the balun.

Cheers,

=Randy=

----- Original Message ----
From: Jim Dunstan <dunstan@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, August 13, 2008 4:00:23 PM
Subject: Re: [loopantennas] horizontal loop tuner

At 01:15 PM 8/13/2008 -0700, you wrote:

>So finally, to my question: what tuner?
>
>My first thought was SGC, but even used ones on ebay are well over
>$300.00. I see that MFJ has a new outdoor tuner (model 927) which is less,
>but when I called them it looks like you must use a balun on the output of
>the tuner to drive a loop (or dipole). The MFJ is a unbalanced path from
>input through to output. I'm not sure the SGC would be different, but perhaps.
>
>Does anyone have experience with the MFJ, and is it likely to work with
>the balun strategy? If so, then I would most appreciate a hint as to the
>best sort of balun to use.
>
>I also thought of using ladder line where the loop wires come together,
>but I don't see a way to route to my hamshack with this feedline. So it is
>going to be coax to the tuner.
>
>Thanks much for any help,
>
>=Randy=

Hi,

Both tuners .... the SGC and the MFJ are unbalanced to unbalanced ATU ....
SGC would call it a 'coupler'. They are designed to be mounted at the
antenna whether it is a vertical, dipole, or loop. It is an excellent
strategy to build a multi-band antenna. In the case of a balanced antenna
such as a dipole or a loop as you propose it is a simple matter to connect
it at the feed point. The antenna terminal connects to one side of the

loop and the other side of the loop connects to the coupler ground terminal. I don't recommend putting a balun between the tuner and the antenna .... as they (baluns) cause more problems than they solve. They are low impedance devices and work 50 ohm to 50 ohm (1:1) or 50 ohm to 200 ohm (4:1). As soon as you get much higher impedances they become unpredictable in performance.

Now the only reason to talk 'balun' at all is to prevent as little RF current to flow on the outside of the coax shield as possible. This can be easily accomplished by placing a 'current choke' between the coax and the coupler, 50 ohm to 50 ohm, (the correct place) ... simply coil approx. 20 ft. of the coax cable at the point it goes into the coupler and you should have an effective current choke.

Many of the SGC couplers are sufficiently weather resistant to sit on their own ... however it is always a good idea to keep them in a second protective enclosure. I am not familiar with the MJF-927 ... but I note that they use a different description re weather "weather protected" and not weather proof hi hi.

Ladder line is a good alternative .... and in fact can be used in conjunction with the coupler. For example you can use ladder line between the loop and a convenient place closer to the shack and then 'couple' the balanced line to the coax in the exact manner already described. Then the coax can be routed to the shack. This method is superior to trying to couple balanced line to coax with a balun .... eg the coupler can handle the various impedances much more efficiently than the balun.

Go ahead with your plan and you will have a very good multi-band antenna.

Jim, VE3CI

[Non-text portions of this message have been removed]

5502. Re: Rock Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-16 06:44:59 UTC
From: RAY
Topic: 5496 Message: 5502

--- In loopantennas@yahoogroups.com, "Tom" <tgleeman@...> wrote:
>
> Hi Chris, N7ZWYand the Loop Group
>
> You wrote:
>
> "Just goes to show that nobody has all the solutions.
> Too bad we can't make a portable loop where the loop itself can be
inflated."
>
> Do you mean, fill an inflatable loop with helium gas, to make a
floating
> loop?
>
> If so.......I like the idea!
>
> Best regards.
>
> Tom
> KE6YNH, 73
> San Diego, CA
>
>
> If you build it! I will buy it lol
Ray wa2sei
>

5503. Re: Rock Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-16 17:30:29 UTC
From: Ken
Topic: 5496 Message: 5503

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:

> You could use hydrogen and call it the Hindenloop.

Please note this Hindenloop can NOT be used anywhere near Lakehurst.
New Jersey! :-)

Ken

5504. Re: [loopantennas] Re: Rock Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-16 17:35:43 UTC
From: Chris Trask
Topic: 5496 Message: 5504

```
>
> > You could use hydrogen and call it the Hindenloop.
>
> Please note this Hindenloop can NOT be used anywhere near Lakehurst.
> New Jersey! :-)
>
> Ken
>
```

And no smoking within 50 feet.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5505. Ciro Mazzoni Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-17 14:06:48 UTC
From: beltran_thomas
Topic: 5505 Message: 5505

I'm wondering if anyone has had experience with this company. I've sent several emails requesting information, but have never gotten a response. The link is http://www.ciromazzoni.com/index.htm. Their loop antennas appear to be high quality, and perhaps, high price, but interesting. Thanks for any information that might be available. Tom

5506. Re: [loopantennas] Ciro Mazzoni Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-17 17:39:47 UTC
From: Paul V Birke PEng
Topic: 5505 Message: 5506

nice big loops

p

----- Original Message ----
From: beltran_thomas <beltran_thomas@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, August 17, 2008 10:06:48 AM
Subject: [loopantennas] Ciro Mazzoni Loops

I'm wondering if anyone has had experience with this company. I've sent several emails requesting information, but have never gotten a response. The link is http://www.ciromazz oni.com/index. htm. Their loop antennas appear to be high quality, and perhaps, high price, but interesting. Thanks for any information that might be available. Tom

[Non-text portions of this message have been removed]

5507. Wideband Loop Antenna Matching Networks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 00:59:30 UTC
From: Chris Trask
Topic: 5507 Message: 5507

After quite a bit of work, I've come to a conclusion regarding the practicality of passive wideband matching networks for loop antennas. Basically, the high Q of the loop antenna impedance makes the realization of such matching networks a formidable task. Along the way, I came up with a balanced network section that I cannot find in any textbook that I have here. Despite this, the results of this was disappointing, to say the least. However, I wrote a fairly full description of the approach that I had the most success with, and it's available at:

http://tinyurl.com/5693jc

After I was done with all this, I quickly put together a remotely tuned matching network that uses three transformers and a pair of varactors. It works almost as well as my active loop in the QEX articles, and it's the ground work for a tunable matching network for transmitting loops. I'll have more about this later after I get some parts to reduce it to a final version and iron out a couple of mechanical details. For now, I'm using it in place of my active loop.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5508. Re: [loopantennas] Wideband Loop Antenna Matching Networks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 01:43:03 UTC
From: Tom
Topic: 5507 Message: 5508

Hi Chris,

I was unable to connect with the
web site using the link, http://tinyurl.com/5693jc.

Best regards.

Tom

----- Original Message -----
From: Chris Trask
To: Loop Antennas
Sent: Sunday, August 17, 2008 5:59 PM
Subject: [loopantennas] Wideband Loop Antenna Matching Networks

After quite a bit of work, I've come to a conclusion regarding the
practicality of passive wideband matching networks for loop antennas.
Basically, the high Q of the loop antenna impedance makes the realization of
such matching networks a formidable task. Along the way, I came up with a
balanced network section that I cannot find in any textbook that I have
here. Despite this, the results of this was disappointing, to say the
least. However, I wrote a fairly full description of the approach that I
had the most success with, and it's available at:

http://tinyurl.com/5693jc

After I was done with all this, I quickly put together a remotely tuned
matching network that uses three transformers and a pair of varactors. It
works almost as well as my active loop in the QEX articles, and it's the
ground work for a tunable matching network for transmitting loops. I'll
have more about this later after I get some parts to reduce it to a final
version and iron out a couple of mechanical details. For now, I'm using it
in place of my active loop.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \

'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

5509. Re: [loopantennas] Wideband Loop Antenna Matching Networks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 01:52:09 UTC
From: Chris Trask
Topic: 5507 Message: 5509

> Hi Chris,
>
> I was unable to connect with the
> web site using the link, http://tinyurl.com/5693jc.
>
> Best regards.
>
> Tom
>

I just connected to it. If I click on the URL in your posting and
remove the period at the end, I connected it it fine as well. I think we've
had something like this uccur once before. Here's a copy of the URL with
brackets (not visible):

http://tinyurl.com/5693jc

Maybe that will clear up whatever the trouble is.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5510. Coupler based loop antenna with remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 06:05:15 UTC
From: Tom
Topic: 5510 Message: 5510

Hello Loop Group,

Please see another one of my loop
doodles at:
http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=6

The challenge here would be to isolate any part of the
SGC 2035, 500 watt, coupler from ground to get a
balanced loop.

The advantage of using a coupler is that it can be
tuned remotely from an amateur transceiver.
The coupler is water proof. You can mount it outside
at the antenna feed point, where an antenna tuner should
be.

Cheers.

Tom
KE6YNH, 73
San Diego, CA

[Non-text portions of this message have been removed]

5511. Re: [loopantennas] Coupler based loop antenna with remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 12:34:32 UTC
From: John Hoopes
Topic: 5510 Message: 5511

That's pretty slick Tom! I'd like to have a setup like that but I don't have the real estate.

John, AB4MS

--- On Mon, 8/18/08, Tom <tgleeman@...> wrote:
From: Tom <tgleeman@...>
Subject: [loopantennas] Coupler based loop antenna with remote tuning
To: loopantennas@yahoogroups.com
Date: Monday, August 18, 2008, 2:05 AM

Hello Loop Group,

Please see another one of my loop

doodles at:

http://ph.groups. yahoo.com/ group/loopantenn as/photos/ view/199f? b=6

The challenge here would be to isolate any part of the

SGC 2035, 500 watt, coupler from ground to get a

balanced loop.

The advantage of using a coupler is that it can be

tuned remotely from an amateur transceiver.

The coupler is water proof. You can mount it outside

at the antenna feed point, where an antenna tuner should

be.

Cheers.

Tom

KE6YNH, 73

San Diego, CA

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5512. Re: [loopantennas] Wideband Loop Antenna Matching Networks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 12:37:00 UTC
From: John Hoopes
Topic: 5507 Message: 5512

Hi Chris,

Very interesting. I'd just like to say I enjoy reading your papers and want to thank you for taking the time to share them with the group!

John, AB4MS

--- On Sun, 8/17/08, Chris Trask <christrask@...> wrote:
From: Chris Trask <christrask@...>
Subject: [loopantennas] Wideband Loop Antenna Matching Networks
To: "Loop Antennas" <loopantennas@yahoogroups.com>
Date: Sunday, August 17, 2008, 8:59 PM

After quite a bit of work, I've come to a conclusion regarding the

practicality of passive wideband matching networks for loop antennas.

Basically, the high Q of the loop antenna impedance makes the realization of

such matching networks a formidable task. Along the way, I came up with a

balanced network section that I cannot find in any textbook that I have

here. Despite this, the results of this was disappointing, to say the

least. However, I wrote a fairly full description of the approach that I

had the most success with, and it's available at:

http://tinyurl. com/5693jc

After I was done with all this, I quickly put together a remotely tuned

matching network that uses three transformers and a pair of varactors. It

works almost as well as my active loop in the QEX articles, and it's the

ground work for a tunable matching network for transmitting loops. I'll

have more about this later after I get some parts to reduce it to a final

version and iron out a couple of mechanical details. For now, I'm using it

in place of my active loop.

Chris

,---------- --------- --. High Performance Mixers and

/ What's all this \ Amplifiers for RF Communications

/ extinct stuff, anyhow? /

\ _______,---- --------- -' Chris Trask / N7ZWY

_ |/ Principal Engineer

oo\ Sonoran Radio Research

(__)\ _ P.O. Box 25240

\ \ .' `. Tempe, Arizona 85285-5240

\ \ / \

\ '" \ IEEE Senior Member #40274515

. ( ) \

'-|)__| :. \ Email: christrask@earthlin k.net

| | | | \ '. http://www.home. earthlink. net/~christrask

c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

5513. Re: [loopantennas] Wideband Loop Antenna Matching Networks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 13:12:28 UTC
From: Chris Trask
Topic: 5507 Message: 5513

Thank you. This one's not over yet. I'm lookng into the possibiity of using the topology for a transmitting loop for 40M that will require no tuning over the band.

>
>Hi Chris,
>
>Very interesting. I'd just like to say I enjoy reading your papers and want to thank you for taking the time to share them with the group!
>
>John, AB4MS
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5514. Re: [loopantennas] Coupler based loop antenna with remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 21:13:50 UTC
From: Jim Dunstan
Topic: 5510 Message: 5514

At 11:05 PM 8/17/2008 -0700, you wrote:

>Hello Loop Group,
>
>Please see another one of my loop
>doodles at:
><http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=6>http://ph.groups.yaho
o.com/group/loopantennas/photos/view/199f?b=6
>
>The challenge here would be to isolate any part of the
>SGC 2035, 500 watt, coupler from ground to get a
>balanced loop.
>
>The advantage of using a coupler is that it can be
>tuned remotely from an amateur transceiver.
>The coupler is water proof. You can mount it outside
>at the antenna feed point, where an antenna tuner should
>be.
>
>Cheers.
>
>Tom
>KE6YNH, 73
>San Diego, CA

Hi Tom,

A couple of observations re: doodle #6. Yes, placing the coupler at the loop feed-point is an ideal way to feed the loop all bands using 50 ohm coax. I assume you refer to the SGC-235 ... their 500W auto coupler. I agree with your statement of isolating the coupler from ground. More accurately, you are attempting to 'block off' or 'choke' RF from travelling on the outside of the shield of the coax. to ground. This can be accomplished by using an isolation transformer as you show in your illustration. This technique is a bit complicated (mechanically) as it will sit between the coax terminal on the coupler and the end of the coax. I also observe you are using an impedance transformation which is not necessary; the input impedance of the coupler is designed for 50 ohms .... the impedance of the coax feed line ... therefore if you are designing an isolation transformer it must be 1:1. The most convenient way to achieve this goal would be to provide an RF choke at this point. Simply place ferrite beads on the coax at the point it meets the coupler .... there are commercial versions available ... or simply coil 20 ft or so of the coax where it meets the coupler.

I notice that SGC does not specify the output impedance range of their 500 watt model. The reason I suspect is that the range is limited by virtue of the power. What I mean is that any coupler they manufacture may have the capability of matching a very broad range as long as the power being fed is QRP or at least low ... say 20 watts. However as you increase the power the range constricts ... and often severely. It is just that under a particular set of conditions the coupler may work just fine and present a reasonable SWR. However as you increase the power, the stress of higher voltages or currents my go beyond the capabilities of some components.

My suggestions: get rid of the complicating transformer, and use a RF choke. Be very cautious as you approach the 500w output level ... take it slow .... I doubt very much that the coupler will safely handle 500 watts on all frequencies on all bands.

Jim, VE3CI

[Non-text portions of this message have been removed]

5515. Re: [loopantennas] Coupler based loop antenna with remote tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-19 02:56:48 UTC
From: Tom
Topic: 5515 Message: 5515

Hi Jim,

Thanks for your observations.

Tom
KE6YNH

73

----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Monday, August 18, 2008 2:13 PM
Subject: Re: [loopantennas] Coupler based loop antenna with remote tuning

At 11:05 PM 8/17/2008 -0700, you wrote:

>Hello Loop Group,
>
>Please see another one of my loop
>doodles at:
><http://ph.groups.yahoo.com/group/loopantennas/photos/view/199f?b=6>http://ph.groups.yaho
o.com/group/loopantennas/photos/view/199f?b=6
>
>The challenge here would be to isolate any part of the
>SGC 2035, 500 watt, coupler from ground to get a
>balanced loop.
>
>The advantage of using a coupler is that it can be
>tuned remotely from an amateur transceiver.
>The coupler is water proof. You can mount it outside
>at the antenna feed point, where an antenna tuner should
>be.
>
>Cheers.
>
>Tom
>KE6YNH, 73
>San Diego, CA

Hi Tom,

A couple of observations re: doodle #6. Yes, placing the coupler at the
loop feed-point is an ideal way to feed the loop all bands using 50 ohm
coax. I assume you refer to the SGC-235 ... their 500W auto coupler. I
agree with your statement of isolating the coupler from ground. More
accurately, you are attempting to 'block off' or 'choke' RF from travelling

on the outside of the shield of the coax. to ground. This can be accomplished by using an isolation transformer as you show in your illustration. This technique is a bit complicated (mechanically) as it will sit between the coax terminal on the coupler and the end of the coax. I also observe you are using an impedance transformation which is not necessary; the input impedance of the coupler is designed for 50 ohms .... the impedance of the coax feed line ... therefore if you are designing an isolation transformer it must be 1:1. The most convenient way to achieve this goal would be to provide an RF choke at this point. Simply place ferrite beads on the coax at the point it meets the coupler .... there are commercial versions available ... or simply coil 20 ft or so of the coax where it meets the coupler.

I notice that SGC does not specify the output impedance range of their 500 watt model. The reason I suspect is that the range is limited by virtue of the power. What I mean is that any coupler they manufacture may have the capability of matching a very broad range as long as the power being fed is QRP or at least low ... say 20 watts. However as you increase the power the range constricts ... and often severely. It is just that under a particular set of conditions the coupler may work just fine and present a reasonable SWR. However as you increase the power, the stress of higher voltages or currents my go beyond the capabilities of some components.

My suggestions: get rid of the complicating transformer, and use a RF choke. Be very cautious as you approach the 500w output level ... take it slow .... I doubt very much that the coupler will safely handle 500 watts on all frequencies on all bands.

Jim, VE3CI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5516. Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-18 22:02:59 UTC
From: Matt B.
Topic: 5516 Message: 5516

I want to build a ferrite rod antenna similar to CCrane's Twin Coil Ferrite. I want it for my home stereo and do not want to have a wire loop antenna sitting on my small end table.

For $3 I just bought an old Sony transistor portable AM only radio: TR 84 "Super Sensitivity" circa. 1960 . It has a 6" rod with a 3 Gang variable cap. It is a Super HET radio.

I would like to know if I can remove the whole antenna and tuner and any amplifier/mixer/filtering system it has.
I would put the rod into a plastic tube or box and put the electronics into another box with a tuning knob on it.

You can separate the LF Amp and the Receiver by removing a steel link between two screws. I don't understand what this means but it sounds related to what I want to do.
There are 3 screws in a row labeled; GROUND, IN, OUT.
The link links together the IN and OUT screws. When you remove it, you cannot turn the radio ON and there is no volume or sound at all.

Please help if you can. I cannot afford a commercial form of this antenna. I do have good experience with working with electronic parts and wiring so I can do it myself with your advice on how to separate the circuits I need.

Matt B.
Ontario, Canada

5517. Re: [loopantennas] Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-19 04:48:04 UTC
From: John Popelish
Topic: 5516 Message: 5517

Matt B. wrote:
> I want to build a ferrite rod antenna similar to CCrane's Twin Coil
> Ferrite. I want it for my home stereo and do not want to have a wire
> loop antenna sitting on my small end table.
(snip)

What about hiding a loop around the back of a picture frame
or around the back of the end table or around the back of
the couch? Any of those will interact with a lot more wave
energy than a ferrite rod will. Just sayin'.

--
Regards,

John Popelish

5518. Re: [loopantennas] Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-19 13:55:19 UTC
From: Chris Trask
Topic: 5516 Message: 5518

>
>Matt B. wrote:
>> I want to build a ferrite rod antenna similar to CCrane's Twin Coil
>> Ferrite. I want it for my home stereo and do not want to have a wire
>> loop antenna sitting on my small end table.
>(snip)
>
>What about hiding a loop around the back of a picture frame
>or around the back of the end table or around the back of
>the couch? Any of those will interact with a lot more wave
>energy than a ferrite rod will. Just sayin'.
>

Ooooh! I never thought of doing that. That would be an interesting way of hiding a loop indoors. Now, if I just had one of those large Studebaker emblems I could have the best of both worlds. :{)

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5519. Re: antenna rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-19 17:31:12 UTC
From: Aimo Unto Olavi RUOHO
Topic: 5434 Message: 5519

-Thank you very much in deed for your reminding me of Conrad company.
I purchased the rotator through them and was surprised of its
effectiveness at work!
It was a lot cheaper also than other makes.
Conrad is serving its customers perfectly, and I am quite willing to
suggest it to anyone in need of anything fast and without pain.
Really good service!
Thanks and my best regards to you, Cor!
Aimo

-- In loopantennas@yahoogroups.com, "C. Beijersbergen"
<c.beijersbergen@...> wrote:
>
> hello Aimo,
>
> Conrad in Germany has a rotator in their program.
> They can be found at www.conrad.de but they have websites for most
european countries. The english one is under construction at the
moment. You can contact them at international.sales@...
>
> succes!
>
> Cor Beijersbergen
>
>
>
>
> Home TV, Sat, DVD SAT-Empfangstechnik SAT-Installation
Antennen Rotoren AUTOMATIK ANTENNENROTOR
> Artikel-Nr.: 284971 - 62
> 49,95 EUR
>
>
> Hello, loopers!
>
> Would you English members inform me about dealers in Europe, who
have antenna rotators in their program, please?
>
> 73 de Aimo
>
>
> [Non-text portions of this message have been removed]
>

5520. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-19 19:55:43 UTC
From: Matt B.
Topic: 5516 Message: 5520

There is pretty much zero space for a wire loop and if I hid it somewhere I would have no way to turn it for reception.

If I could rig up a loop in the attic on a rotor...but then how would I tune the tuning cap?...

Matt

5521. Re: [loopantennas] Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-19 22:16:21 UTC
From: John Popelish
Topic: 5516 Message: 5521

Matt B. wrote:
> There is pretty much zero space for a wire loop and if I hid it
> somewhere I would have no way to turn it for reception.

True, you might have to make two, oriented at about 90
degrees with respect to each other with a switch to pick the
one best oriented.

> If I could rig up a loop in the attic on a rotor...but then how would I
> tune the tuning cap?...

You can put the tuning cap at the radio with a reduction in
the Q, since the wire losses between the capacitor and loop
are included in the resonant losses. Of you use one of
Chris Trask's neat DC tuned remote varactor variable
capacitors to let you put the capacitors at a remote
location and tune then with a pot across a DC supply to
produce a variable DC tuning voltage.

--
Regards,

John Popelish

5522. Loop Newbie

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-20 00:18:42 UTC
From: roodyjs
Topic: 5522 Message: 5522

I have just recently become interested in the possibilities of constructing a loop antenna at my QTH. I have a small yard that is about 20 ft by 20 ft. My thoughts are to use the 6' high fence to support a full wave 20meter loop (horizontal). I can also try a roof-mounted version. Roof is about 25 ft high.

I am currently using a Par Electronics SWL sloper for receiving and a Tarheel mobile screwdriver, ground mounted with 50 radials for transmitting. Max power is under 100 watts.

My questions have to do with what I can expect to see in receive or transmit improvements with a loop.

As I am pretty new to understanding the qualities and design of such an antenna, I hope that some of you more experienced folks can offer some helpful insight and advice.

Regards,

Jim KC3SN

5523. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-20 01:57:52 UTC
From: tenorman1952
Topic: 5516 Message: 5523

--- In loopantennas@yahoogroups.com, "Matt B." <mattbeme3@...> wrote:
>
> I want to build a ferrite rod antenna similar to CCrane's Twin Coil
> Ferrite. I want it for my home stereo and do not want to have a wire
> loop antenna sitting on my small end table.
(trimmed)
> Matt B.
> Ontario, Canada

Take a look at the offerings of this site:

http://www.stormwise.com/

Particularly the ferrite and bar antennas. There is an AM bar for just
$5 + s&h.

Paul C.
tenorman1952

5524. home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-23 16:14:45 UTC
From: DAVID
Topic: 5524 Message: 5524

i am a tv dxer here in scotland uk and the season is just about finished so i built a small mw loop for mw dx over the winter. my shack is in the roof space of my house so i said what the hell i will build a BIG loop to see how it performs. it is a 6 turn loop which is 5 feet 9 inches high and 7 feet long and i use a roughly 500 pf tuning capacitor and in the middle of the loop i use a single turn loop same size as the 6 turns to feed my aor 7030 and it seems to tune and receive well through out the mw band. at 05.30 this morning local i did receive VOCM on 590 here in scotland and ZIZ st kitts as well before i had to go downstairs. my question is to the group is my loop too big and would i be better with a smaller loop and more turns or will the big loop do its job. i havent really had the time to try it properly but as i said first impressions seem to be good. will be very interested in your comments many thanks david .... scotland uk
my reception of VOCM this morning
http://www.youtube.com/watch?v=TkJlaX-BMig

also a rough diagram of my loop is in the photo section

5525. Update from UKQRM

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-22 07:37:41 UTC
From: Mike
Topic: 5525 Message: 5525

Dear HF group members

UKQRM now has 371 members and 1601 shortwave radio users have signed the e-petition calling for a end to power line Ethernet here in the UK
http://petitions.number10.gov.uk/SaveShortwave/

A number of our members suffering this appalling interference have had the matter resolved by Ofcom and BT (myself included)
When a complaint is made BT has behaved well and removed the adaptors from the offending property!

However the fight is not over yet! Only last night another set came on line and I now have the interference again only this time from a property 500 or more yards from me!
Also its quite clear that the signal from these horrid devices is propagating in the evenings as this morning its much weaker!

I also found it was leaking into the mains supply and telephone lines locally!

You can make a difference and safeguard your hobby, pastime or professional use of HF by signing the petition (UK residents, those with UK voting rights only)
And or joining UKQRM to lend support.

http://tech.groups.yahoo.com/group/UKQRM/

We need those who are passionate about radio, with legal understanding, technical abilities those that just care.

If a stand is not made now, then shortwave will become swampt with these devices.
Already many suppliers are listing them cheaply.

Thanks

Mike UKQRM

http://www.mikeandsniffy.co.uk/UKQRM/

The end of world broadcasting?

Cheers Mike

UKQRM

5526. for sale Wellbrook ala 1530+

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-24 20:35:21 UTC
From: spudie14
Topic: 5526 Message: 5526

Just a quick add for any one that might be intrested in buying my wellbrook loop just dont have time for shortwave anymore if your intrested drop me an email thanks Edd

5527. home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-25 16:08:19 UTC
From: DAVID
Topic: 5524 Message: 5527

here is the mw loop at the testing stage
http://www.youtube.com/watch?v=1rIN4SDDP3g will keep you posted with
results ... david

5528. Re: [loopantennas] home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-25 16:53:36 UTC
From: John Popelish
Topic: 5524 Message: 5528

DAVID wrote:
> here is the mw loop at the testing stage
> http://www.youtube.com/watch?v=1rIN4SDDP3g will keep you posted with
> results ... david

Lovely. Some questions:

Since you are using an isolation balun to couple to the
transmission line, why do you need an additional loop to act
as pickup? Why not just tie the balun across 1 turn of the
tuned coil?

How did you arrive at a 9:1 ratio for the balun?

What is the balun core material?

--
Regards,

John Popelish

5529. Re: [loopantennas] home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-25 16:56:09 UTC
From: david/lorraine
Topic: 5524 Message: 5529

hi i am just taking ideas i have found on the web about mw loops and putting them all together its just a try it and see if it works fine if it dont i can try something else. the way it is at the moment it seems to really null out the north and south and great to the west and east and that is what i want. thats why i posted this ie should i use a 9-1 balun or should i try something else ... all your comments will be a great help ... many many thanks david
----- Original Message -----
From: John Popelish
To: loopantennas@yahoogroups.com
Sent: Monday, August 25, 2008 5:53 PM
Subject: Re: [loopantennas] home made mw loop

DAVID wrote:
> here is the mw loop at the testing stage
> http://www.youtube.com/watch?v=1rIN4SDDP3g will keep you posted with
> results ... david

Lovely. Some questions:

Since you are using an isolation balun to couple to the
transmission line, why do you need an additional loop to act
as pickup? Why not just tie the balun across 1 turn of the
tuned coil?

How did you arrive at a 9:1 ratio for the balun?

What is the balun core material?

--
Regards,

John Popelish

[Non-text portions of this message have been removed]

5530. Re: [loopantennas] home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-25 21:39:57 UTC
From: John Popelish
Topic: 5524 Message: 5530

david/lorraine wrote:
> hi i am just taking ideas i have found on the web
> about mw loops and putting them all together
> its just a try it and see if it works fine
> if it dont i can try something else.
> the way it is at the moment it seems to really
> null out the north and south and great to the west
> and east and that is what i want.
> thats why i posted this ie should i use a 9-1 balun
> or should i try something else ...
> all your comments will be a great help ...
> many many thanks david

If you are up for experimental variations, you might see a better selectivity (Q) signal strength combination if you eliminate the extra coupling turn (and the stray capacitance it adds to your tuning), and just pass one end of the main coil through the core as the coupling winding.

If the secondary also has 1 turn, this puts 50 ohms in series with the tuned loop. If the 50 ohm line is coupled with 2 turns, it puts 50/4=12.5 ohms in series with the loop, raising its Q up less than 4 times (which pumps up the signal) but lowering the output signal by half. The ideal balance between increasing the signal with a higher Q and lowering it with output turns depends on the signal bandwidth you require and how high a Q the loop has without the coupling transformer loading it. I suspect the optimum load is that which lowers the loop Q by about half. But only a few turns on the secondary should be close.

Just a thought.

--
Regards,

John Popelish

5532. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-26 02:14:21 UTC
From: Matt B.
Topic: 5516 Message: 5532

Thanks for the replies gentlemen.

I have received a schematic for a pre-amp for a ferrite system and I will give it a try.

I would really like to get a hold of one of Stormwise's 10" ferrite rods or even a 8" rod from an old radio like a Grundig.
It seems that Stormwise cannot ship the ferrite rods to Canada as the website seems to imply this.

Matt Bourdeau
Canada

5533. Re: [loopantennas] Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-26 03:53:33 UTC
From: John Popelish
Topic: 5516 Message: 5533

Matt B. wrote:
> Thanks for the replies gentlemen.
>
> I have received a schematic for a pre-amp for a ferrite system and I
> will give it a try.
>
> I would really like to get a hold of one of Stormwise's 10" ferrite
> rods or even a 8" rod from an old radio like a Grundig.
> It seems that Stormwise cannot ship the ferrite rods to Canada as the
> website seems to imply this.

You can approximate large rods by stacking long form ferrite
beads. For below 2MHz, I like the Steward LFB beads,
available in Canada from Digikey.

An example is part number LFB159079-000 at just over USD 1,
each. 16mm diameter, 28.6mm long with 8mm hole. These
stack up nicely in thin walled PVC pipe.
http://www.steward.com/web_parts_resize.asp?line=EMC+%2F+EMI+Board+Level+and+Cable+Core+Products&family=Ferrite+Cores+for+Cables+%2D++Wiring+Harnesses+%2D+Connectors&progroup=1%2E+Round+and+Cylindrical+Cores&product=Low+Frequency+Ferrite+Cores
--
Regards,

John Popelish

5534. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-26 17:14:52 UTC
From: Matt B.
Topic: 5516 Message: 5534

Thanks John, that looks like a good idea. I'll plug in the numbers and see about wiring up a rod made from those beads.

Matt

5535. Re: [loopantennas] Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-26 17:32:24 UTC
From: John Popelish
Topic: 5516 Message: 5535

Matt B. wrote:
> Thanks John, that looks like a good idea. I'll plug in the numbers and
> see about wiring up a rod made from those beads.

I forgot to mention that when you make a rod in segments,
this way, you have an additional degree of freedom you don't
have with a solid rod. You can trade off loss against
permeability by adding non conductive shims (i.e. layers of
paper) between the beads. I few years ago, I did some
experiments that explored this variable and found that some
specific shim thickness per bead gave the highest overall Q
at any given frequency. So the rod can be tuned to perform
best at your choice of frequency. The distribution of these
shims along the rod also had a distinct effect, with gaps
near the center having a larger effect than those near the
ends. Just something else to play with.

--
Regards,

John Popelish

5536. Re: [loopantennas] Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-26 17:34:29 UTC
From: Chris Trask
Topic: 5516 Message: 5536

> Matt B. wrote:
> > Thanks John, that looks like a good idea. I'll plug in the numbers and
> > see about wiring up a rod made from those beads.
>
> I forgot to mention that when you make a rod in segments,
> this way, you have an additional degree of freedom you don't
> have with a solid rod. You can trade off loss against
> permeability by adding non conductive shims (i.e. layers of
> paper) between the beads. I few years ago, I did some
> experiments that explored this variable and found that some
> specific shim thickness per bead gave the highest overall Q
> at any given frequency. So the rod can be tuned to perform
> best at your choice of frequency. The distribution of these
> shims along the rod also had a distinct effect, with gaps
> near the center having a larger effect than those near the
> ends. Just something else to play with.
>

I remember when John did these experiments, and it's a wonderful method
for reducing the eddy current losses in the ferrite material.

I think that my paper on a remotely tuned ferrite rod antenna is still
in the group files section. If not, you can find it on my webpage at:

http://tinyurl.com/ys293g

If you remove the tuning components, you'll end up with a good quality
wideband active ferrite rod antenna.

I'm spending my time these days on yet another remotely tuned loop
antenna, and this one is much simplier and far quieter than the one I
published in QEX years ago. I'll have that done for the loop antenna groupd
later this week.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \

'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5537. big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-26 21:27:37 UTC
From: DAVID
Topic: 5537 Message: 5537

i have been busy again i have made another big loop this time for
north south and finally run out of room in the attic here is a short demo
http://www.youtube.com/watch?v=GVpKyQ_qtxg
its the same dimensions as the east west one. thanks for your time ...
david

5538. Re: [loopantennas] for sale Wellbrook ala 1530+

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-26 14:30:44 UTC
From: lbadman@twcny.rr.com
Topic: 5526 Message: 5538

Ed- still for sale- and is this state-side?

Lee

---- spudie14 <riches1234@...> wrote:
> Just a quick add for any one that might be intrested in buying my
> wellbrook loop just dont have time for shortwave anymore if your
> intrested drop me an email thanks Edd
>

5539. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 14:36:36 UTC
From: tenorman1952
Topic: 5516 Message: 5539

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...>
wrote:
>
> > Matt B. wrote:

(trimmed)

> I think that my paper on a remotely tuned ferrite rod antenna
is still
> in the group files section. If not, you can find it on my webpage
at:
>
> http://tinyurl.com/ys293g
>
> If you remove the tuning components, you'll end up with a good
quality
> wideband active ferrite rod antenna.
>
> I'm spending my time these days on yet another remotely tuned
loop
> antenna, and this one is much simplier and far quieter than the one
I
> published in QEX years ago. I'll have that done for the loop
antenna groupd
> later this week.
>
>
> Chris

Chris, you've obviously spent a lot of time working with ferrite core
loops. How does a ferrite core loop compare in performance to an air
core loop?

I know ferrite works well for VLF and MW, but how about SW?

Paul C.
tenorman1952

5540. Re: [loopantennas] Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 14:56:58 UTC
From: Chris Trask
Topic: 5516 Message: 5540

Paul,

>
>Chris, you've obviously spent a lot of time working with ferrite core
>loops. How does a ferrite core loop compare in performance to an air
>core loop?
>
>I know ferrite works well for VLF and MW, but how about SW?
>

The performance of the active ferrite rod antenna that I made for that paper is comparable to the performance of the active 1m diameter air-cored loop that I have been using for many years, and both antennas tune over about the same range. I haven't made any qualitative measurements between the two, and I suppose that I should do so as it is an aspect of some interest.

In the meantime, I'm about to finish up some work on a new form of remotely-tuned air-cored loop that does not have an amplifier. Instead, it has an impedance matching network that couples the loop antenna to 50-ohm coaxial cable through a series of wideband transformers. It uses a balanced form of tuning that seems to do away with the usual harmonic interference from nearby AM BCB stations. The S/N performance is much better than that of either of the active loops. When I get this work done along I should perhaps set up a small antenna range and compare all three in terms of signal gain and S/N ratio. However, I would also like to build a remotely-tuned shielded loop and add that to the comparison as that form of receiving antenna is also of interest.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5541. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 15:41:52 UTC
From: al_ka5jgv
Topic: 5516 Message: 5541

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
However, I would also like to build a remotely-tuned shielded loop and add that to the comparison as that form of receiving antenna is also of interest.
>
> Chris

I am looking forward to the tuned and shielded loop design.

The amount of good information you provide to this group is surprising and very much appreciated. Thank you.

Al KA5JGV
San Antonio, TX

5542. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 16:57:59 UTC
From: tenorman1952
Topic: 5516 Message: 5542

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...>
wrote:
>
> Paul,
>
> >
> >Chris, you've obviously spent a lot of time working with ferrite
core
> >loops. How does a ferrite core loop compare in performance to an
air
> >core loop?
> >
> >I know ferrite works well for VLF and MW, but how about SW?
> >
>
> The performance of the active ferrite rod antenna that I made
for that paper is comparable to the performance of the active 1m
diameter air-cored loop that I have been using for many years, and
both antennas tune over about the same range. I haven't made any
qualitative measurements between the two, and I suppose that I should
do so as it is an aspect of some interest.
>
> In the meantime, I'm about to finish up some work on a new
form of remotely-tuned air-cored loop that does not have an
amplifier. Instead, it has an impedance matching network that
couples the loop antenna to 50-ohm coaxial cable through a series of
wideband transformers. It uses a balanced form of tuning that seems
to do away with the usual harmonic interference from nearby AM BCB
stations. The S/N performance is much better than that of either of
the active loops. When I get this work done along I should perhaps
set up a small antenna range and compare all three in terms of signal
gain and S/N ratio. However, I would also like to build a remotely-
tuned shielded loop and add that to the comparison as that form of
receiving antenna is also of interest.
>
>
>
>
>
> Chris

Thanks, Chris. I need a small, quick to set up and take down antenna
for AM/MW and SW up to 10m. Last night I was experimenting with a 1m
loop tuned with a 385 pf tuning cap, with a coax pickup loop going to
an Icom R75. I was getting good signals from 60 m - 20 m, and it was

easy to unplug the loop, plug in my outdoor 80 dipole, back and forth.

Though the S reading was a tad lower for the loop, it picked up everything the dipole picked up, and the low sig to noise ratio made it all equally listenable.

I think some of my questions are answered on ferrite vs loop in the BBC Whitepaper I just uploaded to the Files section.

Paul C.
tenorman1952

5543. Re: for sale Wellbrook ala 1530+

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-26 23:59:25 UTC
From: Lee Moore (Gimbert)
Topic: 5526 Message: 5543

Thanks Edd.

As i am in Birmingham UK it would be easier to collect a new one from
the makers in Wales.

Cheers.

Lee ... G6ZSG.

--- In loopantennas@yahoogroups.com, <lbadman@...> wrote:
>
> Ed- still for sale- and is this state-side?
>
> Lee
>
>
> ---- spudie14 <riches1234@...> wrote:
> > Just a quick add for any one that might be intrested in buying my
> > wellbrook loop just dont have time for shortwave anymore if your
> > intrested drop me an email thanks Edd
> >
>

5544. "Accidental" loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 14:26:44 UTC
From: Misha
Topic: 5544 Message: 5544

Hello everybody!
My home environment is very noisy, this is why I joined this group, to read about lower noise antennas.

I have a short (3ft) cable plugged into my FT-817, terminated with alligator clips so I can hook it up to different antennas quickly when experimenting. I noticed that when I clip the center conductor wire to the ground lug on the back of the transceiver, I can still hear enough signal without any of the noise! The cable shield is not connected to anything on the far end and is providing the electrical shielding (not perfect), while the center conductor forms a magnetic loop.
This "antenna" definitely works better than a straight wire, and S/N is great for broadcast signals and stronger ham signals. It works from 530kHz all the way to UHF (where it isn't a magnetic loop anymore). Of course, I can't transmit, because the efficiency and SWR would be horrible.

5545. Varactor-Tuned Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 19:30:52 UTC
From: Chris Trask
Topic: 5545 Message: 5545

I finally completed the work that I have been doing on a simple varactor-tuned loop antenna with interchangeable antenna elements. The documentation is available at:

http://tinyurl.com/6lht4y

A little more work needs to be done here as the inductance of the transformers is limiting the high end of the tuning range. However, the results obtained at this point show that the sensitivity is far better than I had anticipated, and together with the very good S/N performance this design rivals the performance my earlier active loop antenna that was published in QEX back in 2003.

Corrections and constructive comments are always appreciated.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5546. Re: big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 20:37:27 UTC
From: aircheckIover
Topic: 5537 Message: 5546

David; Thanks for the videos. I can hear you switching N-S vs E-W but am wondering what kind of gain you are getting w/ that large of a loop? What is your location (urban/suburban/rural)? What kind of receiver? I made a 3.5 ft (effective) diameter BCB loop and compared to a 2 ft BCB loop I hear little benefit in the larger loop. This due I suppose to high RF and QRM around here.

Tnx,

Mark

==========

- In loopantennas@yahoogroups.com, "DAVID" <dhamilton1@...> wrote:
>
> i have been busy again i have made another big loop this time for
> north south and finally run out of room in the attic here is a short demo
> http://www.youtube.com/watch?v=GVpKyQ_qtxg
> its the same dimensions as the east west one. thanks for your time ...
> david
>

5547. Re: [loopantennas] Re: big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 21:19:25 UTC
From: david/lorraine
Topic: 5537 Message: 5547

i am in a small village called sorn in the south west coast of scotland and using the aor 7030 receiver. here is another example of the two large loops this one gives a better description of the two stations being received and countrys http://www.youtube.com/watch?v=qLp0zBpQ4xM i have been wondering myself what gain i will have on such large loops. thanks for your time david

----- Original Message -----
From: aircheckIover
To: loopantennas@yahoogroups.com
Sent: Wednesday, August 27, 2008 9:37 PM
Subject: [loopantennas] Re: big mw loop again

David; Thanks for the videos. I can hear you switching N-S vs E-W but
am wondering what kind of gain you are getting w/ that large of a
loop? What is your location (urban/suburban/rural)? What kind of
receiver? I made a 3.5 ft (effective) diameter BCB loop and compared
to a 2 ft BCB loop I hear little benefit in the larger loop. This due
I suppose to high RF and QRM around here.

Tnx,

Mark

==========

- In loopantennas@yahoogroups.com, "DAVID" <dhamilton1@...> wrote:
>
> i have been busy again i have made another big loop this time for
> north south and finally run out of room in the attic here is a short
demo
> http://www.youtube.com/watch?v=GVpKyQ_qtxg
> its the same dimensions as the east west one. thanks for your time ...
> david
>

[Non-text portions of this message have been removed]

5548. Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 21:35:41 UTC
From: aimo ruoho
Topic: 5548 Message: 5548

Hello.folks!
To my great surprise, I happened to see the
http://www.makela.info/lyhytaaltokuuntelu/index.p...
This man, Raimo Makela, who has written a Guide for DX-listeners, called Antenneilla Aalloille (With Antennas to the Waves), shows, how to make a simple closed-triangle-shaped directive antenna, that attenuates signals from one direction, while amplifies the signals coming from the opposite direction.
This Mini-Directive-Loop-Antenna, which was made much according to the K9AY, is only 1,5 meter high and 1,0 meter broad. A great gift for them, who have very little room inside/outside!
I made my own prototype, to see, if it really works as promised, and I was really very positively surprised! It is really very directive to one direction, while attenuating signals from the opposite direction!
This is, what I have been thinking of for a long time! A dream come true, as you Anglo-Saxon-Americans so nicely say!
What I made, is staying in my listening-room as a raw model only, so far, but I have plans to make a little larger one to use with my new-bought rotator, to see, if I can finally receive some DX in Spain.
I am going to connect it with some of my many Antenna Amplifiers and Preselectors etc. one after another, to see, if it really can be the winner of my other many receiving media...

Any advice and positive ideas will be received with gratitude.

[Non-text portions of this message have been removed]

5549. Re: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 22:06:35 UTC
From: aimo ruoho
Topic: 5548 Message: 5549

Sorry, folks!
I tried myself to test the email address, that I gave you...
You guessed right, it did not work!
If you are still interested, please try the following: http://www.raimo@...
It is unfortunately made in my language, Finnish, but the smartest of you will undoubtedly find, what you want, by pressing with your mouse the text: Antennit.
With my apology and Best Regards,
Ami

----- Original Message ----
From: aimo ruoho <aimounto@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, August 27, 2008 11:35:41 PM
Subject: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Hello.folks!
To my great surprise, I happened to see the http://www.makela. info/lyhytaaltok uuntelu/index. p...
This man, Raimo Makela, who has written a Guide for DX-listeners, called Antenneilla Aalloille (With Antennas to the Waves), shows, how to make a simple closed-triangle-shaped directive antenna, that attenuates signals from one direction, while amplifies the signals coming from the opposite direction.
This Mini-Directive- Loop-Antenna, which was made much according to the K9AY, is only 1,5 meter high and 1,0 meter broad. A great gift for them, who have very little room inside/outside!
I made my own prototype, to see, if it really works as promised, and I was really very positively surprised! It is really very directive to one direction, while attenuating signals from the opposite direction!
This is, what I have been thinking of for a long time! A dream come true, as you Anglo-Saxon- Americans so nicely say!
What I made, is staying in my listening-room as a raw model only, so far, but I have plans to make a little larger one to use with my new-bought rotator, to see, if I can finally receive some DX in Spain.
I am going to connect it with some of my many Antenna Amplifiers and Preselectors etc. one after another, to see, if it really can be the winner of my other many receiving media...

Any advice and positive ideas will be received with gratitude.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5550. Re: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 22:11:38 UTC
From: aimo ruoho
Topic: 5548 Message: 5550

The email address should be: raimo@...
Then click the blue word on the left: "Lyhytaaltokuuntelu", then, if needed: "Antennit"
amigo

----- Original Message ----
From: aimo ruoho <aimounto@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, August 28, 2008 12:06:35 AM
Subject: Re: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Sorry, folks!
I tried myself to test the email address, that I gave you...
You guessed right, it did not work!
If you are still interested, please try the following: http://www.raimo@ makela.info
It is unfortunately made in my language, Finnish, but the smartest of you will undoubtedly find, what you want, by pressing with your mouse the text: Antennit.
With my apology and Best Regards,
Ami

----- Original Message ----
From: aimo ruoho <aimounto@yahoo. com>
To: loopantennas@ yahoogroups. com
Sent: Wednesday, August 27, 2008 11:35:41 PM
Subject: [loopantennas] Mini-Directive- One-Point of the Compass-Loop

Hello.folks!
To my great surprise, I happened to see the http://www.makela. info/lyhytaaltok uuntelu/index. p...
This man, Raimo Makela, who has written a Guide for DX-listeners, called Antenneilla Aalloille (With Antennas to the Waves), shows, how to make a simple closed-triangle-shaped directive antenna, that attenuates signals from one direction, while amplifies the signals coming from the opposite direction.
This Mini-Directive- Loop-Antenna, which was made much according to the K9AY, is only 1,5 meter high and 1,0 meter broad. A great gift for them, who have very little room inside/outside!
I made my own prototype, to see, if it really works as promised, and I was really very positively surprised! It is really very directive to one direction, while attenuating signals from the opposite direction!
This is, what I have been thinking of for a long time! A dream come true, as you Anglo-Saxon- Americans so nicely say!
What I made, is staying in my listening-room as a raw model only, so far, but I have plans to make a little larger one to use with my new-bought rotator, to see, if I can finally receive some DX in Spain.
I am going to connect it with some of my many Antenna Amplifiers and Preselectors etc. one after another, to see, if it really can be the winner of my other many receiving media...

Any advice and positive ideas will be received with gratitude.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5551. Re: [loopantennas] Re: big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 22:21:28 UTC
From: gandalfg8@aol.com
Topic: 5537 Message: 5551

In a message dated 27/08/2008 22:20:13 GMT Daylight Time,
dhamilton1@... writes:

i am in a small village called sorn in the south west coast of scotland and
using the aor 7030 receiver. here is another example of the two large loops
this one gives a better description of the two stations being received and
countrys _http://www.youtube.http://wwwhttp://www.yo_
(http://www.youtube.com/watch?v=qLp0zBpQ4xM) i have been wondering myself what gain i will
have on such
large loops. thanks for your time david

Hi David

Thanks for sharing your recordings, that's very encouraging.

I'm in Toward on the Cowal Peninsula, a bit to the north west of you, and
since moving north from near London have struggled to get anything like the MW
reception I was used to.

What time of day was that recording made?

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5552. Re: [loopantennas] Re: big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 22:26:49 UTC
From: david/lorraine
Topic: 5537 Message: 5552

it was recorded at 21.17 this evening at the moment i am listening out for the nigerian pirate on 917 khz ... thanks david
----- Original Message -----
From: gandalfg8@...
To: loopantennas@yahoogroups.com
Sent: Wednesday, August 27, 2008 11:21 PM
Subject: Re: [loopantennas] Re: big mw loop again

In a message dated 27/08/2008 22:20:13 GMT Daylight Time,
dhamilton1@... writes:

i am in a small village called sorn in the south west coast of scotland and
using the aor 7030 receiver. here is another example of the two large loops
this one gives a better description of the two stations being received and
countrys _http://www.youtube.http://wwwhttp://www.yo_
(http://www.youtube.com/watch?v=qLp0zBpQ4xM) i have been wondering myself what gain i will have on such
large loops. thanks for your time david

Hi David

Thanks for sharing your recordings, that's very encouraging.

I'm in Toward on the Cowal Peninsula, a bit to the north west of you, and
since moving north from near London have struggled to get anything like the MW
reception I was used to.

What time of day was that recording made?

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5553. Re: [loopantennas] Re: big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 22:43:48 UTC
From: gandalfg8@aol.com
Topic: 5537 Message: 5553

In a message dated 27/08/2008 23:27:30 GMT Daylight Time,
dhamilton1@... writes:

it was recorded at 21.17 this evening at the moment i am listening out for
the nigerian pirate on 917 khz ... thanks david

Darn sight better than I'm doing then, guess it's time to put the tuned
ferrite loops back in their box and try something with a bit more capture area:-)

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5554. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 01:00:22 UTC
From: gmcjetpilot@yahoo.com
Topic: 5516 Message: 5554

You can sometimes just put a little AM radio next to a big older radio and use the big radio to boost the signal of the little radio. It might be the big radio is a broken tube radio and the little radio is a digital thing with a smaller loop. There is a youtube video showing this. So I am sure you can take the LOOP and TANK circuit out of a radio and use it boost other radios.

[Non-text portions of this message have been removed]

5555. Slightly off topic MW reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 13:01:49 UTC
From: Doug Kniffen
Topic: 5555 Message: 5555

Does anyone know what causes MW reception strength to vary significantly (10+ S units) and rapidly (~1.5 Hertz)? It sounds just like somebody is rapidly cranking the volume control up and down.

Years ago I heard this on BBC shortwave broadcasts. It was so hard to listen through audio rapidly changing from crystal clear to mostly static that I gave up.

Now it's been happening on MW in the last month. Doesn't matter what radio I use (3), or what antenna I try (big outdoor wire, small untuned loop, or built in ferrite). The problem seems to bounce around the MW band. If you hear it on one station, and change frequency to a clear station, you can often go back to the original station when the problem shows up at the second station. With no more than several minutes clear reception at any frequency, re-tuning really isn't a solution.

The problem seems to be some natural phenomena, but if nobody else has it it must be caused by some sort of local interference. If it is natural; What is the cause, and is there a particular antenna design that will minimize the problem?

Thanks,
Doug Kniffen

5556. Re: [loopantennas] Slightly off topic MW reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 13:40:03 UTC
From: Jim Dunstan
Topic: 5555 Message: 5556

At 08:01 AM 8/28/2008 -0500, you wrote:

>Does anyone know what causes MW reception strength to vary significantly (
>10+ S units) and rapidly (~1.5 Hertz)? It sounds just like somebody is
>rapidly cranking the volume control up and down.
>
>Years ago I heard this on BBC shortwave broadcasts. It was so hard to listen
>through audio rapidly changing from crystal clear to mostly static that I
>gave up.
>
>Now it's been happening on MW in the last month. Doesn't matter what radio
>I use (3), or what antenna I try (big outdoor wire, small untuned loop, or
>built in ferrite). The problem seems to bounce around the MW band. If you
>hear it on one station, and change frequency to a clear station, you can
>often go back to the original station when the problem shows up at the
>second station. With no more than several minutes clear reception at any
>frequency, re-tuning really isn't a solution.
>
>The problem seems to be some natural phenomena, but if nobody else has it it
>must be caused by some sort of local interference. If it is natural; What
>is the cause, and is there a particular antenna design that will minimize
>the problem?
>
>Thanks,
>Doug Kniffen

Hi Doug,

What you describe is the result of evening sky wave propagation. Generally speaking all MW reception during the daylight hours is direct and more or less line of sight (there is some bending). If you do DX listening during the day on MW then your setup has to deal with low signal levels and local noise. These daytime DX stations are in the 100 to 300 mile range. At night it becomes completely different and stations come in from thousands of miles away with S9 signals.

The difference is due to the interaction between the ionosphere and MW signals. During the day the Ionospheric conditions are such that MW signals are not reflected (the cause of propagation over long distances) and the layers change at night such that these conditions will propagate MW signals over long distances (reflections). When listening to a particular station on a particular frequency it is usually steady for a period of time and then fades out .... often to be replaced by a different station at a different location. How rapidly this happens depends on natural phenomena such as magnetic field fluctuations, cosmic ray showers, etc.

As your location moves closer to the north or south pole magnetic fluctuations become more rapid and intense and radio reception may take on a rapid flutter (Arctic flutter). So to answer your direct questions what you experience is a result of the changing characteristics of the ionosphere which in turn is created and modified by the interaction of the cosmic rays from the sun interacting with the earth's magnetic field. It is not local inference and there is not much you can do about it re: antenna design.

Jim

5557. Re: [loopantennas] Slightly off topic MW reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 13:42:05 UTC
From: Jay Heyl
Topic: 5555 Message: 5557

MW signals propagate in two ways. The first is by what is termed ground wave. This is very straightforward -- signal leaves transmitter tower and travels along near the ground until there's not enough left of the wave to be received. (In reality it's not quite that simple, but it's close enough for this discussion.) When the sun is high in the sky, ground wave is the primary method of MW propagation.

The second method is sky wave. The signal travels up into the sky, bounces off one of the layers of the atmosphere, and is reflected back toward earth. Sky wave propagation is not a big factor during most of the day time. At night, however, it becomes a huge factor and is the reason you can fairly easily hear stations many hundreds of miles away.

Ground wave is still in play at night, but doesn't propagate in that way any further than it does during the day. You get local signals mostly via ground wave and distant signals mostly via sky wave. The ability of the ionosphere to reflect MW signals is affected by a number of things, most of them related to solar activity of one kind or another. As the ionosphere changes, propagation of the signals bouncing off that layer change, sometimes profoundly, as you've noticed.

It's not at all uncommon to get a crystal clear signal from a very distant station. It sounds as though it's located right down the block. Then, quite suddenly, it's gone, sometimes replaced by another station that's just as clear as the first was, sometimes by static. It's just the nature of long distance MW listening. A longer, larger antenna can help in some circumstances, but if the ionosphere changes so that a different signal is dominant at your location, there's really nothing you can do about it.

-- Jay

On Thu, Aug 28, 2008 at 9:01 AM, Doug Kniffen <dkniffen@...>wrote:

> Does anyone know what causes MW reception strength to vary significantly (
> 10+ S units) and rapidly (~1.5 Hertz)? It sounds just like somebody is
> rapidly cranking the volume control up and down.
>
> Years ago I heard this on BBC shortwave broadcasts. It was so hard to
> listen
> through audio rapidly changing from crystal clear to mostly static that I
> gave up.
>
> Now it's been happening on MW in the last month. Doesn't matter what radio
> I use (3), or what antenna I try (big outdoor wire, small untuned loop, or
> built in ferrite). The problem seems to bounce around the MW band. If you
> hear it on one station, and change frequency to a clear station, you can

> often go back to the original station when the problem shows up at the
> second station. With no more than several minutes clear reception at any
> frequency, re-tuning really isn't a solution.
>
> The problem seems to be some natural phenomena, but if nobody else has it
> it
> must be caused by some sort of local interference. If it is natural; What
> is the cause, and is there a particular antenna design that will minimize
> the problem?
>

[Non-text portions of this message have been removed]

5558. Re: [loopantennas] Slightly off topic MW reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 13:52:57 UTC
From: Jay Heyl
Topic: 5555 Message: 5558

On Thu, Aug 28, 2008 at 9:01 AM, Doug Kniffen <dkniffen@...>wrote:

> Does anyone know what causes MW reception strength to vary significantly (
> 10+ S units) and rapidly (~1.5 Hertz)? It sounds just like somebody is
> rapidly cranking the volume control up and down.

I meant to add this in my last reply.

You didn't mention what radio(s) you're using. If you have Sync AM available, you might try using that. It should help if carrier fading is causing the pulsing.

If your radio has different settings for AGC, you can try playing with that. Assuming the radio allows it, sometimes turning AGC off completely and controlling the RF gain by hand can smooth things out.

Using LSB/USB can also sometimes help with brief fading.

When the station fades away for long periods, that's probably due to the ionosphere and there's nothing you can do about it.

-- Jay

[Non-text portions of this message have been removed]

5559. Re: big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 15:13:47 UTC
From: aircheckIover
Topic: 5537 Message: 5559

David; Wondering what BCB is like on a typical night in Scotland. Do you consistently have skip from USA & other parts of the world? Or are some nights a mush of undefinable signals? If I want to hear stations to the west of me, killing stations to the east - I am more or less in the middle of the continent in Wisconsin - I have to listen close to dawn. Fun coincidence: We have a local 50KW here in Milwaukee. I nulled it using the internal ferrite on the KA2100 portable radio two nights ago when skip was good & noise was down and got a positive ID on WBBR. Next day I see your WBBR video on YouTube. Using radio-locator.com I see they are 50KW beaming east toward you. Man, they get out. Question: Watt for watt & on average, do you notice the directional USA AMs beaming east are stronger than the omni's?

Now that I have better gear and winter approaches, I am looking forward to real DX on BCB. Until now I've only heard hets on BCB. Now I'm going for the "channels between the channels".

Fun stuff.

-Mark

==========

> i am in a small village called sorn in the south west coast of scotland and using the aor 7030 receiver. here is another example of the two large loops this one gives a better description of the two stations being received and countrys http://www.youtube.com/watch?v=qLp0zBpQ4xM i have been wondering myself what gain i will have on such large loops. thanks for your time david
> ----- Original Message -----
> From: aircheckIover
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, August 27, 2008 9:37 PM
> Subject: [loopantennas] Re: big mw loop again
>
>
> David; Thanks for the videos. I can hear you switching N-S vs E-W but
> am wondering what kind of gain you are getting w/ that large of a
> loop? What is your location (urban/suburban/rural)? What kind of
> receiver? I made a 3.5 ft (effective) diameter BCB loop and compared
> to a 2 ft BCB loop I hear little benefit in the larger loop. This due
> I suppose to high RF and QRM around here.
>
> Tnx,
>

> Mark
>
> ====================================
>
> - In loopantennas@yahoogroups.com, "DAVID" <dhamilton1@> wrote:
> >
> > i have been busy again i have made another big loop this time for
> > north south and finally run out of room in the attic here is a short
> demo
> > http://www.youtube.com/watch?v=GVpKyQ_qtxg
> > its the same dimensions as the east west one. thanks for your
time ...
> > david
> >
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

5560. Re: [loopantennas] Re: big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 15:59:22 UTC
From: david/lorraine
Topic: 5537 Message: 5560

hi i am not getting the big peaks to usa etc untill 05.30 in the morning local time here. its a bit early in the season to be getting them at night yet but in saying that i am not up all night i am usually up around 04.00 and sometimes they are just starting or i have to wait half hour or so for them to come in. i dont get them every time for example this morning WEGP on 1390 was extremely weak in and out of noise but was very strong on wednesday morning its all down to propagation. the reason i built the loops i have no room for antennas in the garden and all i am interested in is usa carribean etc and africa thats why i put them east west and north south so anything east is a bonus and there is nothing much to the north of me and i wanted as much gain and nulling as i could get in favour of those directions. and after reading many articles etc it seemed bigger loops had more gain but i could be wrong i really dont know what gain the two big loops have. yes i think the directional ones are much stronger than the omni"s. i have set myself a challenge there is one or two stations coming in along with or just under WTIC on 1080 and i am trying to id them also there is a nigerian pirate on 917 khz also after that one. many thanks for your time david .... scotland uk
----- Original Message -----
From: aircheckclover
To: loopantennas@yahoogroups.com
Sent: Thursday, August 28, 2008 4:13 PM
Subject: [loopantennas] Re: big mw loop again

David; Wondering what BCB is like on a typical night in Scotland. Do you consistently have skip from USA & other parts of the world? Or are some nights a mush of undefinable signals? If I want to hear stations to the west of me, killing stations to the east - I am more or less in the middle of the continent in Wisconsin - I have to listen close to dawn. Fun coincidence: We have a local 50KW here in Milwaukee. I nulled it using the internal ferrite on the KA2100 portable radio two nights ago when skip was good & noise was down and got a positive ID on WBBR. Next day I see your WBBR video on YouTube. Using radio-locator.com I see they are 50KW beaming east toward you. Man, they get out. Question: Watt for watt & on average, do you notice the directional USA AMs beaming east are stronger than the omni's?

Now that I have better gear and winter approaches, I am looking forward to real DX on BCB. Until now I've only heard hets on BCB. Now I'm going for the "channels between the channels".

Fun stuff.

-Mark

==========

> i am in a small village called sorn in the south west coast of scotland and using the aor 7030 receiver. here is another example of

the two large loops this one gives a better description of the two
stations being received and countrys
http://www.youtube.com/watch?v=qLp0zBpQ4xM i have been wondering
myself what gain i will have on such large loops. thanks for your time
david
> ----- Original Message -----
> From: aircheckclover
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, August 27, 2008 9:37 PM
> Subject: [loopantennas] Re: big mw loop again
>
>
> David; Thanks for the videos. I can hear you switching N-S vs E-W but
> am wondering what kind of gain you are getting w/ that large of a
> loop? What is your location (urban/suburban/rural)? What kind of
> receiver? I made a 3.5 ft (effective) diameter BCB loop and compared
> to a 2 ft BCB loop I hear little benefit in the larger loop. This due
> I suppose to high RF and QRM around here.
>
> Tnx,
>
> Mark
>
> ====================================
>
> - In loopantennas@yahoogroups.com, "DAVID" <dhamilton1@> wrote:
> >
> > i have been busy again i have made another big loop this time for
> > north south and finally run out of room in the attic here is a short
> demo
> > http://www.youtube.com/watch?v=GVpKyQ_qtxg
> > its the same dimensions as the east west one. thanks for your
time ...
> > david
> >
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

5561. Re: [loopantennas] Varactor-Tuned Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 16:18:14 UTC
From: n5ztw@texasdata.net
Topic: 5545 Message: 5561

Thanks Chris for sharing with the group. This looks like a
lot of hard work and well documented. Could you put a copy
in the group "files" section?
Thanks again,
Del N5ZTW

----- Original Message Follows -----
From: "Chris Trask" <christrask@...>
To: "Loop Antennas" <loopantennas@yahoogroups.com>
Subject: [loopantennas] Varactor-Tuned Loop Antennas
Date: Wed, 27 Aug 2008 12:30:52 -0700

> I finally completed the work that I have been doing on
> a simple varactor-tuned loop antenna with interchangeable
> antenna elements. The documentation is available at:
>
> http://tinyurl.com/6lht4y
>
> A little more work needs to be done here as the
> inductance of the transformers is limiting the high end of
> the tuning range. However, the results obtained at this
> point show that the sensitivity is far better than I had
> anticipated, and together with the very good S/N
> performance this design rivals the performance my earlier
> active loop antenna that was published in QEX back in
> 2003.
>
> Corrections and constructive comments are always
> appreciated.
>
> Chris
>
> ,----------------------. High Performance
> Mixers and
> / What's all this \ Amplifiers for RF
> Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask /
> N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio
> Research (__)\ _ P.O.
> Box 25240
> \ \ .' `. Tempe, Arizona
> 85285-5240

> \ \ / \
> \ '" \ IEEE Senior Member
> #40274515
> . ( ) \
> '-|)__| :. \ Email:
> christrask@...
> | | | | \ '.
> http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>

5562. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 16:48:54 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 5562

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Varactor Tuned Loop Antenna.pdf
Uploaded by : chris3trask <christrask@...>
Description : A simple varactor-tuned loop antenna with interchangeable antenna elements

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Varactor%20Tuned%20Loop%20Antenna.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

chris3trask <christrask@...>

5563. Re: [loopantennas] Varactor-Tuned Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 16:48:24 UTC
From: Chris Trask
Topic: 5545 Message: 5563

>
> Thanks Chris for sharing with the group. This looks like a
> lot of hard work and well documented. Could you put a copy
> in the group "files" section?
> Thanks again,
> Del N5ZTW
>

Done. There should be an email announcement to the group shortly. I revised the paper this morning to correct a number of spelling and grammar errors, as well as move a couple of illustrations so that they flowed better with the text.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5565. Re: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-27 21:40:24 UTC
From: tmartin831@aol.com
Topic: 5548 Message: 5565

I went to this site...got a 404 error

In a message dated 8/27/2008 5:36:11 P.M. Eastern Standard Time,
aimounto@... writes:

http://www.makela.info/lyhytaaltokuuntelu/index.p...

**********It's only a deal if it's where you want to go. Find your travel
deal here.
(http://information.travel.aol.com/deals?ncid=aoltrv00050000000047)

[Non-text portions of this message have been removed]

5566. Re: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 18:24:09 UTC
From: aimo ruoho
Topic: 5548 Message: 5566

Any one there?

----- Original Message ----
From: aimo ruoho <aimounto@yahoo.com>
To: loopantennas@yahoogroups.com
Sent: Thursday, August 28, 2008 12:11:38 AM
Subject: Re: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

The email address should be: raimo@makela. info
Then click the blue word on the left: "Lyhytaaltokuuntelu ", then, if needed: "Antennit"
amigo

----- Original Message ----
From: aimo ruoho <aimounto@yahoo. com>
To: loopantennas@ yahoogroups. com
Sent: Thursday, August 28, 2008 12:06:35 AM
Subject: Re: [loopantennas] Mini-Directive- One-Point of the Compass-Loop

Sorry, folks!
I tried myself to test the email address, that I gave you...
You guessed right, it did not work!
If you are still interested, please try the following: http://www.raimo@ makela.info
It is unfortunately made in my language, Finnish, but the smartest of you will undoubtedly find, what you want, by pressing with your mouse the text: Antennit.
With my apology and Best Regards,
Ami

----- Original Message ----
From: aimo ruoho <aimounto@yahoo. com>
To: loopantennas@ yahoogroups. com
Sent: Wednesday, August 27, 2008 11:35:41 PM
Subject: [loopantennas] Mini-Directive- One-Point of the Compass-Loop

Hello.folks!
To my great surprise, I happened to see the http://www.makela. info/lyhytaaltok uuntelu/index. p...
This man, Raimo Makela, who has written a Guide for DX-listeners, called Antenneilla Aalloille (With Antennas to the Waves), shows, how to make a simple closed-triangle-shaped directive antenna, that attenuates signals from one direction, while amplifies the signals coming from the opposite direction.
This Mini-Directive- Loop-Antenna, which was made much according to the K9AY, is only 1,5 meter high and 1,0 meter broad. A great gift for them, who have very little room inside/outside!
I made my own prototype, to see, if it really works as promised, and I was really very positively surprised! It is really very directive to one direction, while attenuating signals from the opposite direction!

This is, what I have been thinking of for a long time! A dream come true, as you Anglo-Saxon- Americans so nicely say!
What I made, is staying in my listening-room as a raw model only, so far, but I have plans to make a little larger one to use with my new-bought rotator, to see, if I can finally receive some DX in Spain.
I am going to connect it with some of my many Antenna Amplifiers and Preselectors etc. one after another, to see, if it really can be the winner of my other many receiving media...

Any advice and positive ideas will be received with gratitude.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5567. Re: Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 19:07:20 UTC
From: Aimo Unto Olavi RUOHO
Topic: 5548 Message: 5567

I am sorry, Martin!
Would you like to try the following instead: raimo@makela.info ?
Then click: lyhytaaltokuuntelu, then: antennit, both will be written
with blue text. (Sorry, but all will be written in my language,
Finnish).
If that will not help, please, contact me once more
Friendly, Aimo

--- In loopantennas@yahoogroups.com, tmartin831@... wrote:
>
> I went to this site...got a 404 error
>
>
> In a message dated 8/27/2008 5:36:11 P.M. Eastern Standard Time,
> aimounto@... writes:
>
> http://www.makela.info/lyhytaaltokuuntelu/index.p...
>
>
>
>
>
> **********It's only a deal if it's where you want to go. Find
your travel
> deal here.
> (http://information.travel.aol.com/deals?ncid=aoltrv00050000000047)
>
>
> [Non-text portions of this message have been removed]
>

5568. Fw: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 19:48:33 UTC
From: aimo ruoho
Topic: 5568 Message: 5568

Please, try the following email address down here to find detail of the Mini-K9AY.directive Antenna.

http://www.makela.info/lyhytaaltokuuntelu/index.php?option=com_content&task=view&id=53<emid=27
73 de Amigo

----- Forwarded Message ----
From: Raimo Mäkelä <raimo@...>
To: aimo ruoho <aimounto@...>
Sent: Thursday, August 28, 2008 9:25:07 PM
Subject: Re: Mini-K9AY

hei,

Kokeile tällä osoittella.

http://www.makela.info/lyhytaaltokuuntelu/index.php?option=com_content&task=view&id=53&Itemid=27

terv.
raimo

----- Original Message -----
From: aimo ruoho
To: Raimo Mäkelä
Sent: Thursday, August 28, 2008 10:22 PM
Subject: Re: Mini-K9AY

Hei!
Nyt vaikuttaa siltá, etta sinuun ei saa yhteytta!
Annoin lupaa sinulta kysymatta osoitteesi loopantennas-ryhmalle, mutta nayttaa silta,etteivat paase
sivuillesi...
Taisin antaa vaillinaisen osoitteen niille, joita kiinnostaa tuo Mini-K9AY- antenni?
(On muuten ihmeen hyva katiska!) (Minulla on muuten tuore Wellbrook 100M, jota testailen.)
Saivat virheilmoituksen...
Sorry!
Ami

----- Original Message ----
From: Raimo Mäkelä <raimo@...>
To: Aimo Ruoho <aimounto@yahoo.com>
Sent: Friday, August 8, 2008 4:10:41 PM
Subject: Re: Mini-K9AY

terve,

Kiitoksia terveisistä. Kun kaksi K9AY antennia on yhdessä, voidaan tosiaan valita toinen ja sitten toinen.

Olet oikeassa, yksi mini K9AY-antenni voidaan laittaa kiinni roottoriin. Tosin näin pienen antennin vastaanottoteho ei ole mitenkään suuri, ja siksi DX-spesialistit ovat hankkineet tehdastekoisia wellbrookin aktiiviantenneja. EWE-antenni toimii pienelläkin pihalla.

Hyviä kokeiluja!

terv.
raimo

[Non-text portions of this message have been removed]

5569. Re: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 20:32:27 UTC
From: Jay Heyl
Topic: 5548 Message: 5569

On Thu, Aug 28, 2008 at 2:24 PM, aimo ruoho <aimounto@...> wrote:

> Any one there?
>

I took the original address, removed the trailing characters after the 'p', then added 'hp' to the end ('http://www.makela.info/lyhytaaltokuuntelu/index.php'). That brought up the page as intended.

Unfortunately, my Finnish is a bit rusty. I clicked the Antennit link and from your original message the "Antenneilla aalloille" link. Sadly, I came upon only more Finnish. With the romance languages I can sometimes hack my way through it, but I'm afraid Finnish is not something I'm likely to understand at any point in this lifetime.

Perhaps you could provide us with a rough translation. A mini-K9AY does sound interesting.

-- Jay

[Non-text portions of this message have been removed]

5570. RE: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 20:55:54 UTC
From: Wild, Larry
Topic: 5548 Message: 5570

Below is the URL to the site (at least on my computer):
http://www.makela.info/lyhytaaltokuuntelu/index.php?option=com_content&task=view&id=52&Itemid=27

5571. Re: Ferrite Rod Antenna (Tuned) with old Radio parts?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 21:34:42 UTC
From: airchecklover
Topic: 5516 Message: 5571

Chris;

Antenna shootouts - great idea. I will be posting shortly a series of tests I recorded (yes, audio files will be posted) comparing two receivers barefoot (Sat 800 & RP 2100) to a 2ft 15 turn loop vs the CCrane Twin-Ferrite. The tests will also show the results of the T-F/Loop combo - the combo being winner in the tests for s/n and nulling.

-Mark

> The performance of the active ferrite rod antenna that I made for that paper is comparable to the performance of the active 1m diameter air-cored loop that I have been using for many years, and both antennas tune over about the same range. I haven't made any qualitative measurements between the two, and I suppose that I should do so as it is an aspect of some interest.

> When I get this work done along I should perhaps set up a small antenna range and compare all three in terms of signal gain and S/N ratio.

5572. Re: [loopantennas] Fw: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 22:10:51 UTC
From: aimo ruoho
Topic: 5568 Message: 5572

Thank you both, Jay Heyl and Larry Wild!
Please see the exact email address, given to me by Raimo Makela himself.
It wil direct you to the right page of the Mini-K9AY.
Sorry for the mess?
I just happened to give wrong addresses twice or more.
Please, see down. There are two equal addresses, the right ones, at last!
You will see the drawings and the measures in meters.
The other things are probably not as important, if you want to build the antenna?
R=resistor
m=meter
vaimentaa=attenuate
suunnasta=from direction
antennivahvistin=antenna amplifier
jne=etc.

Best Regards from Amigo

Sorry, but for some unknown reason, I am not able to wipe out the extra words down here!
At least the right addresses are ther twice!
Ami

Please, try the following email address down here to find detail of the Mini-K9AY.directive Antenna.

http://www.makela. info/lyhytaaltok uuntelu/index. php?option= com_content& task=view& id=53<emid= 27
73 de Amigo

----- Forwarded Message ----
From: Raimo Mäkelä <raimo@makela. info>
To: aimo ruoho <aimounto@yahoo. com>
Sent: Thursday, August 28, 2008 9:25:07 PM
Subject: Re: Mini-K9AY

hei,

Kokeile tällä osoittella.

http://www.makela. info/lyhytaaltok uuntelu/index. php?option= com_content& task=view& id=53&Itemid= 27

terv.
raimo

----- Original Message -----
From: aimo ruoho
To: Raimo Mäkelä

Sent: Thursday, August 28, 2008 10:22 PM
Subject: Re: Mini-K9AY

Hei!
Nyt vaikuttaa siltá, etta sinuun ei saa yhteytta!
Annoin lupaa sinulta kysymatta osoitteesi loopantennas- ryhmalle, mutta nayttaa
silta,etteivat paase
sivuillesi.. .
Taisin antaa vaillinaisen osoitteen niille, joita kiinnostaa tuo Mini-K9AY- antenni?
(On muuten ihmeen hyva katiska!) (Minulla on muuten tuore Wellbrook 100M, jota testailen.)
Saivat virheilmoituksen. ..
Sorry!
Ami

----- Original Message ----
From: Raimo Mäkelä <raimo@makela. info>
To: Aimo Ruoho <aimounto@yahoo. com>
Sent: Friday, August 8, 2008 4:10:41 PM
Subject: Re: Mini-K9AY

terve,

Kiitoksia terveisistä. Kun kaksi K9AY antennia on yhdessä, voidaan tosiaan
valita toinen ja sitten toinen.

Olet oikeassa, yksi mini K9AY-antenni voidaan laittaa kiinni roottoriin.
Tosin näin pienen antennin vastaanottoteho ei ole mitenkään
suuri, ja siksi DX-spesialistit ovat hankkineet tehdastekoisia wellbrookin
aktiiviantenneja. EWE-antenni toimii pienelläkin pihalla.

Hyviä kokeiluja!

terv.
raimo

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5573. Fw: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 22:21:47 UTC
From: aimo ruoho
Topic: 5568 Message: 5573

I hope, that this will help you folks.

Ami

----- Forwarded Message ----
From: Raimo Mäkelä <raimo@...>
To: aimo ruoho <aimounto@yahoo.com>
Sent: Thursday, August 28, 2008 9:25:07 PM
Subject: Re: Mini-K9AY

http://www.makela.info/lyhytaaltokuuntelu/index.php?option=com_content&task=view&id=53&Itemid=27

terv.
raimo

----- Original Message -----
From: aimo ruoho
To: Raimo Mäkelä
Sent: Thursday, August 28, 2008 10:22 PM
Subject: Re: Mini-K9AY

Hei!
Nyt vaikuttaa siltá, etta sinuun ei saa yhteytta!
Annoin lupaa sinulta kysymatta osoitteesi loopantennas-ryhmalle, mutta nayttaa silta,etteivat paase
sivuillesi...
Taisin antaa vaillinaisen osoitteen niille, joita kiinnostaa tuo Mini-K9AY- antenni?
(On muuten ihmeen hyva katiska!) (Minulla on muuten tuore Wellbrook 100M, jota testailen.)
Saivat virheilmoituksen...
Sorry!
Ami

----- Original Message ----
From: Raimo Mäkelä <raimo@...>
To: Aimo Ruoho <aimounto@...>
Sent: Friday, August 8, 2008 4:10:41 PM
Subject: Re: Mini-K9AY

terve,

Kiitoksia terveisistä. Kun kaksi K9AY antennia on yhdessä, voidaan tosiaan
valita toinen ja sitten toinen.

Olet oikeassa, yksi mini K9AY-antenni voidaan laittaa kiinni roottoriin.
Tosin näin pienen antennin vastaanottoteho ei ole mitenkään
suuri, ja siksi DX-spesialistit ovat hankkineet tehdastekoisia wellbrookin

aktiiviantenneja. EWE-antenni toimii pienelläkin pihalla.

Hyviä kokeiluja!

terv.
raimo

[Non-text portions of this message have been removed]

5574. Resonating transmitting loop at feed point?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 22:13:54 UTC
From: lbradenjr
Topic: 5574 Message: 5574

Hello,

I'm new to the group with a question concerning one turn transmitting magnetic loop. Has there been information published about the voltage distribution over the wide range of frequencies that a typical loop, given enough capacitance, can be tuned to resonance? Why is the high voltage capacitor typically positioned on the side opposite the feed point?

73,

Larry Braden
KB3PCU

5575. Re: [loopantennas] Slightly off topic MW reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 22:36:15 UTC
From: Andy
Topic: 5555 Message: 5575

> Does anyone know what causes MW reception strength to vary significantly (
> 10+ S units) and rapidly (~1.5 Hertz)? It sounds just like somebody is
> rapidly cranking the volume control up and down.

Either of two possibilities are:

1. If the rate is extremely regular, it could be a "beat frequency" between stations on the same frequency, but not exactly the same. A 1.5 Hz difference between them would cause a 1.5 Hz variation in combined signal strength. Not likely that this is what you're hearing, but it might be.

2. More likely, it is the changing ionosphere, and multiple paths and path lengths (delays) that change between in- and out-of-phase with one another. It is a known phenomenon for nearly 100 years. Sometimes the fluctuations are slow, sometimes they are rapid.

Andy

5576. Re: [loopantennas] Mini-Directive-One-Point of the Compass-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-28 23:32:32 UTC
From: Don
Topic: 5548 Message: 5576

I did a search for:

http://www.makela.info/

Then clicked on Translate. Does not translate all words but enough to
get the idea. YMMV.

Don
Upland, CA

Jay Heyl wrote:
> On Thu, Aug 28, 2008 at 2:24 PM, aimo ruoho <aimounto@...> wrote:
>
>
>> Any one there?
>>
>>
>
> I took the original address, removed the trailing characters after the 'p',
> then added 'hp' to the end ('
> http://www.makela.info/lyhytaaltokuuntelu/index.php'). That brought up the
> page as intended.
>
> Unfortunately, my Finnish is a bit rusty. I clicked the Antennit link and
> from your original message the "Antenneilla aalloille" link. Sadly, I came
> upon only more Finnish. With the romance languages I can sometimes hack my
> way through it, but I'm afraid Finnish is not something I'm likely to
> understand at any point in this lifetime.
>
> Perhaps you could provide us with a rough translation. A mini-K9AY does
> sound interesting.
>
> -- Jay
>
>
> [Non-text portions of this message have been removed]
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
> http://groups.yahoo.com/group/loopantennas/files

>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG.
> Version: 8.0.169 / Virus Database: 270.6.10/1638 - Release Date: 8/27/2008 7:06 PM
>
>
>
>

No virus found in this outgoing message.
Checked by AVG.
Version: 8.0.169 / Virus Database: 270.6.10/1638 - Release Date: 8/27/2008 7:06 PM

5577. big mw loop again

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-29 10:36:31 UTC
From: DAVID
Topic: 5537 Message: 5577

i was wondering if any of you guys could do me a favour. i am not sure if it can be done but could any of you put the dimensions of my loop in a antenna moddeling software and see what it comes up with i am very curious to see what the software says about it if indeed it can be done. if it can be done if you need the dimensions again i will post them on here. did some tests this morning again i had WTIC Cleveland on 1100 khz at 06.00 here in scotland on the east west loop and when switched to the north south loop not even a trace of it so they seem to be doing something. if anyone could do this for me it would be a great help thanks for your time david

5578. Re: [loopantennas] Fw: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-29 11:09:30 UTC
From: C. Beijersbergen
Topic: 5568 Message: 5578

If in Google you search for "mini-k9ay" Google will give you this page within in the top 10 search results. In Google there is the option to open a translated version of this page. I was able to read the article clearly although a number of words remained in finnish.

Cor Beijersbergen

----- Forwarded Message ----
From: Raimo Mäkelä <raimo@...>
To: aimo ruoho <aimounto@...>
Sent: Thursday, August 28, 2008 9:25:07 PM
Subject: Re: Mini-K9AY

http://www.makela.info/lyhytaaltokuuntelu/index.php?option=com_content&task=view&id=53&Itemid=27

terv.
raimo

[Non-text portions of this message have been removed]

5579. Fw: [K9AYloop] Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-29 11:26:07 UTC
From: aimo ruoho
Topic: 5579 Message: 5579

Hi, Folks!
Here comes the translation for K9AY Mini version, kindly translated
by the World-wide famous multi-skilled Finn, Mauno Ritola.
Thank you all for interest! Nice building and testing!

Ami

----- Forwarded Message ----
From: Mauno Ritola <Mauno.Ritola@...>
To: K9AYloop@yahoogroups.com
Sent: Friday, August 29, 2008 11:29:51 AM
Subject: Re: [K9AYloop] Mini-K9AY

"Mini-K9AY

K9AY antenna has triangular shape, height being 7.62 metres and width about 9.3 metres. Mini version of the antenna is much smaller. Height is 1.5 metres and width only 1 metre.

To function effectively Mini-K9AY antenna requires terminal resistor (marked as "R" in the picture, with value of 125 - 200 Ohms). The impedance of the antenna is approximately 200 Ohms. The antenna must be connected with 4:1-impedance transformer to 50 Ohm coaxial cable and the receiver.

Mini-K9AY antenna works best on medium wave on lower frequencies of shortwave (2.3 - 5.1 MHz). It is fairly effective also on other shortwave frequencies.

Mini-K9AY antenna is very suitable for noisy environment: it attenuates nearby noise. The antenna gets it directional properties with its terminating resistor, and adjusting it may be useful to find the least noisy reception. The antenna receives best from the direction of the terminating resistor ("R" in the picture).

Amplification of the Mini-K9AY is on medium wave abound -60 dB, and on low parts of SW-35 dB at best. The angle of the receiving beam is ±90°. The arrival angle is 25-30°. The attenuation of the incoming signal from backlobe depends on the value of the terminating resistor and may be 15-25 dB.

Since Mini-K9AY has weaker gain than its big brother (on MW about 30 dB and in tropicla bans about 10 dB less), I recommend using a good-quality, low-noise preamplifier. "

73, Mauno

----- Original Message -----
From: Bill Whitacre
To: K9AYloop@yahoogroup s.com
Sent: Friday, August 29, 2008 3:03 AM
Subject: Re: [K9AYloop] Mini-K9AY

Now if we only had an English translation!

bw

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5580. Re:Slightly off topic MW reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-29 12:38:45 UTC
From: gmcjetpilot@yahoo.com
Topic: 5555 Message: 5580

Clearly it is the reception fairies the fly around. Some time they get drunk and mess around with our radios....ha ha......yes it can be anything from propagation to local or atmo interferance from may sources.

The "wave" or swoosh where the volumn goes from good and strong to soft/faint and back again to strong sounds like skip or skywave propagation. (marginal skip). You should not hear this with local stations which are more line of sight or ground wave. On shortwave I can get New zealand (east coast US about 8000 miles) late at night on SW; some times it comes in strong, but than towards the end of their broadcast slot, I'll get time of day (night) fade, which sounds like what you are talking about.

COULD BE?

One time I had this FADE deal and it turned out to be my antenna coaxial, which was failing. Just a small movement of the coaxial made the internal contact so marginal, it made this fade affect happen. It was weird and affected local MW stations. I figured it out. The coaxial was bought at a ham fest and looked top quality. It was crud. I bought my own coax and connectors and made my own patch cables. They work well.

[Non-text portions of this message have been removed]

5581. Re: for sale Wellbrook ala 1530+

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-29 13:58:25 UTC
From: Briggs Longbothum
Topic: 5526 Message: 5581

--- In loopantennas@yahoogroups.com, "spudie14" <riches1234@...> wrote:
>
> Just a quick add for any one that might be intrested in buying my
> wellbrook loop just dont have time for shortwave anymore if your
> intrested drop me an email thanks Edd
>
Hi Ed-
I wrote several days ago asking about this offering...got no reply! Is your ALA-1530+ still FS? What do you need for it? s/h to 01930?

-Briggs, ab2nj

5582. Re: [loopantennas] Resonating transmitting loop at feed point?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-29 14:12:37 UTC
From: Chris Trask
Topic: 5574 Message: 5582

The single capacitor is used that way so as to keep the loop balanced. You can accomplish the same thing with a pair of capacitors at the feedpoint, one at each end of the loop.

>
>
>Hello,
>
>I'm new to the group with a question concerning one turn transmitting
>magnetic loop. Has there been information published about the voltage
>distribution over the wide range of frequencies that a typical loop,
>given enough capacitance, can be tuned to resonance? Why is the high
>voltage capacitor typically positioned on the side opposite the feed
>point?
>
>73,
>
>Larry Braden
>KB3PCU
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5583. Re: [loopantennas] Resonating transmitting loop at feed point?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-29 18:42:57 UTC
From: toddroberts2001@aol.com
Topic: 5574 Message: 5583

In a message dated 8/28/2008 6:23:04 P.M. Eastern Daylight Time,
lbradenjr@... writes:
Hello,
I'm new to the group with a question concerning one turn transmitting
magnetic loop. Has there been information published about the voltage
distribution over the wide range of frequencies that a typical loop,
given enough capacitance, can be tuned to resonance? Why is the high
voltage capacitor typically positioned on the side opposite the feed
point?
73,
Larry Braden
KB3PCU

The tuning capacitor end of a one-turn transmitting loop is the
high-impedance end of the loop that develops the highest voltage. The midpoint of the
loop opposite the tuning capacitor is the low impedance and low voltage side of
the loop and can be considered the center-tap point of the loop. Since most
hams use low impedance 50 ohm coax cable as a transmission line it is common
practice to feed the loop at the low impedance center-tap end for best match.
It is most common to use a smaller 50 ohm coupling loop at the low impedance
end or else a gamma match.

Also there is a voltage null at the exact midpoint center-tap of the loop
opposite the tuning capacitor so that point can be grounded without affecting
the operation of the loop and it can be connected to the coax shield ground.

73 Todd WD4NGG

**********It's only a deal if it's where you want to go. Find your travel
deal here.
(http://information.travel.aol.com/deals?ncid=aoltrv00050000000047)

5584. Re: Fw: [K9AYloop] Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-30 11:27:41 UTC
From: aircheckIover
Topic: 5579 Message: 5584

Thanks Ami & Mauno.

-Mark

==========

> Hi, Folks!
> Here comes the translation for K9AY Mini version, kindly translated
> by the World-wide famous multi-skilled Finn, Mauno Ritola.
> Thank you all for interest! Nice building and testing!
>
> Ami
>
>
>
> ----- Forwarded Message ----
> From: Mauno Ritola <Mauno.Ritola@...>
> To: K9AYloop@yahoogroups.com
> Sent: Friday, August 29, 2008 11:29:51 AM
> Subject: Re: [K9AYloop] Mini-K9AY
>
>
> "Mini-K9AY
>
> K9AY antenna has triangular shape, height being 7.62 metres and
width about 9.3 metres. Mini version of the antenna is much smaller.
Height is 1.5 metres and width only 1 metre.
>
> To function effectively Mini-K9AY antenna requires terminal resistor
(marked as "R" in the picture, with value of 125 - 200 Ohms). The
impedance of the antenna is approximately 200 Ohms. The antenna must
be connected with 4:1-impedance transformer to 50 Ohm coaxial cable
and the receiver.
>
> Mini-K9AY antenna works best on medium wave on lower frequencies of
shortwave (2.3 - 5.1 MHz). It is fairly effective also on other
shortwave frequencies.
>
> Mini-K9AY antenna is very suitable for noisy environment: it
attenuates nearby noise. The antenna gets it directional properties
with its terminating resistor, and adjusting it may be useful to find
the least noisy reception. The antenna receives best from the
direction of the terminating resistor ("R" in the picture).
>
> Amplification of the Mini-K9AY is on medium wave abound -60 dB, and
on low parts of SW-35 dB at best. The angle of the receiving beam is

±90°. The arrival angle is 25-30°. The attenuation of the incoming signal from backlobe depends on the value of the terminating resistor and may be 15-25 dB.
>
> Since Mini-K9AY has weaker gain than its big brother (on MW about 30 dB and in tropicla bans about 10 dB less), I recommend using a good-quality, low-noise preamplifier. "
>
> 73, Mauno
>
> ----- Original Message -----
> From: Bill Whitacre
> To: K9AYloop@yahoogroup s.com
> Sent: Friday, August 29, 2008 3:03 AM
> Subject: Re: [K9AYloop] Mini-K9AY
>
> Now if we only had an English translation!
>
> bw
>
> ---
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

5585. Re: Fw: [K9AYloop] Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-30 13:04:37 UTC
From: tenorman1952
Topic: 5579 Message: 5585

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Hi, Folks!
> Here comes the translation for K9AY Mini version, kindly translated
> by the World-wide famous multi-skilled Finn, Mauno Ritola.
> Thank you all for interest! Nice building and testing!
>
> Ami

Excellent! Where is the schematic or photo of this loop?

Paul C.

tenorman1952

5586. Re: Fw: [K9AYloop] Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-30 18:44:33 UTC
From: Aimo Unto Olavi RUOHO
Topic: 5579 Message: 5586

--- In loopantennas@yahoogroups.com, "tenorman1952"
<tenorman1952@...> wrote:

> Excellent! Where is the schematic or photo of this loop?

ANSWER:
http://www.makela.info/lyhytaaltokuuntelu/index.php?
option=com_content&task=view&id=53<emid=27

I am sorry, if the above URL does not turn to blue.
In that case you have to write it exactly as I wrote it...
Text there is in my language, Finnish, but the drawings tell you
all, that is available now. At least you already had the English
translation....
I hope, that some geniouses will build this and send photos to our
photo gallery soon.

This address, that I gave to you above has been shown in many former
emails on my screen. If you see them all, you will know better...

Ami

>
>
>
> Paul C.
>
> tenorman1952
>

5587. Fw: [loopantennas] Fw: [K9AYloop] Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-30 19:02:40 UTC
From: aimo ruoho
Topic: 5587 Message: 5587

----- Forwarded Message ----
From: aimo ruoho <aimounto@...>
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>;
Shortwave-SWL-Antenna@yahoogroups.com
Sent: Friday, August 29, 2008 1:26:07 PM
Subject: [loopantennas] Fw: [K9AYloop] Mini-K9AY

Hi, Folks!
Here comes the translation for K9AY Mini version, kindly translated
by the World-wide famous multi- skilled Finn, Mauno Ritola.
Thank you all for interest! Nice building and testing!

Ami

----- Forwarded Message ----
From: Mauno Ritola <Mauno.Ritola@ gmail.com>
To: K9AYloop@yahoogroup s.com
Sent: Friday, August 29, 2008 11:29:51 AM
Subject: Re: [K9AYloop] Mini-K9AY

"Mini-K9AY

K9AY antenna has triangular shape, height being 7.62 metres and width about 9.3 metres. Mini version of the antenna is much smaller. Height is 1.5 metres and width only 1 metre.

To function effectively Mini-K9AY antenna requires terminal resistor (marked as "R" in the picture, with value of 125 - 200 Ohms). The impedance of the antenna is approximately 200 Ohms. The antenna must be connected with 4:1-impedance transformer to 50 Ohm coaxial cable and the receiver.

Mini-K9AY antenna works best on medium wave on lower frequencies of shortwave (2.3 - 5.1 MHz). It is fairly effective also on other shortwave frequencies.

Mini-K9AY antenna is very suitable for noisy environment: it attenuates nearby noise. The antenna gets it directional properties with its terminating resistor, and adjusting it may be useful to find the least noisy reception. The antenna receives best from the direction of the terminating resistor ("R" in the picture).

Amplification of the Mini-K9AY is on medium wave abound -60 dB, and on low parts of SW-35 dB at best. The angle of the receiving beam is ±90°. The arrival angle is 25-30°. The attenuation of the incoming signal from backlobe depends on the value of the terminating resistor and may be 15-25 dB.

Since Mini-K9AY has weaker gain than its big brother (on MW about 30 dB and in tropicla bans about 10 dB less), I recommend using a good-quality, low-noise preamplifier. "

73, Mauno

----- Original Message -----
From: Bill Whitacre
To: K9AYloop@yahoogroup s.com
Sent: Friday, August 29, 2008 3:03 AM
Subject: Re: [K9AYloop] Mini-K9AY

Now if we only had an English translation!

bw

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5588. Re: [loopantennas] Fw: [K9AYloop] Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-30 19:11:55 UTC
From: aimo ruoho
Topic: 5579 Message: 5588

Hi again!
Would you kindly tell us all about your experiences
when building and testing this "miracle"?

I am sure, that if done with skill, this type of antenna,
equipped with a proper amplifier and rotator,
can be a very effective and rather cheap "fishing" media.

Awaiting for your positive comments and experiences,
73 de Ami

----- Original Message ----
From: aimo ruoho <aimounto@...>
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>;
Shortwave-SWL-Antenna@yahoogroups.com
Sent: Friday, August 29, 2008 1:26:07 PM
Subject: [loopantennas] Fw: [K9AYloop] Mini-K9AY

Hi, Folks!
Here comes the translation for K9AY Mini version, kindly translated
by the World-wide famous multi- skilled Finn, Mauno Ritola.
Thank you all for interest! Nice building and testing!

Ami

----- Forwarded Message ----
From: Mauno Ritola <Mauno.Ritola@ gmail.com>
To: K9AYloop@yahoogroup s.com
Sent: Friday, August 29, 2008 11:29:51 AM
Subject: Re: [K9AYloop] Mini-K9AY

"Mini-K9AY

K9AY antenna has triangular shape, height being 7.62 metres and width about 9.3 metres. Mini version of the antenna is much smaller. Height is 1.5 metres and width only 1 metre.

To function effectively Mini-K9AY antenna requires terminal resistor (marked as "R" in the picture, with value of 125 - 200 Ohms). The impedance of the antenna is approximately 200 Ohms. The antenna must be connected with 4:1-impedance transformer to 50 Ohm coaxial cable and the receiver.

Mini-K9AY antenna works best on medium wave on lower frequencies of shortwave (2.3 - 5.1 MHz). It is fairly effective also on other shortwave frequencies.

Mini-K9AY antenna is very suitable for noisy environment: it attenuates nearby noise. The antenna gets it directional properties with its terminating resistor, and adjusting it may be useful to find the least noisy reception. The antenna receives best from the direction of the terminating resistor ("R" in the picture).

Amplification of the Mini-K9AY is on medium wave abound -60 dB, and on low parts of SW-35 dB at best. The angle of the receiving beam is ±90°. The arrival angle is 25-30°. The attenuation of the incoming signal from backlobe depends on the value of the terminating resistor and may be 15-25 dB.

Since Mini-K9AY has weaker gain than its big brother (on MW about 30 dB and in tropicla bans about 10 dB less), I recommend using a good-quality, low-noise preamplifier. "

73, Mauno

----- Original Message -----
From: Bill Whitacre
To: K9AYloop@yahoogroup s.com
Sent: Friday, August 29, 2008 3:03 AM
Subject: Re: [K9AYloop] Mini-K9AY

Now if we only had an English translation!

bw

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5589. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-30 21:52:58 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 5589

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Varactor Tuned Loop Antenna.pdf
Uploaded by : chris3trask <christrask@...>
Description : A simple varactor-tuned loop antenna with interchangeable antenna elements

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Varactor%20Tuned%20Loop%20Antenna.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

chris3trask <christrask@...>

5590. Re: [loopantennas] New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-30 22:14:31 UTC
From: Chris Trask
Topic: 238 Message: 5590

```
>
> File : /Varactor Tuned Loop Antenna.pdf
> Uploaded by : chris3trask <christrask@...>
> Description : A simple varactor-tuned loop antenna with interchangeable
> antenna elements
>
```

A few people asked about where to obtain some of the parts for this, such as the varactors and transformer cores. Best place I could think of was Dan's Small Parts:

<http://www.danssmallpartsandkits.net>

With a couple of minor substitutions, he has the varactors, cores, and magnet wire. The remaining parts are fairly common. He also has a pair of reduction drives which can be used on the tuning control if desired. I put all of this on a new page at the end of the document.

I would be interested in hearing from others overseas about part sources so that they can be added to the list. I'm also trying to find someone who would make parts kits available, but haven't heard anything back as of yet.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5591. loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-31 08:28:36 UTC
From: DAVID
Topic: 5591 Message: 5591

another small video to show my home made loop in action ... many thanks david ..... scotland uk
http://www.youtube.com/watch?v=SRrPUBw3hwQ

5592. Re: [loopantennas] loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-08-31 10:24:02 UTC
From: Brent Taylor
Topic: 5591 Message: 5592

Great clip, David...and I enjoyed your other YouTube clips also!

Brent Taylor, VY2HF
Stratford, Prince Edward Islans
Canada

----- Original Message -----
From: DAVID
To: loopantennas@yahoogroups.com
Sent: Sunday, August 31, 2008 5:28 AM
Subject: [loopantennas] loop antenna

another small video to show my home made loop in action ... many
thanks david ..... scotland uk
http://www.youtube.com/watch?v=SRrPUBw3hwQ

5593. another loop update

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 19:00:16 UTC
From: DAVID
Topic: 5593 Message: 5593

here is the north/south east/west loop together many thanks david
http://www.youtube.com/watch?v=2HPKXRM5NPo

5594. Delbert Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 19:54:37 UTC
From: chas
Topic: 5594 Message: 5594

anyone know what this is?
how well does it work?
comments pro or con?
off list if you wish<G>

thanks
73 de chas

5595. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 19:59:07 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 5595

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

5596. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 19:59:07 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 5596

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

5597. Re: [loopantennas] Delbert Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 20:24:05 UTC
From: n5ztw@texasdata.net
Topic: 5594 Message: 5597

Try this link
http://delbertloops.com/DelbertLoops.html
I have worked Delbert on 2M SSB before. He is in Houston I'm
west of Austin aprox 250 miles apart. I met him once at a
local Hamfest. I had to shake his hand because he is the
only other "Delbert" I have worked on the air! I know his
antennas are popular in this area.
the other Delbert, N5ZTW

----- Original Message Follows -----
From: chas <chasm@...>
To: undisclosed-recipients:;
Subject: [loopantennas] Delbert Loop Antennas
Date: Mon, 01 Sep 2008 14:54:37 -0500

> anyone know what this is?
> how well does it work?
> comments pro or con?
> off list if you wish<G>
>
> thanks
> 73 de chas
>

5598. Re: [loopantennas] another loop update

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 20:32:04 UTC
From: aimo ruoho
Topic: 5593 Message: 5598

There were 128 videos available!
Which one is the video that you wanted us to see?

----- Original Message ----
From: DAVID <dhamilton1@...>
To: loopantennas@yahoogroups.com
Sent: Monday, September 1, 2008 9:00:16 PM
Subject: [loopantennas] another loop update

here is the north/south east/west loop together many thanks david
http://www.youtube. com/watch? v=2HPKXRM5NPo

[Non-text portions of this message have been removed]

5599. Re: [loopantennas] another loop update

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 20:40:26 UTC
From: david/lorraine
Topic: 5593 Message: 5599

this one http://www.youtube.com/watch?v=2HPKXRM5NPo
----- Original Message -----
From: aimo ruoho
To: loopantennas@yahoogroups.com
Sent: Monday, September 01, 2008 9:32 PM
Subject: Re: [loopantennas] another loop update

There were 128 videos available!
Which one is the video that you wanted us to see?

----- Original Message ----
From: DAVID <dhamilton1@...>
To: loopantennas@yahoogroups.com
Sent: Monday, September 1, 2008 9:00:16 PM
Subject: [loopantennas] another loop update

here is the north/south east/west loop together many thanks david
http://www.youtube. com/watch? v=2HPKXRM5NPo

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5600. Re: [loopantennas] Wideband Loop Antenna Matching Networks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 20:46:58 UTC
From: crabtreejr@aol.com
Topic: 5507 Message: 5600

In a message dated 8/17/08 8:01:27 PM Central Daylight Time,
christrask@... writes:
> After quite a bit of work, I've come to a conclusion regarding the
> practicality of passive wideband matching networks for loop antennas.
> Basically, the high Q of the loop antenna impedance makes the realization of
> such matching networks a formidable task. Along the way, I came up with a
> balanced network section that I cannot find in any textbook that I have
> here. Despite this, the results of this was disappointing, to say the
> least. However, I wrote a fairly full description of the approach that I
> had the most success with, and it's available at:
>
> http://tinyurl.com/5693jc
>
> > snip>
> Chris

On a point of detail, Wellbrook does not make the WL1030 antenna (page 2).

73 John KC0G

****
It's only a deal if it's where you want to go. Find your travel
deal here.

(http://information.travel.aol.com/deals?ncid=aoltrv00050000000047)

[Non-text portions of this message have been removed]

5601. Re: [loopantennas] Wideband Loop Antenna Matching Networks

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-01 20:56:32 UTC
From: Chris Trask
Topic: 5507 Message: 5601

```
> In a message dated 8/17/08 8:01:27 PM Central Daylight Time,
> christrask@... writes:
> > After quite a bit of work, I've come to a conclusion regarding the
> > practicality of passive wideband matching networks for loop antennas.
> > Basically, the high Q of the loop antenna impedance makes the
realization of
> > such matching networks a formidable task. Along the way, I came up with
a
> > balanced network section that I cannot find in any textbook that I have
> > here. Despite this, the results of this was disappointing, to say the
> > least. However, I wrote a fairly full description of the approach that I
> > had the most success with, and it's available at:
> >
> > http://tinyurl.com/5693jc
> >
> > > snip>
> > Chris
>
> On a point of detail, Wellbrook does not make the WL1030 antenna (page 2).
>
> 73 John KC0G
>

So I've heard since then. The web page that showed that schematic with
the two current feedback amplifiers wasn't entirely clear.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

5602. Re: Delbert Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-02 18:02:45 UTC
From: Hiram
Topic: 5594 Message: 5602

Thanks for the link. It looks like a folded dipole wrapped around into
a circle. Pretty cool, I wish Delbert put some more specific data on
his website.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "n5ztw@..." <n5ztw@...> wrote:
>
> Try this link
> http://delbertloops.com/DelbertLoops.html
> I have worked Delbert on 2M SSB before. He is in Houston I'm
> west of Austin aprox 250 miles apart. I met him once at a
> local Hamfest. I had to shake his hand because he is the
> only other "Delbert" I have worked on the air! I know his
> antennas are popular in this area.
> the other Delbert, N5ZTW
>
> ----- Original Message Follows -----
> From: chas <chasm@...>
> To: undisclosed-recipients:;
> Subject: [loopantennas] Delbert Loop Antennas
> Date: Mon, 01 Sep 2008 14:54:37 -0500
>
> > anyone know what this is?
> > how well does it work?
> > comments pro or con?
> > off list if you wish<G>
> >
> > thanks
> > 73 de chas
> >
>

5603. Re: [loopantennas] Re: Delbert Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-02 18:12:30 UTC
From: Chris Trask
Topic: 5594 Message: 5603

```
>
> > Try this link
> > http://delbertloops.com/DelbertLoops.html
> > I have worked Delbert on 2M SSB before. He is in Houston I'm
> > west of Austin aprox 250 miles apart. I met him once at a
> > local Hamfest. I had to shake his hand because he is the
> > only other "Delbert" I have worked on the air! I know his
> > antennas are popular in this area.
> > the other Delbert, N5ZTW
>
>
> Thanks for the link. It looks like a folded dipole wrapped around into
> a circle. Pretty cool, I wish Delbert put some more specific data on
> his website.
>

My first impression was that it was a balanced form of a halo antenna.
Every bit as cool as a circular folded dipole.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

5604. Re: [loopantennas] Re: Delbert Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-02 19:24:05 UTC
From: n5ztw@texasdata.net
Topic: 5594 Message: 5604

I thought the same, a DB products bent around a light pole!
I've seen alot of them around however.
Del N5ZTW

----- Original Message Follows -----
From: "Hiram" <daveleb55@...>
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: Delbert Loop Antennas
Date: Tue, 02 Sep 2008 18:02:45 -0000

> Thanks for the link. It looks like a folded dipole wrapped
> around into a circle. Pretty cool, I wish Delbert put some
> more specific data on his website.
>
> Pappy Hiram
>
>
>
>
> --- In loopantennas@yahoogroups.com, "n5ztw@..."
> <n5ztw@...> wrote: >
> > Try this link
> > http://delbertloops.com/DelbertLoops.html
> > I have worked Delbert on 2M SSB before. He is in Houston
> > I'm west of Austin aprox 250 miles apart. I met him once
> > at a local Hamfest. I had to shake his hand because he
> > is the only other "Delbert" I have worked on the air! I
> > know his antennas are popular in this area.
> > the other Delbert, N5ZTW
> >
> > ----- Original Message Follows -----
> > From: chas <chasm@...>
> > To: undisclosed-recipients:;
> > Subject: [loopantennas] Delbert Loop Antennas
> > Date: Mon, 01 Sep 2008 14:54:37 -0500
> >
> > > anyone know what this is?
> > > how well does it work?
> > > comments pro or con?
> > > off list if you wish<G>
> > >
> > > thanks
> > > 73 de chas
> > >
> >

>
>
>

5605. Wiring question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-02 19:30:56 UTC
From: trident_3b
Topic: 5605 Message: 5605

Hi,

I've bought a replacement unipolar stepper motor for my AEA Isoloop
and it has 6 wires (White, Yellow, Orange, Grey, Black and Brown). The
LC-2 controller has 4 (White, Green, Red and Black).
I believe a unipolar motor can also be employed as a bipolar motor.
Can anyone tell me how they match up...?!

MTIA,
Andrew

5606. Re: [loopantennas] Wiring question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-02 21:27:53 UTC
From: John Popelish
Topic: 5605 Message: 5606

trident_3b wrote:
> Hi,
>
> I've bought a replacement unipolar stepper motor for my AEA Isoloop
> and it has 6 wires (White, Yellow, Orange, Grey, Black and Brown). The
> LC-2 controller has 4 (White, Green, Red and Black).
> I believe a unipolar motor can also be employed as a bipolar motor.
> Can anyone tell me how they match up...?!

I would be absolutely amazed if there was a world wide color code standard for step motor lead wires. But 6 and 8 lead unipolar, 4 phase motors can certainly be used with bipolar drivers. It is the 5 lead motors that cannot easily be driven as bipolars.

To make the motor step, both of its two phases must be magnetizable in each of two directions (and possibly not magnetized at all). Bipolar drivers can do this with only one winding per phase, since they can drive that winding in either direction. But unipolar drive requires two coils (one wound each way), so that you can use one or the other with similar drive to produce both magnetization polarities. The effective center tap of this pair of windings connected in series is the common connection for the two unipolar drive current paths.

If you just disconnect that center tap, and drive the series pair of windings with a bipolar driver, you get the two magnetization directions. Since those drive amperes are passing through twice as many turns as when the unipolar winding uses only one half at a time, it takes only half the unipolar drive current to get the same torque with bipolar drive. But it also takes twice the applied voltage to get that torque (at the half current) at the same speed, because the two windings in series have 4 times the inductance and the back EMF of the windings is a per turn effect, so twice the turns generates twice the back EMF.

There are also some 8 lead steppers that are universal replacement types, that can have their 2 phases of half windings connected in series for unipolar or high voltage, low current bipolar use, or connected in parallel for bipolar, low voltage, high current use. I have also pulled the ends of some 6 lead unipolar motors and separated one of the half windings from the center tap lead and attached the other to a new lead, making an 8 lead motor out of it.

In your case, you find the two pairs of leads that produce
the higher resistance readings to act as the ends of bipolar
driven windings. Just tape up the other two leads (the
winding center taps).

--
Regards,

John Popelish

5607. Re: [loopantennas] Re: Delbert Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-03 03:18:34 UTC
From: chas
Topic: 5594 Message: 5607

Hiram wrote:
> Thanks for the link. It looks like a folded dipole wrapped around into
> a circle. Pretty cool, I wish Delbert put some more specific data on
> his website.
> Pappy Hiram

HERE is a bit of information from Delbert...

>> The gain is approximately 2 db and if you put two of them together it is probably 5.
>> They can be stacked together without a problem.
>> I have plenty of them. They cost $65 each.
> > Thanks,
>> Delbert
>> K5DDD

73 de chas k5dam

//

5608. Re: for sale Wellbrook ala 1530+

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-03 14:12:55 UTC
From: Briggs Longbothum
Topic: 5526 Message: 5608

--- In loopantennas@yahoogroups.com, "spudie14" <riches1234@...> wrote:
>
> Just a quick add for any one that might be intrested in buying my
> wellbrook loop just dont have time for shortwave anymore if your
> intrested drop me an email thanks Edd
>
I have written to you twice now with an interest in your FS ALA 1530+
as you had advertised here recently. Please RSVP asap if it is still
available, what you need for it, and shipping to 01930.

The courtesy of your reply would be greatle appreciated.

Briggs Longbothum, ab2nj (Bruggo "at" verizon.net)

5609. horizontal or vertical

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-03 15:02:35 UTC
From: DAVID
Topic: 5609 Message: 5609

just noticed on my multi turn loop i have fed it in the bottom corner and correct me if i am wrong but on a normal hf or vhf loop this would be a mix of horizonta/vertical does this work the same way on a multi turn mw loop or will i need to feed it in the middle of the horizontal section to get horizontal pol. thanks for your time david

5610. Re: [loopantennas] Re: for sale Wellbrook ala 1530+

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-03 15:51:39 UTC
From: W DAVISON
Topic: 5526 Message: 5610

hi how much do you want for it and how much for shipping to scotland thanks

Briggs Longbothum <bruggo@...> wrote: --- In loopantennas@yahoogroups.com, "spudie14" <riches1234@...> wrote:
>
> Just a quick add for any one that might be intrested in buying my
> wellbrook loop just dont have time for shortwave anymore if your
> intrested drop me an email thanks Edd
>
I have written to you twice now with an interest in your FS ALA 1530+
as you had advertised here recently. Please RSVP asap if it is still
available, what you need for it, and shipping to 01930.

The courtesy of your reply would be greatle appreciated.

Briggs Longbothum, ab2nj (Bruggo "at" verizon.net)

[Non-text portions of this message have been removed]

5611. Re: [loopantennas] another loop update

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-03 20:17:31 UTC
From: aimo ruoho
Topic: 5593 Message: 5611

I mean: What is the name of your video?
I have searched twice the address, that you gave me, but every time I go to youtube, they demand me to install a certain program, which never works!
This never happened before.
I have used youtube many, many times before, but it does not give me any videos now.
It would have been very interesting to see your famous video. but as things are now, no nothing!
Amigo

----- Original Message ----
From: david/lorraine <dhamilton1@...>
To: loopantennas@yahoogroups.com
Sent: Monday, September 1, 2008 10:40:26 PM
Subject: Re: [loopantennas] another loop update

this one http://www.youtube. com/watch? v=2HPKXRM5NPo
----- Original Message -----
From: aimo ruoho
To: loopantennas@ yahoogroups. com
Sent: Monday, September 01, 2008 9:32 PM
Subject: Re: [loopantennas] another loop update

There were 128 videos available!
Which one is the video that you wanted us to see?

----- Original Message ----
From: DAVID <dhamilton1@tiscali. co.uk>
To: loopantennas@ yahoogroups. com
Sent: Monday, September 1, 2008 9:00:16 PM
Subject: [loopantennas] another loop update

here is the north/south east/west loop together many thanks david
http://www.youtube. com/watch? v=2HPKXRM5NPo

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5612. Re: [loopantennas] another loop update

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-03 21:55:32 UTC
From: Jeff
Topic: 5593 Message: 5612

I can view video just fine with the provided link.
Might try a virus scan.

Jeff

aimo ruoho wrote:
>
>
> I mean: What is the name of your video?
> I have searched twice the address, that you gave me, but every time I go
> to youtube, they demand me to install a certain program, which never works!
> This never happened before.
> I have used youtube many, many times before, but it does not give me any
> videos now.
> It would have been very interesting to see your famous video. but as
> things are now, no nothing!
> Amigo

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.169 / Virus Database: 270.6.16/1650 - Release Date: 9/3/2008 4:13 PM

[Non-text portions of this message have been removed]

5613. Re: [loopantennas] another loop update

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-03 20:46:51 UTC
From: Paul
Topic: 5593 Message: 5613

http://www.youtube.com/watch?v=2HPKXRM5NPo

----- Original Message -----
From: aimo ruoho
To: loopantennas@yahoogroups.com
Sent: Wednesday, September 03, 2008 10:17 PM
Subject: Re: [loopantennas] another loop update

I mean: What is the name of your video?
I have searched twice the address, that you gave me, but every time I go to youtube, they demand me to install a certain program, which never works!
This never happened before.
I have used youtube many, many times before, but it does not give me any videos now.
It would have been very interesting to see your famous video. but as things are now, no nothing!
Amigo

----- Original Message ----
From: david/lorraine <dhamilton1@...>
To: loopantennas@yahoogroups.com
Sent: Monday, September 1, 2008 10:40:26 PM
Subject: Re: [loopantennas] another loop update

this one http://www.youtube. com/watch? v=2HPKXRM5NPo
----- Original Message -----
From: aimo ruoho
To: loopantennas@ yahoogroups. com
Sent: Monday, September 01, 2008 9:32 PM
Subject: Re: [loopantennas] another loop update

There were 128 videos available!
Which one is the video that you wanted us to see?

----- Original Message ----
From: DAVID <dhamilton1@tiscali. co.uk>
To: loopantennas@ yahoogroups. com
Sent: Monday, September 1, 2008 9:00:16 PM
Subject: [loopantennas] another loop update

here is the north/south east/west loop together many thanks david
http://www.youtube. com/watch? v=2HPKXRM5NPo

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.169 / Virus Database: 270.6.15/1648 - Release Date: 9/2/2008 5:29 PM

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.169 / Virus Database: 270.6.15/1648 - Release Date: 9/2/2008 5:29 PM

[Non-text portions of this message have been removed]

5614. Single turn vs Double Turns

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-04 06:10:26 UTC
From: oh6bi
Topic: 5614 Message: 5614

Hello all.

I built the rockloop based on dl1gsj article.
(http://www.qsl.net/dl1gsj/html/rockloop.html)
Thanks Joachim.

The condensator i used is butterfly 2x40 pF, toroid is made by Philips, I dont know the specs. I used it like in series - 3 to 20pF, and I was able to run even 100 Watts , no sparking in cap and no heating in the toroid. First test was sidelengths abt 80 cm, loop was working nicely from 18 MHz to 29 MHz. I made some local QSOs at 10m with good reports.

But my favourite band is 14 MHz, so I put some more wire to the loop sides abt 90 cm and got the resonance at 20m. Same time I loost 28 MHz.

I made some calculations: with the same length of loop wire I could make two turns and reach lower resonance freq. to reach lower band with same material. Goeing to test it in the evening.

My question is : what happens to system when using two turns, shall the efficiency drop down compared to one turn loop ?

73s de rami, oh6bi

5615. Re: [loopantennas] Single turn vs Double Turns

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-04 13:39:34 UTC
From: Chris Trask
Topic: 5614 Message: 5615

>
>But my favourite band is 14 MHz, so I put some more wire to the loop
>sides abt 90 cm and got the resonance at 20m. Same time I loost 28
>MHz.
>
>I made some calculations: with the same length of loop wire I could
>make two turns and reach lower resonance freq. to reach lower band
>with same material. Goeing to test it in the evening.
>
>My question is : what happens to system when using two turns, shall
>the efficiency drop down compared to one turn loop ?
>
>73s de rami, oh6bi
>

Yes, the efficiency will decrease as the number of turns increases. For 20M, you can use a 64cm diameter loop and get good efficiency. The larger the diameter of the conductor, the better the efficiency.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5616. Rock Loop agn

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-05 06:58:27 UTC
From: oh6bi
Topic: 5616 Message: 5616

Hi All !

After several messages and replies in Yahoo Groups:
CW-QRP (ex codewarriors), hfpack, loopantennas and MQFD

I apreciate good replies and information what I got from all of you
guys !!

I decided to make this message for all because different
replies in different groups, so that everyone can see the result.

In very first messge in hfpack I asked info abt magloops.
After that I decided to make RockLoop:

I built the rockloop based on dl1gsj article.
(http://www.qsl.net/dl1gsj/html/rockloop.html)
Thanks Joachim.

The condensator I used is butterfly 2x40 pF, toroid is made by
Philips, I dont know the specs. I used capacitor like in series - 3
to 20pF, and I was able to run even 100 Watts , no sparking in cap
and no heating in the toroid. The loop side has 5 turns and coax side
has 20 turns. Tested other number of turns both sides and this gave
best swr with philips.
Loop Wire is 1.5 sqmm tinned copper and the coax side wire is .5 sqmm
copper, both standard insulated electric installation wires.

First test was sidelengths abt 80 cm, loop was working nicely
from 18 MHz to 29 MHz. I made some local QSOs at
10m with good reports. But my favourite band is 14 MHz,
so I put some more wire to the loopsides abt 90 cm and got the
resonance at 20m. Same time I lost 28 MHz.

Problem is the capacitor, needed bigger one,
Because nowdays it is difficult to find good variables from here
I tried to solve 14 MHz this time by giving more inductance to
get resonance frequency lower using same components.
I used some programs to find out how much does the inductance grow
when making two turns from same flexible loop radiator.
I got inductance more than double of the original loop and
resonance will go even lower than needed 14 MHz.
I already knew some things with big loops near the wavelength,
radiation resictance and the area of loop are important.

OK , it is clear that making double ring that reduses the loop area
will drop the efficiency, but I didnt know how much. Anyway that loop
size I am using is not so good with 14 MHz compared to 28 MHz, just

to get it working there. In this case loss resistance stays same ,
frequency and area are different. Q will also change.

Some programs are giving efficiency for 1 m diameter loop :
28 MHz 85 percent eff. and 14 MHz 33 percent eff. .

I made double turn question to find info and opinnions from the
groups.

After that I found from aa5tb web site good information.
These formulas, copied from http://www.aa5tb.com/loop.html
are giving good mathematical answers:

Radiation Resistance, Ohms: RR = (3.38×10↑-8)(f²A)²
Loss Resistance, Ohms: RL = (9.96×10↑-4)(√f)(S/d)
Efficiency: η; = RR/(RR+RL)
Inductance, Henrys: L = (1.9×10↑-8)S[7.353log10(96S/πd)-
6.386]
Inductive Reactance, Ohms: XL = 2πf(L×10□3;6)
Tuning Capacitor, Farads: CT = 1/2πf(L×↑6)
Quality Factor: Q = (f×10↑6)/Δf = XL/2(RR + RL)
Bandwidth, Hertz: [6;f = (f×10↑6)/Q = [(f1-f2)×10↑6]
Distributed Capacity: pF: CD = 0.82S
Capacitor Potential, Volts: VC = √(PXLQ)
Capacitor Voltage Rating: 75,000V/in

where
f = operating frequency, MHz
A = area of loop, square feet
S = conductor length, feet
d = conductor diameter, inches
η = decimal value; dB = 10 log10η
P = transmitter power, Watts

It was tricky thing to make turns double.. you can try it with
piece of rope. In normal position the capacitor is at the top of the
loop and toroid is down. Making two turns moves toroid to the top
with capacitor.
So, I made triple turns and got toroid to correct place down.
I made new loopwire with original 80 cm sidelengths and
before changing turns I made measurings and got resonances at
28, 24, 21 and 18 MHz . Three turns model was resonating from
11,7 to 16.5 MHz. At 14 MHz resonance was good and strong.
But Loop diameter came quite small, so I didnt try to make QSOs.

At Alexandres web site you can see good way to solve capacitor
problem:
http://hps.infolink.com.br/py1ahd/gallery19.htm

Also Joachim suggested extra capacitors. Now I have to go local shop
to find good capasitors for lower bands.
Values I vill test are 10 pF, 20pF, 30pF and 40pF.
I am not sure if this local shop has silver micas but at least
they have polystyrene models.

Best regards and 73s de rami, oh6bi

5617. loop info

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-06 08:18:10 UTC
From: DAVID
Topic: 5617 Message: 5617

hi i am not sure if someone from the group told me if i feed my loop in the corner and put a variable capacitor in the other corner and tune for a null with the variable capacitor this changes the figure of eight pattern to one with the maximum direction to the oposite side of the variable capacitor ie the coax feed point. can anyone confirm this. many thanks in advance david

5618. Re: [loopantennas] loop info

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-06 18:52:37 UTC
From: aimo ruoho
Topic: 5617 Message: 5618

To know is either to ask or, even better, to try and test oneself...
Only time will be lost, but often good results received.
That is one of the secrets to gain more self-confidence and self-esteem.

By the way, did you notice the Loop called Mini-K9AY?

It is a loop, which attenuates one direction while amplifies
the opposite direction. The figure 8 is no more there, only the other half!
Amplification varies between -60 dB on MW to -35 dB on the lower SW.
Attenuation from the opposite direction may be between 15-25 dB!

Just what I have been thinking and hoping for years!

The smallest version is only 1,5 meters high and 1,0 meter broad.
It is turnable and when used with a rotator, it can be on the roof
or yard. In the attic it will work very well also.

I thought, that a bigger version (2,5 x 2,0 m) might give a little stronger signal,
but a better idea here may be to continue to use the Wellbrook ALA 100M
(serial number 0009) all-band-amplifier to boost the incoming signal,
because it is a very quiet one. I was really surprised to notice this, because
I did not know, that the 100M would like to be used with so short a wire,
3,69 metres!
The longer version would demand only twice that, 7,38 meters...

This "Mini-Master" uses a resistor on one of the lower sides and
a small Toroid or iron powder ring on the other. It works well with
a coaxial cable and therefor an A.T.U. is not necessary, but I want to use one,
because it amplifies a little more the signals here.

Thanks for your videos, David and good luck for your efforts in your hobby!

Ami

----- Original Message ----
From: DAVID <dhamilton1@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, September 6, 2008 10:18:10 AM
Subject: [loopantennas] loop info

hi i am not sure if someone from the group told me if i feed my loop
in the corner and put a variable capacitor in the other corner and
tune for a null with the variable capacitor this changes the figure of
eight pattern to one with the maximum direction to the oposite side of
the variable capacitor ie the coax feed point. can anyone confirm
this. many thanks in advance david

[Non-text portions of this message have been removed]

5619. Kiwa MW Air Core Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-07 15:43:50 UTC
From: billmagness
Topic: 5619 Message: 5619

New to the group....I've just been lucky enough to pick up both a JRC NRD 535 and 545. I am looking for a KIWA Air Core Loop antenna. If anyone knows of any sources, please feel free to drop me a note.

Good to be a part of the group and I wish every body good luck.

Regards,
Bill

5620. RE: [loopantennas] Kiwa MW Air Core Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-07 19:56:46 UTC
From: Fredric J. Einstein
Topic: 5619 Message: 5620

I have one for sale. $500 plus shipping. Contact me if interested.

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of billmagness
Sent: Sunday, September 07, 2008 11:44 AM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Kiwa MW Air Core Loop Antenna

New to the group....I've just been lucky enough to pick up both a JRC NRD 535 and 545. I am looking for a KIWA Air Core Loop antenna. If anyone knows of any sources, please feel free to drop me a note.

Good to be a part of the group and I wish every body good luck.

Regards,
Bill

[Non-text portions of this message have been removed]

5621. Kaito KA-31 active loop user instruction manual

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 01:17:33 UTC
From: deepwater355
Topic: 5621 Message: 5621

Can anyone tell me where I can download a copy of the users manual for the Kaito KA-31 active loop antenna. Thanks.

5622. AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 19:33:45 UTC
From: xxxalexxxisxxx
Topic: 5622 Message: 5622

Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but still is noisy. My goal is clear reception of the 560 am approx. 75 mi. away. Got some litz wire and want to make best use of it. Thank You, Alexis.

5623. Re: [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 20:02:37 UTC
From: Chris Trask
Topic: 5622 Message: 5623

>
> Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> still is noisy. My goal is clear reception of the 560 am approx. 75
> mi. away. Got some litz wire and want to make best use of it. Thank
> You, Alexis.
>

Matching the antenna to the load and using narrow-band tuning can make a great deal of difference in the S/N ratio. I did just that for an HF loop recently:

http://www.home.earthlink.net/~christrask/Paper011.html

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5624. Re: ***SPAM*** [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 20:09:02 UTC
From: EDUARDO L. CASTALDELLI
Topic: 5624 Message: 5624

Hi,
please see the site www.radiodx.qsl.br/escutas.htm. Have a small loop OM20-E, is a copy of chinese antenna, ís small and not have noisy, but is necessary the amplifier of rf.
Escuse my english.

Respectfully,

Eduardo
----- Original Message -----
From: xxxalexxxisxxx
To: loopantennas@yahoogroups.com
Sent: Monday, September 08, 2008 4:33 PM
Subject: ***SPAM*** [loopantennas] AM Loop

Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
still is noisy. My goal is clear reception of the 560 am approx. 75
mi. away. Got some litz wire and want to make best use of it. Thank
You, Alexis.

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.6.19/1659 - Release Date: 8/9/2008 07:01

[Non-text portions of this message have been removed]

5625. Re: [loopantennas] Re: Delbert Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 20:09:24 UTC
From: Paul V Birke PEng
Topic: 5594 Message: 5625

----- Original Message ----
From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, September 2, 2008 2:12:30 PM
Subject: Re: [loopantennas] Re: Delbert Loop Antennas

>
> > Try this link
> > http://delbertloops .com/DelbertLoop s.html
> > I have worked Delbert on 2M SSB before. He is in Houston I'm
> > west of Austin aprox 250 miles apart. I met him once at a
> > local Hamfest. I had to shake his hand because he is the
> > only other "Delbert" I have worked on the air! I know his
> > antennas are popular in this area.
> > the other Delbert, N5ZTW
>
>
> Thanks for the link. It looks like a folded dipole wrapped around into
> a circle. Pretty cool, I wish Delbert put some more specific data on
> his website.
>

My first impression was that it was a balanced form of a halo antenna.
Every bit as cool as a circular folded dipole.

Chris

dear chris

my understanding is that these do not offer much gain, the halo or its folded dipole
version

best
Paul

[Non-text portions of this message have been removed]

5626. Re: [loopantennas] Re: Delbert Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 20:17:40 UTC
From: Paul V Birke PEng
Topic: 5594 Message: 5626

is that dBi or dBd?

best

Paul

[Non-text portions of this message have been removed]

5627. Re: [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 20:31:32 UTC
From: Jay Heyl
Topic: 5622 Message: 5627

On Mon, Sep 8, 2008 at 3:33 PM, xxxalexxxisxxx <alexdsmith@...> wrote:
> Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> still is noisy. My goal is clear reception of the 560 am approx. 75
> mi. away. Got some litz wire and want to make best use of it. Thank

Loops are usually among the best at rejecting locally generated noise,
but they are no immune. If you have a lot of RF noise in your area,
the antenna is going to pick some of it up.

Depending on the power and antenna pattern of the station in question,
you may also be asking for something that simply isn't possible
without going to extreme measures.

Perhaps you can give us a bit more information about your situation.
What kind of noise are you hearing? Do you hear it on neighboring
stations as well? What radio are you using? Can you put the antenna
outside or must it be an indoor antenna? Which station are you trying
to hear and approximately where do you live in relation to the
transmitter? (Or check the antenna pattern at
http://www.radio-locator.com/cgi-bin/home to see if you should be
within the station's reception area.)

-- Jay

5628. Re: [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 20:39:55 UTC
From: alexis smith
Topic: 5622 Message: 5628

Chris Trask wrote:

> >
> > Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> > still is noisy. My goal is clear reception of the 560 am approx. 75
> > mi. away. Got some litz wire and want to make best use of it. Thank
> > You, Alexis.
> >
>
> Matching the antenna to the load and using narrow-band tuning can make a
> great deal of difference in the S/N ratio. I did just that for an HF loop
> recently:
>
> http://www.home.earthlink.net/~christrask/Paper011.html
> <http://www.home.earthlink.net/%7Echristrask/Paper011.html>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> <mailto:christrask%40earthlink.net>
> | | | | \ '. http://www.home.earthlink.net/~christrask
> <http://www.home.earthlink.net/%7Echristrask>
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>

Thank You ; I will study this, Alexis.

5629. Re: [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 21:08:25 UTC
From: alexis smith
Topic: 5622 Message: 5629

Jay Heyl wrote:

> On Mon, Sep 8, 2008 at 3:33 PM, xxxalexxxisxxx
> <alexdsmith@... <mailto:alexdsmith%40bellsouth.net>> wrote:
> > Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> > still is noisy. My goal is clear reception of the 560 am approx. 75
> > mi. away. Got some litz wire and want to make best use of it. Thank
>
> Loops are usually among the best at rejecting locally generated noise,
> but they are no immune. If you have a lot of RF noise in your area,
> the antenna is going to pick some of it up.
>
> Depending on the power and antenna pattern of the station in question,
> you may also be asking for something that simply isn't possible
> without going to extreme measures.
>
> Perhaps you can give us a bit more information about your situation.
> What kind of noise are you hearing? Do you hear it on neighboring
> stations as well? What radio are you using? Can you put the antenna
> outside or must it be an indoor antenna? Which station are you trying
> to hear and approximately where do you live in relation to the
> transmitter? (Or check the antenna pattern at
> http://www.radio-locator.com/cgi-bin/home
> <http://www.radio-locator.com/cgi-bin/home> to see if you should be
> within the station's reception area.)
>
> -- Jay
>
>

Hi Jay; The station I want to get clearly is WQAM Miami, I live in WPB FL, The link You sent shows me just out of local coverage area. I can and do use my box antenna outside, I only have trouble with neighbor station at night. I use a CC radio and Adcom gtp 500. Most of the noise I hear is static. Thank You Alexis.

5630. Re: Kaito KA-31 active loop user instruction manual

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 22:14:03 UTC
From: tenorman1952
Topic: 5621 Message: 5630

--- In loopantennas@yahoogroups.com, "deepwater355" <deepwater355@...>
wrote:
>
> Can anyone tell me where I can download a copy of the users manual
for
> the Kaito KA-31 active loop antenna. Thanks.
>

There is no manual, as such. The directions are printed on a card in
the display pack.

I'll post a scan of the card in Files section. Mine is the Degen 31MS
version, but it is the same as the Kaito.

Paul C.
tenorman1952

5631. Re: ***SPAM*** [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 22:14:29 UTC
From: airchecklover
Topic: 5624 Message: 5631

HI Eduardo;

That link didn't work. I found loops here instead ...

http://www.radiodx.qsl.br/montagens.htm

Are these what you meant? They look great.

Mark

==========

> Hi,
> please see the site www.radiodx.qsl.br/escutas.htm. Have a small
loop OM20-E, is a copy of chinese antenna, ís small and not have
noisy, but is necessary the amplifier of rf.
> Escuse my english.
>
> Respectfully,
>
> Eduardo
> ----- Original Message -----
> From: xxxalexxxisxxx
> To: loopantennas@yahoogroups.com
> Sent: Monday, September 08, 2008 4:33 PM
> Subject: ***SPAM*** [loopantennas] AM Loop
>
>
> Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> still is noisy. My goal is clear reception of the 560 am approx. 75
> mi. away. Got some litz wire and want to make best use of it. Thank
> You, Alexis.
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it
in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG
and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
uploading.

> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG.
> Version: 7.5.524 / Virus Database: 270.6.19/1659 - Release Date:
8/9/2008 07:01
>
>
> [Non-text portions of this message have been removed]
>

5632. Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 22:30:22 UTC
From: tenorman1952
Topic: 5622 Message: 5632

--- In loopantennas@yahoogroups.com, "xxxalexxxisxxx" <alexdsmith@...>
wrote:
>
> Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> still is noisy. My goal is clear reception of the 560 am approx. 75
> mi. away. Got some litz wire and want to make best use of it. Thank
> You, Alexis.

See my folder Loop Kits in the Photo section. The MTM Scientific AM Loop is approximately 17" x 17" (24" on the diagonal) with 15 turns at 1/8" spacing. The tuning capacitor is a standard 9.6-365 pf tuning cap. There is a 1 turn pickup loop just inside of the 15 turn loop.

http://www.mtmscientific.com/loop.html

http://www.mtmscientific.com/pickup.html

Well, whatdya know? If you click Photos by Customers, that is mine at the top of that page! I didn't know that until just now.

The pickup loop shown is probably better than what I did. You could also make a coax pickup loop, making a, say, 10" dia loop on the end, soldering the center conductor of the very end back to the shield of the coax. I've made pickup loops like that and they work well.

Of course, dimensions may be altered, but that will change the number of turns required, too. I have read comments from those that experimented with sizes that beyond a 2' loop, there are diminishing returns, that is, a 4' loop is not much better than a 2', but I have not built any larger.

So, what is the best loop? I don't know, and I don't think anyone here knows... but there are a number of good designs. And this is THE place to share ideas, see what others are doing, find out what works, what doesn't.

Paul C.

5633. Re: [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 23:05:37 UTC
From: Jay Heyl
Topic: 5622 Message: 5633

On Mon, Sep 8, 2008 at 5:08 PM, alexis smith <alexdsmith@...> wrote:

> Hi Jay; The station I want to get clearly is WQAM Miami, I live in WPB
> FL, The link You sent shows me just out of local coverage area. I can
> and do use my box antenna outside, I only have trouble with neighbor
> station at night. I use a CC radio and Adcom gtp 500. Most of the noise
> I hear is static. Thank You Alexis.

You should be able to hear WQAM on the CCRadio without any trouble at all. You certainly shouldn't need a giant loop. If anything, that's going to overload the CCRadio. I have to think if you're getting a lot of noise in the signal it almost has to be coming from a local source. Have you tried taking a walk with the radio to see what it sounds like outside and at different spots in your neighborhood? Do you get the same or similar noise on other stations? Do you normally use the radio plugged in to AC or on battery? Does it sound different on battery?

If you don't want to walk around with the CCRadio, I recommend getting a Sony SRF-59 for portable use with earphones. It's a great little radio you can get at most Kmarts for $15. Do not let the cheap looks fool you. There's a radio giant lurking under that cheap exterior.

If outside reception is okay, then walk around the house with the radio and see if the noise gets stronger or weaker. I used to have a "green plug" behind my refrigerator that turned out to be a huge source of RFI. I located it using a portable SW radio with the antenna fully retracted. When I got rid of that thing my noise level dropped about 5 s-points.

Really, WQAM should be no problem for you. I'm pretty sure I can get them here in Orlando. It's not a great signal, but it's there.

If you can't locate and eliminate a noise source, I would suggest trying a small, tuned loop similar to the Terk or the Select-A-Tenna. You should be able to inductively couple it to the CCRadio, so just put the loop near the radio and tune the antenna to peak the radio signal on that frequency. You can build your own tuned loop for about $15 in parts. There are plans all over the Internet. (I'd start in the file section for this group.)

-- Jay

5634. Re:AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 23:08:56 UTC
From: gmcjetpilot@yahoo.com
Topic: 5622 Message: 5634

Why do you want to listen to the station? Is it technical challenge only or programing you like. You will understand the question as you read below.

What they said, they just may be too week, far and conditions / environment (terrain, RFI far-dist) prevents clean reception.

Hate to say it, have you tried the Internet? Many stations have streaming content.

http://www.radio-locator.com/

Go to link and put the info in and select fringe stations. If it does not show up that is your first clue it is outside their fringe coverage area. If the station does not show, put in the zip code of the town the station is in and try again.

(*** NOTE: THERE IS A LINK TO THE STATIONS COVERAGE MAPS, DAY AND NIGHT. THAT ALONE MIGHT TELL YOU IF THERE IS ANY CHANCE YOU ARE ABLE TO GET THE STATION CLEANLY.)

**** Ignore below if you're JUST trying the Station as a technical challenge ****

When you see the station you will see some info and links to their web page and a icon indicating if they have streaming audio. IF THE STATION has a web page and simultaneous streaming audio of their programing you can go there and listen all day long static free (if you have high speed Net connection).

You can also just google the radios call sign, that might get you direct to the station Net page if they have one. Some times stations don't have live streaming audio but PodCast. Basically the Podcast is audio files of recent programing. You can down load it and play it back on the computer or iPod / MP3 player. I use this a lot for programing.

Is there some particular program you want or need to hear? Is there some synidcaded radio program you want to hear? You can find a station that does carry that program and do the above, go to their streaming audio. The station can be 1000's of miles or half way around the world.

Sadly this is part of the reason SW radio is dying. For example BBC stopped SW radio to North America. Their logic, there're other ways to listen, satellite radio, cable tv and yes streaming audio on the NET. Boooooooo. (but the fact of life, Sat and Net are pretty good for getting live/streaming audio). The down side of both Sat and Net is you need to pay for it. Sat you need a service and special radio and Net you need a fairly expensive high-speed cable internet connection.

Why is that one station so important? If you really have to have it you just might be out of luck.

[Non-text portions of this message have been removed]

5635. Re: [loopantennas] Re:AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 23:27:22 UTC
From: alexis smith
Topic: 5622 Message: 5635

gmcjetpilot@... wrote:

> Why do you want to listen to the station? Is it technical challenge
> only or programing you like. You will understand the question as you
> read below.
>
> What they said, they just may be too week, far and conditions /
> environment (terrain, RFI far-dist) prevents clean reception.
>
> Hate to say it, have you tried the Internet? Many stations have
> streaming content.
>
> http://www.radio-locator.com/ <http://www.radio-locator.com/>
>
> Go to link and put the info in and select fringe stations. If it does
> not show up that is your first clue it is outside their fringe
> coverage area. If the station does not show, put in the zip code of
> the town the station is in and try again.
>
> (*** NOTE: THERE IS A LINK TO THE STATIONS COVERAGE MAPS, DAY AND
> NIGHT. THAT ALONE MIGHT TELL YOU IF THERE IS ANY CHANCE YOU ARE ABLE
> TO GET THE STATION CLEANLY.)
>
>
> **** Ignore below if you're JUST trying the Station as a technical
> challenge ****
>
> When you see the station you will see some info and links to their web
> page and a icon indicating if they have streaming audio. IF THE
> STATION has a web page and simultaneous streaming audio of their
> programing you can go there and listen all day long static free (if
> you have high speed Net connection).
>
> You can also just google the radios call sign, that might get you
> direct to the station Net page if they have one. Some times stations
> don't have live streaming audio but PodCast. Basically the Podcast is
> audio files of recent programing. You can down load it and play it
> back on the computer or iPod / MP3 player. I use this a lot for
> programing.
>
> Is there some particular program you want or need to hear? Is there
> some synidcaded radio program you want to hear? You can find a station
> that does carry that program and do the above, go to their streaming
> audio. The station can be 1000's of miles or half way around the world.
>

> Sadly this is part of the reason SW radio is dying. For example BBC
> stopped SW radio to North America. Their logic, there're other ways to
> listen, satellite radio, cable tv and yes streaming audio on the NET.
> Boooooooo. (but the fact of life, Sat and Net are pretty good for
> getting live/streaming audio). The down side of both Sat and Net is
> you need to pay for it. Sat you need a service and special radio and
> Net you need a fairly expensive high-speed cable internet connection.
>
> Why is that one station so important? If you really have to have it
> you just might be out of luck.
>
> [Non-text portions of this message have been removed]
>
>

Hi; To listen live to radio brodcast of dolphin games, not allowed to be
on computer due to NFL rules. ThankYou, Alexis.

5636. Re: [loopantennas] Re:AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 23:34:56 UTC
From: Chris Trask
Topic: 5622 Message: 5636

```
>
> > Why do you want to listen to the station? Is it technical challenge
> > only or programing you like. You will understand the question as you
> > read below.
>

<<<SNIP>>>

>
> > Why is that one station so important? If you really have to have it
> > you just might be out of luck.
> >
>
> Hi; To listen live to radio brodcast of dolphin games, not allowed to be
> on computer due to NFL rules. ThankYou, Alexis.
>

LOL! Oh, what a fool I've been, helping a Dolphins fan. If you had
said Steelers, then I'd be cheering. :{b

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

5637. loop results

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 23:59:52 UTC
From: DAVID
Topic: 5637 Message: 5637

seems i have done all i can to get the loops performing to their best
from in my attic. i have just received a nigerian low powered pirate
on 917 khz here in scotland. i have some trouble from the spannish
station on 918 khz but i managed to get it
http://www.youtube.com/watch?v=COhBuVaa7RQ
its over 3600 miles away from scotland so not too bad for some wires
in the attic. many thanks david

5638. Kaito KA-31 Degen 31MS

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 02:41:43 UTC
From: tenorman1952
Topic: 5638 Message: 5638

I'll start with the Cliff Notes first...

Not bad.

First, do look at the instructions and plug everything in with the correct orientation. Don't ask why I say this...

I have it hooked up to my Icom R75 using the Y-cable with clips for ground and ant connection to the R75's Ant 2 terminals. I used some little 2" stubs of wire clipped into the R75's terminals, and attached the Y-cable clips to those.

AM is OK, surprisingly so. The AM reception is not outstanding, but this is a small single turn loop.

Though the instruction card says it tunes from 531-1602 khz, I was able to tune a station at 560 khz, and another at 1700 khz. With both stations there was enough adjustment on each end that I am sure it would go down to 530 khz and up past 1710 khz. It is about 21:00 now and the AM band is still a little crazy.

Tuned up to the 75 meter band. The instruction card says it does 3.9 mhz - 22 mhz in the SW range. I'm listening to some local (in this state and adjacent states) hams on 3.610 mhz and am not tuned all the way to the limit of the tuning wheel.

Plenty to listen to now that the sun is down on 49 meters and 60 meters.

Dialed up to 40 meters, some code, some phone coming in. Some international broadcast coming in just above the ham freq.

20 meters, some code and phone. Didn't find much above 20 m.

All in all, not a bad antenna. And it all fits easily in a Hefty "One Zip" 1 quart ziplock bag.

It has a tiny ferrite bar coupler, about the size of those in "pocket" transistor radios. I pulled out the Grundig S350DL to see how this works. I tried it on AM and SW. Well, not very well.

The Grundig has a very effective ferrite bar antenna, so the Kaito/Degen loop was not much help.

The tuning wheel is not any more difficult to set than a tuning capacitor on a passive tuned loop.

This might be a good choice for the fellow in the nursing home,
though he could do better for an AM antenna.

Paul C.

5639. Re: ***SPAM*** Re: ***SPAM*** [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 03:20:50 UTC
From: CASTALDELLI
Topic: 5639 Message: 5639

hI, please check this andress: http://www.radiodx.qsl.br/radioescuta.htm

tanks,

Eduardo
----- Original Message -----
From: aircheckIover
To: loopantennas@yahoogroups.com
Sent: Monday, September 08, 2008 7:14 PM
Subject: ***SPAM*** Re: ***SPAM*** [loopantennas] AM Loop

HI Eduardo;

That link didn't work. I found loops here instead ...

http://www.radiodx.qsl.br/montagens.htm

Are these what you meant? They look great.

Mark

==========

> Hi,
> please see the site www.radiodx.qsl.br/escutas.htm. Have a small
loop OM20-E, is a copy of chinese antenna, ís small and not have
noisy, but is necessary the amplifier of rf.
> Escuse my english.
>
> Respectfully,
>
> Eduardo
> ----- Original Message -----
> From: xxxalexxxisxxx
> To: loopantennas@yahoogroups.com
> Sent: Monday, September 08, 2008 4:33 PM
> Subject: ***SPAM*** [loopantennas] AM Loop
>
>
> Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> still is noisy. My goal is clear reception of the 560 am approx. 75
> mi. away. Got some litz wire and want to make best use of it. Thank
> You, Alexis.
>
>
> ------------------------------------
>

> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it
in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG
and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG.
> Version: 7.5.524 / Virus Database: 270.6.19/1659 - Release Date:
8/9/2008 07:01
>
>
> [Non-text portions of this message have been removed]
>

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.524 / Virus Database: 270.6.19/1659 - Release Date: 8/9/2008 07:01

[Non-text portions of this message have been removed]

5640. Re: [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 04:12:55 UTC
From: Jay Heyl
Topic: 5622 Message: 5640

On Mon, Sep 8, 2008 at 5:08 PM, alexis smith <alexdsmith@...> wrote:

> Hi Jay; The station I want to get clearly is WQAM Miami, I live in WPB
> FL, The link You sent shows me just out of local coverage area. I can
> and do use my box antenna outside, I only have trouble with neighbor
> station at night. I use a CC radio and Adcom gtp 500. Most of the noise
> I hear is static. Thank You Alexis.

Hi Alexis,

I've done a bit more research on this and am convinced you should be able to get a decent signal from WQAM unless you have a local noise source interfering.

On my drive home tonight I tuned to 560 and was able to get a weak but listenable signal from here in Orlando. That would have been when they were still on day power of 5kW. Just a bit ago, about 11pm EDT, I tuned in with my Panasonic RF-2200 and was able to get a fair signal from WQAM. There was a Spanish station underneath, but I was able to null them by rotating the antenna. (The RF-2200 has a rotatable ferrite antenna on the top.)

These things lead me to conclude the issue must be one of the following. 1) You have a local noise source that's interfering with your reception. If this is the case, it's unlikely any antenna is going to solve the problem. Your best bet is to find the source of the noise and do whatever you can to eliminate it.

2) You have a MW transmitter nearby that is overloading the CCRadio and causing it to become desensitized. The CCRadio is known for being subject to this in strong signal areas. It's one of the side effects of a sensitive radio that is difficult to overcome. If this is the case, you might have better luck with a less sensitive radio. Or with a radio that has an adjustable RF gain control.

Since you mention you have the same problem with your Adcom tuner, it either shares the CCRadio's penchant for overload, or you have a local noise issue. The latter would seem more likely.

Short of finding and eliminating the noise source, there's not a whole lot you can do. If the noise is coming from a single source, you might be able to use two antennas with a phaser to null out the noise.

Disregard the desired signal for a moment. When tuned to 560, can you rotate the radio to minimize the noise? Don't pay attention to the station, just to the noise. When you rotate the radio does the noise ever get significantly lower in volume? If it does, then the phaser

solution might have some promise.

As to finding the noise, common sources are TVs, dimmer switches, touch-lamps, computers, computer monitors (more CRT than LCD), compact fluorescent lights, regular fluorescent lights. I had a security light that used to generate a huge amount of noise because it was set to stay on at a dimmed level at night, going to full brightness if there was any motion in the area. The noise was horrendous. I changed the settings on the light so it was completely off unless there was motion and the noise went away. I'm sure some of the others can contribute other ideas for noise sources.

I hope this helps.

-- Jay

5641. tunning capacitor/feed point

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 06:48:24 UTC
From: DAVID
Topic: 5641 Message: 5641

does the feed point on the pickup loop have to be on the same edge as the tunning capacitor on a muilti turn mw loop. mine are on opposite edges but i dont seem to notice any difference . i did it this way as it was easier to feed the radio but if it will spoil the loop i will put them on the same edge. any comments on this will be a great help ... many thanks david

5642. Interesting new loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 06:52:04 UTC
From: tenorman1952
Topic: 5642 Message: 5642

I found these on ebay:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=370000079325

Actually, this wood loop looks kinda cool!

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=370082255995

(Tecsun is the actual mfg of the Grundig/Eton S350DL.)

Paul C.
tenorman1952

5643. Re: [loopantennas] Re:AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 12:18:44 UTC
From: alexis smith
Topic: 5622 Message: 5643

Chris Trask wrote:

> >
> > > Why do you want to listen to the station? Is it technical challenge
> > > only or programing you like. You will understand the question as you
> > > read below.
> >
>
> <<<SNIP>>>
>
> >
> > > Why is that one station so important? If you really have to have it
> > > you just might be out of luck.
> > >
> >
> > Hi; To listen live to radio brodcast of dolphin games, not allowed to be
> > on computer due to NFL rules. ThankYou, Alexis.
> >
>
> LOL! Oh, what a fool I've been, helping a Dolphins fan. If you had
> said Steelers, then I'd be cheering. :{b
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> <mailto:christrask%40earthlink.net>
> | | | | \ '. http://www.home.earthlink.net/~christrask
> <http://www.home.earthlink.net/%7Echristrask>
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>

Be nice; At least Your team kicks ass , I like Ben. Good luck this year,
Should be You and Colts at end, Alexis.

5644. Re: [loopantennas] Re:AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 13:52:48 UTC
From: Chris Trask
Topic: 5622 Message: 5644

```
>
> Be nice; At least Your team kicks ass , I like Ben. Good luck this year,
> Should be You and Colts at end, Alexis.
>
```

There was a time when the Dolphins were a team to be reckoned with.

I watched the Bares and the Clots (sic, sic, sic) the other day. Not sure of the Clots will be a contender this year.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5645. attic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 15:15:43 UTC
From: alan
Topic: 5645 Message: 5645

hi group i cant seem to find anything for attic loops was wondering if someone could help with a project in my loft thanks p.s. its for the hf bands

5646. Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-08 22:28:58 UTC
From: patbelcher
Topic: 5622 Message: 5646

Hello,
I live on the Lake Worth/Boynton Beach line and I get WQAM pretty good in the daytime, but I hear what you are saying. No matter which receiver or antenna I use, I still get a Spanish radio station in the background. Maybe look into some mods for your receiver. Check out www.kiwa.com
Hope this helps.
Pat

--- In loopantennas@yahoogroups.com, alexis smith <alexdsmith@...> wrote:
>
> Jay Heyl wrote:
>
> > On Mon, Sep 8, 2008 at 3:33 PM, xxxalexxxisxxx
> > <alexdsmith@... <mailto:alexdsmith%40bellsouth.net>> wrote:
> > > Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> > > still is noisy. My goal is clear reception of the 560 am approx. 75
> > > mi. away. Got some litz wire and want to make best use of it. Thank
> >
> > Loops are usually among the best at rejecting locally generated noise,
> > but they are no immune. If you have a lot of RF noise in your area,
> > the antenna is going to pick some of it up.
> >
> > Depending on the power and antenna pattern of the station in question,
> > you may also be asking for something that simply isn't possible
> > without going to extreme measures.
> >
> > Perhaps you can give us a bit more information about your situation.
> > What kind of noise are you hearing? Do you hear it on neighboring
> > stations as well? What radio are you using? Can you put the antenna
> > outside or must it be an indoor antenna? Which station are you trying
> > to hear and approximately where do you live in relation to the
> > transmitter? (Or check the antenna pattern at
> > http://www.radio-locator.com/cgi-bin/home
> > <http://www.radio-locator.com/cgi-bin/home> to see if you should

be
> > within the station's reception area.)
> >
> > -- Jay
> >
> >
>
> Hi Jay; The station I want to get clearly is WQAM Miami, I live in
WPB
> FL, The link You sent shows me just out of local coverage area. I
can
> and do use my box antenna outside, I only have trouble with
neighbor
> station at night. I use a CC radio and Adcom gtp 500. Most of the
noise
> I hear is static. Thank You Alexis.
>

5647. Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 00:01:38 UTC
From: patbelcher
Topic: 5622 Message: 5647

So what type of results do you get with the 2 foot loop. I have seen these before, so I was just curious.
Thanks,
Pat--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "xxxalexxxisxxx" <alexdsmith@>
> wrote:
> >
> > Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> > still is noisy. My goal is clear reception of the 560 am approx. 75
> > mi. away. Got some litz wire and want to make best use of it. Thank
> > You, Alexis.
>
>
> See my folder Loop Kits in the Photo section. The MTM Scientific AM
> Loop is approximately 17" x 17" (24" on the diagonal) with 15 turns at
> 1/8" spacing. The tuning capacitor is a standard 9.6-365 pf tuning
> cap. There is a 1 turn pickup loop just inside of the 15 turn loop.
>
> http://www.mtmscientific.com/loop.html
>
> http://www.mtmscientific.com/pickup.html
>
> Well, whatdya know? If you click Photos by Customers, that is mine at
> the top of that page! I didn't know that until just now.
>
> The pickup loop shown is probably better than what I did. You could
> also make a coax pickup loop, making a, say, 10" dia loop on the end,
> soldering the center conductor of the very end back to the shield of
> the coax. I've made pickup loops like that and they work well.
>
> Of course, dimensions may be altered, but that will change the

number
> of turns required, too. I have read comments from those that
> experimented with sizes that beyond a 2' loop, there are
diminishing
> returns, that is, a 4' loop is not much better than a 2', but I
have
> not built any larger.
>
> So, what is the best loop? I don't know, and I don't think anyone
here
> knows... but there are a number of good designs. And this is THE
place
> to share ideas, see what others are doing, find out what works,
what
> doesn't.
>
> Paul C.
>

5648. Re: [loopantennas] Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 17:24:07 UTC
From: Chris Trask
Topic: 5622 Message: 5648

>
> Hello,
> I live on the Lake Worth/Boynton Beach line and I get WQAM pretty
> good in the daytime, but I hear what you are saying. No matter which
> receiver or antenna I use, I still get a Spanish radio station in
> the background. Maybe look into some mods for your receiver. Check
> out www.kiwa.com
> Hope this helps.
> Pat
>

Are those two stations in the same direction? If not, you could use a phased array of two antennas to cancel out the unwanted one. Modifying the receiver will not help unless the two stations are at different frequencies, and then only if their sidebands do not overlap each other's carriers.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5649. Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 18:17:31 UTC
From: tenorman1952
Topic: 5622 Message: 5649

--- In loopantennas@yahoogroups.com, "Jay Heyl" <yahoogroups@...>
wrote:

(trimmed)

> As to finding the noise, common sources are TVs, dimmer switches,
> touch-lamps, computers, computer monitors (more CRT than LCD),
compact
> fluorescent lights, regular fluorescent lights. I had a security
light
> that used to generate a huge amount of noise because it was set to
> stay on at a dimmed level at night, going to full brightness if
there
> was any motion in the area. The noise was horrendous. I changed the
> settings on the light so it was completely off unless there was
motion
> and the noise went away. I'm sure some of the others can contribute
> other ideas for noise sources.
>
> I hope this helps.
>
> -- Jay

I had not realized just how much manmade noise was present until the power was out a few days due to Hurricane Gustav passing directly over us. Tuning through the AM band with my Grundig S350DL was like listening to FM with mute. With RF gain and volume full up, and placing my ear close to the speaker, I could just barely hear a soft "shhhhhh" between stations, and the occasional soft crackle of distant lightning. Nothing else. I heard distant daytime stations I had never heard before.

This is now moot, as power is back, along with all the other noise. Computers produce a lot of noise, even laptops.

Paul

5650. Re: attic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 19:01:56 UTC
From: DAVID
Topic: 5645 Message: 5650

--- In loopantennas@yahoogroups.com, "alan" <wadavison@...> wrote:
>
> hi group i cant seem to find anything for attic loops was wondering if
> someone could help with a project in my loft thanks p.s. its for the hf
> bands
>

hi have a look at my attic loops and there is a diagram of them in the
photos section ... thanks david
http://www.youtube.com/watch?v=2HPKXRM5NPo

5651. Re: [loopantennas] attic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 19:47:00 UTC
From: Jim Dunstan
Topic: 5645 Message: 5651

At 03:15 PM 9/9/2008 +0000, you wrote:

>hi group i cant seem to find anything for attic loops was wondering if
>someone could help with a project in my loft thanks p.s. its for the hf
>bands

Do you plan to transmit with the loop?

Jim, VE3CI

5652. Re: [loopantennas] attic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 20:04:13 UTC
From: david/lorraine
Topic: 5645 Message: 5652

hi no just to receive long distance medium wave stations .. thanks david
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Tuesday, September 09, 2008 8:47 PM
Subject: Re: [loopantennas] attic loop

At 03:15 PM 9/9/2008 +0000, you wrote:

>hi group i cant seem to find anything for attic loops was wondering if
>someone could help with a project in my loft thanks p.s. its for the hf
>bands

Do you plan to transmit with the loop?

Jim, VE3CI

[Non-text portions of this message have been removed]

5653. Re: [loopantennas] Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 21:04:58 UTC
From: Jay Heyl
Topic: 5622 Message: 5653

On Mon, Sep 8, 2008 at 6:28 PM, patbelcher <patbelcher@...> wrote:

>
> I live on the Lake Worth/Boynton Beach line and I get WQAM pretty
> good in the daytime, but I hear what you are saying. No matter which
> receiver or antenna I use, I still get a Spanish radio station in
> the background. Maybe look into some mods for your receiver. Check
> out www.kiwa.com
>

The Spanish station is probably Radio Rebelde in Holguin, Cuba. This is the only Cuban station I can find documented on 560. Holguin is fairly far to the east of your line to WQAM. You should be able to null out the Spanish station by rotating your radio and still get a signal from WQAM. I was able to do so at about 11pm last night. When I tried again later (about 1am) I was getting too many signals, possibly from Mexico in addition to Cuba, and was not able to null them all out.

I don't think any of the Kiwa mods are going to help with this situation. The Kiwa loop might help, but he stopped making those a few years ago.

-- Jay

[Non-text portions of this message have been removed]

5654. Re: [loopantennas] Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 22:20:24 UTC
From: alexis smith
Topic: 5622 Message: 5654

Chris Trask wrote:

> >
> > Hello,
> > I live on the Lake Worth/Boynton Beach line and I get WQAM pretty
> > good in the daytime, but I hear what you are saying. No matter which
> > receiver or antenna I use, I still get a Spanish radio station in
> > the background. Maybe look into some mods for your receiver. Check
> > out www.kiwa.com
> > Hope this helps.
> > Pat
> >
>
> Are those two stations in the same direction? If not, you could use a
> phased array of two antennas to cancel out the unwanted one. Modifying the
> receiver will not help unless the two stations are at different
> frequencies,
> and then only if their sidebands do not overlap each other's carriers.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> <mailto:christrask%40earthlink.net>
> | | | | \ '. http://www.home.earthlink.net/~christrask
> <http://www.home.earthlink.net/%7Echristrask>
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>

Thank You Chris; Alexis.

5655. Re: [loopantennas] Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-09 23:16:01 UTC
From: alexis smith
Topic: 5622 Message: 5655

Jay Heyl wrote:

> On Mon, Sep 8, 2008 at 6:28 PM, patbelcher <patbelcher@...
> <mailto:patbelcher%40yahoo.com>> wrote:
>
> >
> > I live on the Lake Worth/Boynton Beach line and I get WQAM pretty
> > good in the daytime, but I hear what you are saying. No matter which
> > receiver or antenna I use, I still get a Spanish radio station in
> > the background. Maybe look into some mods for your receiver. Check
> > out www.kiwa.com
> >
>
> The Spanish station is probably Radio Rebelde in Holguin, Cuba. This
> is the
> only Cuban station I can find documented on 560. Holguin is fairly far to
> the east of your line to WQAM. You should be able to null out the Spanish
> station by rotating your radio and still get a signal from WQAM. I was
> able
> to do so at about 11pm last night. When I tried again later (about 1am) I
> was getting too many signals, possibly from Mexico in addition to
> Cuba, and
> was not able to null them all out.
>
> I don't think any of the Kiwa mods are going to help with this situation.
> The Kiwa loop might help, but he stopped making those a few years ago.
>
> -- Jay
>
> [Non-text portions of this message have been removed]
>
>

Hi Jay; I am very great full for Your knowledge and help, I just purchased a Sony SRF-59 on ebay as none of my local stores carried it. I walked around my house with cc radio and I have a noisy house, mostly my home theater hd dvr`s and batt backup. There are some quieter aereas on the street but still pick up static noise. Would a copper tube shielded anntenna help? Thank You, Alexis.

5656. Re: [loopantennas] Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-10 00:11:44 UTC
From: Jay Heyl
Topic: 5622 Message: 5656

On Tue, Sep 9, 2008 at 7:16 PM, alexis smith <alexdsmith@...> wrote:

> walked around my house with cc radio and I have a noisy house, mostly my
> home theater hd dvr`s and batt backup. There are some quieter aereas on
> the street but still pick up static noise. Would a copper tube shielded
> anntenna help? Thank You, Alexis.

For the most part, if you're in a noisy environment, the radio is going to pick up that noise. Short of getting rid of the noise, a tuned loop is about the best you can do. In that regard, you've certainly come to the right place.

I don't know much about shielded loops so I think I'll let some of the other folks take it from here. Best of luck in hearing the Dolphins.

-- Jay

5657. New to the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-10 01:39:02 UTC
From: Samuel Ernst-Fortin
Topic: 210 Message: 5657

Interested in SWL, learning about antenna construction. Thus far, all I've built is a 100ft longwire for my Realistic DX-160, and a short indoor 30ft simple wire. I'd like to see what a loop would do. Heard they are pretty directional at lower frequencies.

[Non-text portions of this message have been removed]

5658. Re: [loopantennas] attic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-10 05:37:46 UTC
From: W DAVISON
Topic: 5645 Message: 5658

hi there
no i only wish to recieve i would like to listen to the ham bands would it be possible to have a multiband dipole in my loft .the loft is 28 ft long.i already have a loop right round the floor of the loft but someone told me it has to come up higher than that thanks for ant advice .....alan
david/lorraine <dhamilton1@...> wrote:
hi no just to receive long distance medium wave stations .. thanks david
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Tuesday, September 09, 2008 8:47 PM
Subject: Re: [loopantennas] attic loop

At 03:15 PM 9/9/2008 +0000, you wrote:

>hi group i cant seem to find anything for attic loops was wondering if
>someone could help with a project in my loft thanks p.s. its for the hf
>bands

Do you plan to transmit with the loop?

Jim, VE3CI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5659. Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-10 14:47:43 UTC
From: tenorman1952
Topic: 5622 Message: 5659

--- In loopantennas@yahoogroups.com, "patbelcher" <patbelcher@...>
wrote:
>
> So what type of results do you get with the 2 foot loop. I have
seen
> these before, so I was just curious.
> Thanks,
> Pat--- In loopantennas@yahoogroups.com, "tenorman1952"
> <tenorman1952@> wrote:

(trimmed)

> > http://www.mtmscientific.com/loop.html

Excellent! I can tune in a weak distant 860 khz AM next to our local blowtorch WWL 870 AM.

And this loop will tune from 530 to 1710 khz with additional adjustment on each end of the tuning capacitor.

It actually measures 24" on the diagonal, 17" on each side, 15 turns of 22 ga magnet wire at 1/8" spacing, with 9.6-380 pf tuning capacitor.

I couldn't ask for any better for AM. Only drawback is having to tune it, which is not difficult.

I use 4 turn untuned loops with my stereo receivers and tuners. That is the "Ultimate AM Loop Antenna" from a kit sold on eBay by seller jburns1987. This loop measures 12" on each side, 17" on the diagonal, and has 4 turns of stranded insulated hookup wire. The "Ultimate" is much better than the tiny loops that usually come with stereo receivers. At night I easily pick up, from my home on the Gulf Coast, WOAI in San Antonio, WSB in Atlanta, KMOX in St. Louis, WLW Cinncinnati, WLS and WGN in Chicago.

Of course, the MTM tuned loop will bring them in a little better, and bring in other stations the Ultimate won't.

Paul C.
tenorman1952

5660. Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-10 17:10:08 UTC
From: airchecklover
Topic: 5622 Message: 5660

Alex; I've got the 2ft MTM Scientific loop and the CCrane Twin-Ferrite. The 2ft loop will outperform the 1 ft loops currently on the market - ie, Terk. Select-A-Tenna and the two new ones from China. The T-F will work about the same as the 2 ft. loop. Which is better (2 ft loop or T-F)? They are about the same price new. The 2 ft. loop will never need batteries (it is passive) and you don't have to mess around with cables. The T-F is less bulky and you can place the antenna head away from the remote tuning box and your receiver. It's a 50/50 toss up. If however you purchase both, through extensive testing I have found the two antennas working together are an incredible combination. ((i will post audio files on these tests in the next week or so - you will be able to hear what i have learned))

Hope that helps,

Mark

=====work

> --- In loopantennas@yahoogroups.com, "xxxalexxxisxxx" <alexdsmith@>
> wrote:
> >
> > Hi; What is the best AM antenna I can build? Tried a 4ft. box loop but
> > still is noisy. My goal is clear reception of the 560 am approx. 75
> > mi. away. Got some litz wire and want to make best use of it. Thank
> > You, Alexis.
>
>
> See my folder Loop Kits in the Photo section. The MTM Scientific AM
> Loop is approximately 17" x 17" (24" on the diagonal) with 15 turns at
> 1/8" spacing. The tuning capacitor is a standard 9.6-365 pf tuning
> cap. There is a 1 turn pickup loop just inside of the 15 turn loop.
>
> http://www.mtmscientific.com/loop.html
>
> http://www.mtmscientific.com/pickup.html
>
> Well, whatdya know? If you click Photos by Customers, that is mine at
> the top of that page! I didn't know that until just now.
>
> The pickup loop shown is probably better than what I did. You could
> also make a coax pickup loop, making a, say, 10" dia loop on the end,
> soldering the center conductor of the very end back to the shield of
> the coax. I've made pickup loops like that and they work well.
>
> Of course, dimensions may be altered, but that will change the number

> of turns required, too. I have read comments from those that
> experimented with sizes that beyond a 2' loop, there are diminishing
> returns, that is, a 4' loop is not much better than a 2', but I have
> not built any larger.
>
> So, what is the best loop? I don't know, and I don't think anyone here
> knows... but there are a number of good designs. And this is THE place
> to share ideas, see what others are doing, find out what works, what
> doesn't.
>
> Paul C.
>

5661. Re: [loopantennas] New to the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-10 19:07:58 UTC
From: Jim Dunstan
Topic: 210 Message: 5661

At 06:39 PM 9/9/2008 -0700, you wrote:

>Interested in SWL, learning about antenna construction. Thus far, all I've
>built is a 100ft longwire for my Realistic DX-160, and a short indoor 30ft
>simple wire. I'd like to see what a loop would do. Heard they are pretty
>directional at lower frequencies.

Hi,

not quite .... an antenna is generally considered directional if the
pattern (for reception or radiation as the case may be) is narrow ...
either bi-directional or uni-directional. A Hi-Q loop has a narrow
bi-directional null. As a consequence the radiation pattern is also
bi-directional and rather broad. These small loops are good at nulling out
interference from particular directions while maintaining a rather broad
reception pattern.

The small loop is also more immune (but not immune) to noise than most
other antennas. The other useful characteristic is that since most of
these loops are small they can be located to positions with less noise ....
you would be surprised that moving the loop to a different location a few
feet away can result in meaningful reduction in locally generated interference.

Jim

5662. VLF Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 00:49:38 UTC
From: Adnan Nasir
Topic: 5662 Message: 5662

Hi everybody,

I am trying to make a receiver that can communicate under fresh water. Since I am a novice in this feild I need your help and advice in how to make such an antenna for receiver working on 30KHz frequency under fresh water.

Regards
Adnan

5663. Re: [loopantennas] attic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-10 22:28:22 UTC
From: Gary Pewitt
Topic: 5645 Message: 5663

Go to AES.com and order an Eavesdropper 5 band trap dipole antenna. I have been using one for more than 20 years, it's a very good antenna especially made for SWL.
73 Gary N9ZSV

W DAVISON wrote:
>
> hi there
> no i only wish to recieve i would like to listen to the ham bands
> would it be possible to have a multiband dipole in my loft .the loft
> is 28 ft long.i already have a loop right round the floor of the loft
> but someone told me it has to come up higher than that thanks for ant
> advice .....alan
> david/lorraine <dhamilton1@...
> <mailto:dhamilton1%40tiscali.co.uk>> wrote:
> hi no just to receive long distance medium wave stations .. thanks david
> ----- Original Message -----
> From: Jim Dunstan
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Sent: Tuesday, September 09, 2008 8:47 PM
> Subject: Re: [loopantennas] attic loop
>
> At 03:15 PM 9/9/2008 +0000, you wrote:
>
> >hi group i cant seem to find anything for attic loops was wondering if
> >someone could help with a project in my loft thanks p.s. its for the hf
> >bands
>
> Do you plan to transmit with the loop?
>
> Jim, VE3CI
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>

5664. Re: New to the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 11:36:07 UTC
From: sernstfortin
Topic: 210 Message: 5664

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:

> Hi,
>
> not quite ....
> Hi-Q loop has a narrow bi-directional null.

> The small loop is also more immune (but not immune) to noise than

>you would be surprised that moving the loop to a different location
a feet away can result in meaningful reduction in locally generated
interference.
>
> Jim
>
Jim,
Thanks for the response.
I am very interested in building a loop antenna to try it and compare
to the 100ft longwire I have.

What I meant by my comment, is I thought in the upper frequencies,
maybe about 3-4MHz, the directionality of the antenna for SW
listening (no broadcasting, no license (yet)) would be less than that
at lower-frequencies. Maybe I'm wrong about that, but I'm willing to
learn more and give it a go.

Is there a particular design which would work well enough up through
30MHz which you might recommend or point me to for researching?

I like the characteristics w.r.t. nulling, but also placement and the
reduction in noise. Ideally, this would be something I could place on
my deck at the rear of the house for evening listening /
experimentation.

Putting up and taking down my longwire is a bit cumbersome /
inconvenient. By the time we've finished up dinner, the dishes,
volleyball, baths, stories, bed, I'm toast.
Any help appreciated.
Sam

5665. Re: [loopantennas] VLF Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 13:39:31 UTC
From: Chris Trask
Topic: 5662 Message: 5665

>
>Hi everybody,
>
>I am trying to make a receiver that can communicate under fresh water.
>Since I am a novice in this feild I need your help and advice in how
>to make such an antenna for receiver working on 30KHz frequency under
>fresh water.
>

Your best option will be to use a ferrite rod antenna as the EM field in an environment such as water (fresh or salt) is primarily magnetic and almost no electric field.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5666. Re: VLF Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 12:46:07 UTC
From: bob71741
Topic: 5662 Message: 5666

Adnan - Try this group; they deal with communications from caves, and
I believe that they have some articles addressing under water comm.

http://www.caves.org/section/commelect/spelonic.html

--- In loopantennas@yahoogroups.com, "Adnan Nasir" <ad_exclusive@...>
wrote:
>
> Hi everybody,
>
> I am trying to make a receiver that can communicate under fresh water.
> Since I am a novice in this feild I need your help and advice in how
> to make such an antenna for receiver working on 30KHz frequency under
> fresh water.
>
> Regards
> Adnan
>

5667. Re: [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 15:19:07 UTC
From: alexis smith
Topic: 5622 Message: 5667

Jay Heyl wrote:

> On Mon, Sep 8, 2008 at 5:08 PM, alexis smith <alexdsmith@...
> <mailto:alexdsmith%40bellsouth.net>> wrote:
>
> > Hi Jay; The station I want to get clearly is WQAM Miami, I live in WPB
> > FL, The link You sent shows me just out of local coverage area. I can
> > and do use my box antenna outside, I only have trouble with neighbor
> > station at night. I use a CC radio and Adcom gtp 500. Most of the noise
> > I hear is static. Thank You Alexis.
>
> You should be able to hear WQAM on the CCRadio without any trouble at
> all. You certainly shouldn't need a giant loop. If anything, that's
> going to overload the CCRadio. I have to think if you're getting a lot
> of noise in the signal it almost has to be coming from a local source.
> Have you tried taking a walk with the radio to see what it sounds like
> outside and at different spots in your neighborhood? Do you get the
> same or similar noise on other stations? Do you normally use the radio
> plugged in to AC or on battery? Does it sound different on battery?
>
> If you don't want to walk around with the CCRadio, I recommend getting
> a Sony SRF-59 for portable use with earphones. It's a great little
> radio you can get at most Kmarts for $15. Do not let the cheap looks
> fool you. There's a radio giant lurking under that cheap exterior.
>
> If outside reception is okay, then walk around the house with the
> radio and see if the noise gets stronger or weaker. I used to have a
> "green plug" behind my refrigerator that turned out to be a huge
> source of RFI. I located it using a portable SW radio with the antenna
> fully retracted. When I got rid of that thing my noise level dropped
> about 5 s-points.
>
> Really, WQAM should be no problem for you. I'm pretty sure I can get
> them here in Orlando. It's not a great signal, but it's there.
>
> If you can't locate and eliminate a noise source, I would suggest
> trying a small, tuned loop similar to the Terk or the Select-A-Tenna.
> You should be able to inductively couple it to the CCRadio, so just
> put the loop near the radio and tune the antenna to peak the radio
> signal on that frequency. You can build your own tuned loop for about
> $15 in parts. There are plans all over the Internet. (I'd start in the
> file section for this group.)
>
> -- Jay
>

>

Hi Jay; I turned off all the ac breakers in my house to find noise. By turning on individual breakers I found a noisy power supply for a security camera, the wiring carried noise everywhere!. Replaced offending wall wart, now I can hear 560AM, great lesson. Thank You for all Your help!!! Alexis.

5668. Re: VLF Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 15:25:37 UTC
From: tenorman1952
Topic: 5662 Message: 5668

--- In loopantennas@yahoogroups.com, "Adnan Nasir" <ad_exclusive@...>
wrote:
>
> Hi everybody,
>
> I am trying to make a receiver that can communicate under fresh
water.
> Since I am a novice in this feild I need your help and advice in how
> to make such an antenna for receiver working on 30KHz frequency under
> fresh water.
>
> Regards
> Adnan

Perhaps the best starting point is

http://www.stormwise.com

Which is a source for very large ferrite rods for making low frequency
antennas. You will find a lot of good information there, as well as a
few ready made antennas and a wide range of large ferrite rods.

Paul C.
tenorman1952

5669. Re: attic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 15:27:45 UTC
From: tenorman1952
Topic: 5645 Message: 5669

--- In loopantennas@yahoogroups.com, Gary Pewitt <garypewitt@...>
wrote:
>
> Go to AES.com and order an Eavesdropper 5 band trap dipole
antenna. I
> have been using one for more than 20 years, it's a very good
antenna
> especially made for SWL.
> 73 Gary N9ZSV
>
>
>
> W DAVISON wrote:
> >
> > hi there
> > no i only wish to recieve i would like to listen to the ham bands
> > would it be possible to have a multiband dipole in my loft .the
loft
> > is 28 ft long.i already have a loop right round the floor of the
loft
> > but someone told me it has to come up higher than that thanks for
ant

The correct URL for AES is

http://www.aesham.com/

Paul C.
tenorman1952

5670. Re: [loopantennas] Re: New to the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 19:03:32 UTC
From: Jim Dunstan
Topic: 210 Message: 5670

At 11:36 AM 9/11/2008 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
>Dunstan <dunstan@...> wrote:
>
> > Hi,
> >
> > not quite ....
> > Hi-Q loop has a narrow bi-directional null.
>
> > The small loop is also more immune (but not immune) to noise than
>
> >you would be surprised that moving the loop to a different location
>a feet away can result in meaningful reduction in locally generated
>interference.
> >
> > Jim
> >
>Jim,
>Thanks for the response.
>I am very interested in building a loop antenna to try it and compare
>to the 100ft longwire I have.
>
>What I meant by my comment, is I thought in the upper frequencies,
>maybe about 3-4MHz, the directionality of the antenna for SW
>listening (no broadcasting, no license (yet)) would be less than that
>at lower-frequencies. Maybe I'm wrong about that, but I'm willing to
>learn more and give it a go.
>
>Is there a particular design which would work well enough up through
>30MHz which you might recommend or point me to for researching?
>
>I like the characteristics w.r.t. nulling, but also placement and the
>reduction in noise. Ideally, this would be something I could place on
>my deck at the rear of the house for evening listening /
>experimentation.
>
>Putting up and taking down my longwire is a bit cumbersome /
>inconvenient. By the time we've finished up dinner, the dishes,
>volleyball, baths, stories, bed, I'm toast.
>Any help appreciated.
>Sam

Hi Sam,

A small (e.g 3' diam approx) tuned loop for frequencies ... 2-10 mhz makes a vy good antenna for the balcony. My downtown apt in the big city on the 9th flr uses such an antenna. I have it fastened to the balcony railing. As I mentioned orientation is for minimum noise and as consequence is a one time rotation ... and the receiving directions are broad. Tuning the antenna to the frequency of interest is the trick. One method is to make the loop from coax and feed it with a standard unbalanced tuner. I deviated from this approach and constructed the loop from ordinary copper tubing and fed it with 300 ohm twin lead and tuned it with a small balanced tuner ... located inside the apt. about 8' from the loop.

I could tune the loop from approx 3 to 11 mhz. The performance is head and shoulders above the built in whip ... or any wire antenna i could jury rig in the apartment.

At my country home ... eg ... small city on lake superior, i use a wire antenna ... certainly not 100' ft long ... more like 40ft. It terminates at a ground connection out in the garden and is then coupled to coax which comes to the house ... buried a few inches under the lawn. The idea is to keep the antenna away from local noise sources which are inevitably located in the house. There is no need for a long antenna like 100 ft. After all we are not using xtal sets ... modern receivers have more than enough gain ... the key is to keep the ratio of signal to noise as low as possible.

Jim

>

[Non-text portions of this message have been removed]

5671. Re: [loopantennas] AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 22:08:03 UTC
From: Jay Heyl
Topic: 5622 Message: 5671

On Thu, Sep 11, 2008 at 11:19 AM, alexis smith <alexdsmith@...>wrote:

>
> Hi Jay; I turned off all the ac breakers in my house to find noise. By
> turning on individual breakers I found a noisy power supply for a
> security camera, the wiring carried noise everywhere!. Replaced
> offending wall wart, now I can hear 560AM, great lesson. Thank You for
> all Your help!!! Alexis.
>

That sounds almost exactly like the problem I had with the security light. The house was dead quiet RF-wise during the day. At night there would be a horrible noise almost everywhere. I eventually found the noise was worse in the garage, and finally narrowed it down to one switch. Turns out the security light was wired to an outside socket at the back of the house I assume was intended for Christmas lights. It was controlled by a switch in the garage that was taped into the "on" position and marked "Do not turn off". (I assume a previous owner marked it.) Of course, I turned it off and the noise immediately disappeared.

I eventually figured out it was the dimmer on the security light and it could be configured to stay off until it detected motion. Problem solved.

It was really amazing how the house wiring carried the noise practically everywhere throughout the house.

I'm very glad you were able to find and fix the problem. That was a good approach turning everything off and trying it one circuit at a time. Given how the wiring was propagating the noise, that probably saved you hours of checking things around the house.

-- Jay

[Non-text portions of this message have been removed]

5672. Re: New to the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 22:51:11 UTC
From: sernstfortin
Topic: 210 Message: 5672

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>>There is no need for a long antenna like 100 ft. After all
we are not using xtal sets ... modern receivers have more than enough
gain ... the key is to keep the ratio of signal to noise as low as
possible.

I think you meant the key is to maximize the SNR ratio. If the SNR were
low, then the signal would be approxiately equal to or less than the
noise. Not good. ;)

I'll hunt for some designs. Maybe the ARRL wire antenna book will have
something. Any chance you'd post the configuration of the tuning
section you are using in Files or Photos? How about a pic of the
antenna itself? Type / gauge of wire? Spacing of the loops to avoid
self inductance? Values of the variable cap and inductor you're using?

I was hoping a loop could be made that would be workable up through
30MHz; I guess that might be asking too much of a loop - too much
compromise. Again, I have to do some research.
Thanks.

5673. Re: [loopantennas] Re: New to the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-11 23:43:31 UTC
From: Jim Dunstan
Topic: 210 Message: 5673

At 10:51 PM 9/11/2008 +0000, you wrote

>I'll hunt for some designs. Maybe the ARRL wire antenna book will have
>something. Any chance you'd post the configuration of the tuning
>section you are using in Files or Photos? How about a pic of the
>antenna itself? Type / gauge of wire? Spacing of the loops to avoid
>self inductance? Values of the variable cap and inductor you're using?

Not that complicated.... 1 loop (3' in dia.) anything at hand .. bigger the gauge the better. No tuning capacitor, up to 12' balanced feed line, 1 balanced tuner (I use a Z-match). The idea is to tune it from a distance ... eg up to 12'. As you change bands/frequencies you tune the loop with the tuner .... very clear noise rush at resonance. Will work to 15 mhz .... in fact even made a few contacts on 20m. The objective was SWL.

>I was hoping a loop could be made that would be workable up through
>30MHz; I guess that might be asking too much of a loop - too much
>compromise. Again, I have to do some research.
>Thanks.

I suppose if you adjust the components you could resonant to 30mhz. The most dramatic improvements in reception are in that 5mhz to 10mhz range. I'll check my photos .... I know I have a couple of pics.

Jim, VE3CI

>

[Non-text portions of this message have been removed]

5674. Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-12 07:42:18 UTC
From: Bill McGraw
Topic: 5622 Message: 5674

My crude 8" loop has worked with WSL Nashville--300+ miles, WWL in New Orleans 280 miles and a station in Dallas. I have two V-caps and the larger 3 gang works the best. Next will be a 2' square with how many loops up to 7 or so I'll need for AM/MF broadcast. I might even use coax and a toroid balun. Will a loop work with shortwave HF? How does it work and how does it connect the best--pick up loop? I have no idea.

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

5675. Re: New to the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-12 14:21:55 UTC
From: tenorman1952
Topic: 210 Message: 5675

--- In loopantennas@yahoogroups.com, "sernstfortin" <sernstfortin@...>
wrote:
(trimmed)
>I like the characteristics w.r.t. nulling, but also placement and the
> reduction in noise. Ideally, this would be something I could place on
> my deck at the rear of the house for evening listening /
> experimentation.
>
> Putting up and taking down my longwire is a bit cumbersome /
> inconvenient. By the time we've finished up dinner, the dishes,
> volleyball, baths, stories, bed, I'm toast.
> Any help appreciated.
> Sam

The broad reception range and narrow null (fat figure 8 pattern) make
loops ideal for noise reduction.

I use mine placed on an old "Lazy Susan" and rotate it for best
effect. If you are using it with a portable radio, and coupling by
placing the radio near it you will notice the radio needs to be in a
particular orientation with the loop for best effect. In that case,
the radio may be placed on the Lazy Susan and both rotated together.

I have a "pickup loop" added to my MTM Scientific loop and feed my
tuner with a twisted pair, but it works as well with 300 ohm twinlead.

Paul C.
tenorman1952

5676. Re: VLF Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-12 14:30:51 UTC
From: tenorman1952
Topic: 5662 Message: 5676

--- In loopantennas@yahoogroups.com, "tenorman1952"
<tenorman1952@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Adnan Nasir" <ad_exclusive@>
> wrote:
> >
> > Hi everybody,
> >
> > I am trying to make a receiver that can communicate under fresh
> water.
> > Since I am a novice in this feild I need your help and advice in
how
> > to make such an antenna for receiver working on 30KHz frequency
under
> > fresh water.
> >
> > Regards
> > Adnan
>

http://www.stormwise.com/page28.htm

Part # NM15VLF700HZ-70KHZ-BNC. For 700 Hz - 70 KHz.

Paul C.
tenorman1952

5677. Re: [loopantennas] Re: AM Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-12 16:01:25 UTC
From: Jay Heyl
Topic: 5622 Message: 5677

On Fri, Sep 12, 2008 at 3:42 AM, Bill McGraw <mcgr3799@...> wrote:
> My crude 8" loop has worked with WSL Nashville--300+ miles, WWL in New
> Orleans 280 miles and a station in Dallas. I have two V-caps and the larger

Is that daytime or night time reception?

-- Jay

5678. home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-13 07:28:12 UTC
From: DAVID
Topic: 5524 Message: 5678

hi this might sound a little crazy but is it possible to stack 2 multi
turn mw loops as you would with vhf yagis etc ... just a thought
thanks david

5679. Re: [loopantennas] home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-13 16:26:11 UTC
From: Jim Dunstan
Topic: 5524 Message: 5679

At 07:28 AM 9/13/2008 +0000, you wrote:

>hi this might sound a little crazy but is it possible to stack 2 multi
>turn mw loops as you would with vhf yagis etc ... just a thought
>thanks david

Yes, and no. Yes you can 'stack' 2 small MW tuned loops .... that is bring 2 loops so that they are inductively coupled and interact with one another and in turn are either inductively coupled to the built in ferrite loop in the radio or to a link coil.

No, in that they do not act in the way you are suggesting as in a yagi. Using 2 Hi-Q loops it is possible to separate adjacent interfering signals ... eg tune one for maximum on the desired frequency and the second to minimize the undesired signal. This is a trick used by crystal set aficionados.

This is also a great way to couple a long wire antenna to a radio on MW .... the 2 coupled tuned loops act as an 'antenna tuner' ..... one loop connected to the long wire/ ground and the other connected to the receiver ... makes a dynamite DX combination.

Everything above relates to small tuned loops for MW. Of course you can build a yagi type antenna with full size loop elements (1 wavelength in dia.) for HF and VHF (cubical Quad is the example). However building a full size multi-element yagi type loop antenna for MW would be a major construction program hi hi. Such elements for 600 khz would be about 1700 ft in circumference !!

Jim

5680. Re: home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 04:35:19 UTC
From: huelbeag
Topic: 5524 Message: 5680

Hi Jim,

I remember an article or chapter by Joseph Carr (prolific author on loop antennas), there was an illustration of a loop antenna about 24 inches (60cm) apart the receiver and rotated 45 degrees. The receiver used an internal ferrite antenna.

The distance and angle are experimental, but this way Carr related one could control interference.

I really don't know how would this work... Would the rotated, apart antenna be operated at 'anti-resonance' frequency 'absorbing' the offending station?

--hg

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
> At 07:28 AM 9/13/2008 +0000, you wrote:
>
> >hi this might sound a little crazy but is it possible to stack 2 multi
> >turn mw loops as you would with vhf yagis etc ... just a thought
> >thanks david
>
> Yes, and no. Yes you can 'stack' 2 small MW tuned loops .... that is bring
> 2 loops so that they are inductively coupled and interact with one another
> and in turn are either inductively coupled to the built in ferrite loop in
> the radio or to a link coil.

5681. Re: [loopantennas] Re: home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 15:24:31 UTC
From: Jim Dunstan
Topic: 5524 Message: 5681

At 04:35 AM 9/14/2008 +0000, you wrote:

>Hi Jim,
>
>I remember an article or chapter by Joseph Carr (prolific author on
>loop antennas), there was an illustration of a loop antenna about 24
>inches (60cm) apart the receiver and rotated 45 degrees. The receiver
>used an internal ferrite antenna.
>
>The distance and angle are experimental, but this way Carr related one
>could control interference.
>
>I really don't know how would this work... Would the rotated, apart
>antenna be operated at 'anti-resonance' frequency 'absorbing' the
>offending station?
>
>--hg

Hi,

Yes, an external tuned loop can be coupled to the tuned loop in the radio (ferrite antenna) in such a way as to increase OR reduce the amount of signal to the radio. It takes a sensitive 'touch' when adjusting the capacitor on the external loop ... and of course the orientation and distance of the external loop. It is also possible to use 2 external loops in different tuning/orientation combinations to simultaneously increase and decrease signals that are close to each other .... eg. you may have a strong local station at 600 khz that 'splashes' over when you are trying to receive a weak signal on the next channel at 610 khz. It is possible to arrange the tuning so that the signal on 610 is increased while the signal on 600 is decreased. It is easy to imagine how an external Hi-Q circuit can increase the intensity of the electromagnetic field at a certain frequency ... but hard to imagine how it can decrease it in the presence of the receiver antenna. I believe it has to do with adjusting the phase of the intensified field (around the external loop) so that it cancels the field around the receiving antenna (ferrite loop) at a particular frequency.

There are RF interference cancelling devices (MFJ sells a version) that use 2 antenna inputs. The signals from the 2 antennas are mixed and the phase of the signals are adjusted so that any particular signal can be cancelled. The trick that Joe Carr was demonstrating works in a similar fashion.

This is a technique used by crystal set aficionados during receiving contests. All competitive crystal sets use at least 2 Hi-Q circuits ... and many use 3 and 4 since all selectivity of these basic receivers is

achieved at the fundamental frequency of the stations received .... no luxury of a selective IF amplifier hi hi.

Jim

5682. Re: New to the group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 17:47:51 UTC
From: aircheckclover
Topic: 210 Message: 5682

Paul; Nice job on the MTM home-brew. It looked so good i thought I
was seeing the full MTM kit, not a home-brew version.

-Mark

============================

> --- In loopantennas@yahoogroups.com, "sernstfortin" <sernstfortin@>
> wrote:
> (trimmed)
> >I like the characteristics w.r.t. nulling, but also placement and the
> > reduction in noise. Ideally, this would be something I could place on
> > my deck at the rear of the house for evening listening /
> > experimentation.
> >
> > Putting up and taking down my longwire is a bit cumbersome /
> > inconvenient. By the time we've finished up dinner, the dishes,
> > volleyball, baths, stories, bed, I'm toast.
> > Any help appreciated.
> > Sam
>
> The broad reception range and narrow null (fat figure 8 pattern) make
> loops ideal for noise reduction.
>
> I use mine placed on an old "Lazy Susan" and rotate it for best
> effect. If you are using it with a portable radio, and coupling by
> placing the radio near it you will notice the radio needs to be in a
> particular orientation with the loop for best effect. In that case,
> the radio may be placed on the Lazy Susan and both rotated together.
>
> I have a "pickup loop" added to my MTM Scientific loop and feed my
> tuner with a twisted pair, but it works as well with 300 ohm twinlead.
>
> Paul C.
> tenorman1952
>

5683. Fw: [K9AYloop] Re: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 20:19:45 UTC
From: aimo ruoho
Topic: 5683 Message: 5683

Hello, folks!
Here you will see information, that will be revolutionary!
Please examine the following address:
http://www.ok1rr.com/e107plugins/content/content.php?content.76
73 de Ami

----- Forwarded Message ----
From: Martin Kratoska <martin@...>
To: K9AYloop@yahoogroups.com
Sent: Thursday, September 11, 2008 9:51:23 AM
Subject: Re: [K9AYloop] Re: Mini-K9AY

Slightly off-topic, but there is another very interesting small RX
antenna - The W2PM Mini Diamond Receiving Flag

http://www.ok1rr. com/e107_ plugins/content/ content.php? content.76

In contrary to the mini K9AY preliminary study it is proven design which
works. My ~15 dB 2x 2N5109 preamp plus the internal preamp in my Orion
were not the best but it does listen... The main advantage is that this
antenna is ground-independent and can be built as rotatable.

73,
Martin, OK1RR

Aimo Unto Olavi RUOHO napsal(a):
> Thank you very much for your expert email with interesting and well
> made information, Sir!
>
> Are you sure,that instead of the 1:4 transformer I have to use a 1:9
> one? One of these days I will build a 1:9 transformer, too, and test
> it. I understood, that because my Mini-K9AY uses only 3.69 meter long
> wire, it would need a 1:4 transformer. .. As terminal resistor I used a
> 150 Ohm one only. It gives me all frequencies from LW to SW and an
> unexpectedly high Front/Back-Ratio. I am going to test a linear
> potentiometer one day soon, to see, if there will be any hope to make
> things even better...
>
> You see, it's the trial and error method, that makes me breath and
> full of joy, if things work as expected! If I knew all in advance, why
> continue using my time to build anything?
>
> I built "the Mini-Wonder" following the text , drawing and measures
> given. I am not a technician or mathematic genius, and I do not own
> expencive meters or computer programs, so I am very dependable of what
> I see and read and hear after having built and tested this antenna in

> practice.
>
> I used it inside and connected it through my Wellbrook ALA 100M
> Amplifier to my TEN-TEC RX3040 DSP Receiver. It is very directive and
> as is, boosts the signals more than I could expect in advance.
>
> You see, I am a pessimist, who does not dare to be too optimistic with
> these new things, but my curiosity makes me do things like this from
> year to year...
>
> Anyway, I want to thank you for taking the time for measuring and
> publishing the beneficial information for all us semi-ignorants to see
> and wonder. Good work! I hope, that you will be seen more with your
> emails here in the near future.
>
> Please be happy and prosper!
>
> 73 de Ami
>
>
>
>
>
> --- In K9AYloop@yahoogroup s.com, Martin Kratoska <martin@...> wrote:
>> My analysis of the mini K9AY is here:
>> http://www.ok1rr. com/e107_ plugins/content/ content.php? content.104
>>
>> 73,
>> Martin, OK1RR
>>
>>
>> Bill Whitacre napsal(a):
>>> Now if we only had an English translation!
>>>
>>> bw
>>>
>
>
>
> ------------ --------- --------- ------
>
> Community email addresses:
> Post message: K9AYloop@onelist. com
> Subscribe: K9AYloop-subscribe@ onelist.com
> Unsubscribe: K9AYloop-unsubscrib e@onelist. com
> List owner: K9AYloop-owner@ onelist.com
>
> Shortcut URL to this page:
> http://www.onelist. com/community/ K9AYloopYahoo! Groups Links
>

>
>
>

[Non-text portions of this message have been removed]

5684. Re: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 20:32:14 UTC
From: Chris Trask
Topic: 5683 Message: 5684

No matter how I try it, I get error messages saying that there is no
such thing as www.oK155.com.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "aimo ruoho" <aimounto@...>
To: <loopantennas@yahoogroups.com>; <Shortwave-SWL-Antenna@yahoogroups.com>
Sent: Sunday, September 14, 2008 1:19 PM
Subject: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY

> Hello, folks!
> Here you will see information, that will be revolutionary!
> Please examine the following address:
> http://www.ok1rr.com/e107plugins/content/content.php?content.76
> 73 de Ami
>
>
>
> ----- Forwarded Message ----
> From: Martin Kratoska <martin@...>
> To: K9AYloop@yahoogroups.com
> Sent: Thursday, September 11, 2008 9:51:23 AM
> Subject: Re: [K9AYloop] Re: Mini-K9AY
>
>
> Slightly off-topic, but there is another very interesting small RX
> antenna - The W2PM Mini Diamond Receiving Flag
>

> http://www.ok1rr. com/e107_ plugins/content/ content.php? content.76
>
> In contrary to the mini K9AY preliminary study it is proven design which
> works. My ~15 dB 2x 2N5109 preamp plus the internal preamp in my Orion
> were not the best but it does listen... The main advantage is that this
> antenna is ground-independent and can be built as rotatable.
>
> 73,
> Martin, OK1RR
>
> Aimo Unto Olavi RUOHO napsal(a):
> > Thank you very much for your expert email with interesting and well
> > made information, Sir!
> >
> > Are you sure,that instead of the 1:4 transformer I have to use a 1:9
> > one? One of these days I will build a 1:9 transformer, too, and test
> > it. I understood, that because my Mini-K9AY uses only 3.69 meter long
> > wire, it would need a 1:4 transformer. .. As terminal resistor I used a
> > 150 Ohm one only. It gives me all frequencies from LW to SW and an
> > unexpectedly high Front/Back-Ratio. I am going to test a linear
> > potentiometer one day soon, to see, if there will be any hope to make
> > things even better...
> >
> > You see, it's the trial and error method, that makes me breath and
> > full of joy, if things work as expected! If I knew all in advance, why
> > continue using my time to build anything?
> >
> > I built "the Mini-Wonder" following the text , drawing and measures
> > given. I am not a technician or mathematic genius, and I do not own
> > expencive meters or computer programs, so I am very dependable of what
> > I see and read and hear after having built and tested this antenna in
> > practice.
> >
> > I used it inside and connected it through my Wellbrook ALA 100M
> > Amplifier to my TEN-TEC RX3040 DSP Receiver. It is very directive and
> > as is, boosts the signals more than I could expect in advance.
> >
> > You see, I am a pessimist, who does not dare to be too optimistic with
> > these new things, but my curiosity makes me do things like this from
> > year to year...
> >
> > Anyway, I want to thank you for taking the time for measuring and
> > publishing the beneficial information for all us semi-ignorants to see
> > and wonder. Good work! I hope, that you will be seen more with your
> > emails here in the near future.
> >
> > Please be happy and prosper!
> >
> > 73 de Ami
> >

> >
> >
> >
> >
> > --- In K9AYloop@yahoogroup s.com, Martin Kratoska <martin@...> wrote:
> >> My analysis of the mini K9AY is here:
> >> http://www.ok1rr. com/e107_ plugins/content/ content.php? content.104
> >>
> >> 73,
> >> Martin, OK1RR
> >>
> >>
> >> Bill Whitacre napsal(a):
> >>> Now if we only had an English translation!
> >>>
> >>> bw
> >>>
> >
> >
> >
> > ------------ --------- --------- ------
> >
> > Community email addresses:
> > Post message: K9AYloop@onelist. com
> > Subscribe: K9AYloop-subscribe@ onelist.com
> > Unsubscribe: K9AYloop-unsubscrib e@onelist. com
> > List owner: K9AYloop-owner@ onelist.com
> >
> > Shortcut URL to this page:
> > http://www.onelist. com/community/ K9AYloopYahoo! Groups Links
> >
> >
> >
> >
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.6.21/1671 - Release Date: 9/14/08
7:16 AM

5685. Re: [Shortwave-SWL-Antenna] Fw: [K9AYloop] Re: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 20:46:14 UTC
From: aimo ruoho
Topic: 5685 Message: 5685

Sorry, because there was a "_" missing on the address, that I wrote, it gave a zero result...
So, the right email address is the following:
http://www.ok1rr.com/e107_plugins/content/content.php?content.76
I hope,that this came right this time.(Pse look at the original email from Martin@...)
My apologies.
73 de Ami

----- Original Message ----
From: aimo ruoho <aimounto@...>
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>;
Shortwave-SWL-Antenna@yahoogroups.com
Sent: Sunday, September 14, 2008 10:19:45 PM
Subject: [Shortwave-SWL-Antenna] Fw: [K9AYloop] Re: Mini-K9AY

Hello, folks!
Here you will see information, that will be revolutionary!
Please examine the following address:
http://www.ok1rr. com/e107plugins/ content/content. php?content. 76
73 de Ami

----- Forwarded Message ----
From: Martin Kratoska <martin@ok1rr. com>
To: K9AYloop@yahoogroup s.com
Sent: Thursday, September 11, 2008 9:51:23 AM
Subject: Re: [K9AYloop] Re: Mini-K9AY

Slightly off-topic, but there is another very interesting small RX
antenna - The W2PM Mini Diamond Receiving Flag

http://www.ok1rr. com/e107_ plugins/content/ content.php? content.76

In contrary to the mini K9AY preliminary study it is proven design which
works. My ~15 dB 2x 2N5109 preamp plus the internal preamp in my Orion
were not the best but it does listen... The main advantage is that this
antenna is ground-independent and can be built as rotatable.

73,
Martin, OK1RR

Aimo Unto Olavi RUOHO napsal(a):
> Thank you very much for your expert email with interesting and well
> made information, Sir!
>
> Are you sure,that instead of the 1:4 transformer I have to use a 1:9
> one? One of these days I will build a 1:9 transformer, too, and test
> it. I understood, that because my Mini-K9AY uses only 3.69 meter long

> wire, it would need a 1:4 transformer. .. As terminal resistor I used a
> 150 Ohm one only. It gives me all frequencies from LW to SW and an
> unexpectedly high Front/Back-Ratio. I am going to test a linear
> potentiometer one day soon, to see, if there will be any hope to make
> things even better...
>
> You see, it's the trial and error method, that makes me breath and
> full of joy, if things work as expected! If I knew all in advance, why
> continue using my time to build anything?
>
> I built "the Mini-Wonder" following the text , drawing and measures
> given. I am not a technician or mathematic genius, and I do not own
> expencive meters or computer programs, so I am very dependable of what
> I see and read and hear after having built and tested this antenna in
> practice.
>
> I used it inside and connected it through my Wellbrook ALA 100M
> Amplifier to my TEN-TEC RX3040 DSP Receiver. It is very directive and
> as is, boosts the signals more than I could expect in advance.
>
> You see, I am a pessimist, who does not dare to be too optimistic with
> these new things, but my curiosity makes me do things like this from
> year to year...
>
> Anyway, I want to thank you for taking the time for measuring and
> publishing the beneficial information for all us semi-ignorants to see
> and wonder. Good work! I hope, that you will be seen more with your
> emails here in the near future.
>
> Please be happy and prosper!
>
> 73 de Ami
>
>
>
>
>
> --- In K9AYloop@yahoogroup s.com, Martin Kratoska <martin@...> wrote:
>> My analysis of the mini K9AY is here:
>> http://www.ok1rr. com/e107_ plugins/content/ content.php? content.104
>>
>> 73,
>> Martin, OK1RR
>>
>>
>> Bill Whitacre napsal(a):
>>> Now if we only had an English translation!
>>>
>>> bw
>>>

>
>
>
> ------------ --------- --------- ------
>
> Community email addresses:
> Post message: K9AYloop@onelist. com
> Subscribe: K9AYloop-subscribe@ onelist.com
> Unsubscribe: K9AYloop-unsubscrib e@onelist. com
> List owner: K9AYloop-owner@ onelist.com
>
> Shortcut URL to this page:
> http://www.onelist. com/community/ K9AYloopYahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5686. Re: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 20:45:47 UTC
From: Chris Trask
Topic: 5683 Message: 5686

The correct URL is:

http://www.ok1rr.com/e107_plugins/content/content.php?content.76

It's basically a rhombic antenna lying on its side. Launch angle is a
little high.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "aimo ruoho" <aimounto@...>
To: <loopantennas@yahoogroups.com>; <Shortwave-SWL-Antenna@yahoogroups.com>
Sent: Sunday, September 14, 2008 1:19 PM
Subject: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY

> Hello, folks!
> Here you will see information, that will be revolutionary!
> Please examine the following address:
> http://www.ok1rr.com/e107plugins/content/content.php?content.76
> 73 de Ami
>
>
>
> ----- Forwarded Message ----
> From: Martin Kratoska <martin@...>
> To: K9AYloop@yahoogroups.com
> Sent: Thursday, September 11, 2008 9:51:23 AM
> Subject: Re: [K9AYloop] Re: Mini-K9AY
>
>

> Slightly off-topic, but there is another very interesting small RX
> antenna - The W2PM Mini Diamond Receiving Flag
>
> http://www.ok1rr. com/e107_ plugins/content/ content.php? content.76
>
> In contrary to the mini K9AY preliminary study it is proven design which
> works. My ~15 dB 2x 2N5109 preamp plus the internal preamp in my Orion
> were not the best but it does listen... The main advantage is that this
> antenna is ground-independent and can be built as rotatable.
>
> 73,
> Martin, OK1RR
>
> Aimo Unto Olavi RUOHO napsal(a):
> > Thank you very much for your expert email with interesting and well
> > made information, Sir!
> >
> > Are you sure,that instead of the 1:4 transformer I have to use a 1:9
> > one? One of these days I will build a 1:9 transformer, too, and test
> > it. I understood, that because my Mini-K9AY uses only 3.69 meter long
> > wire, it would need a 1:4 transformer. .. As terminal resistor I used a
> > 150 Ohm one only. It gives me all frequencies from LW to SW and an
> > unexpectedly high Front/Back-Ratio. I am going to test a linear
> > potentiometer one day soon, to see, if there will be any hope to make
> > things even better...
> >
> > You see, it's the trial and error method, that makes me breath and
> > full of joy, if things work as expected! If I knew all in advance, why
> > continue using my time to build anything?
> >
> > I built "the Mini-Wonder" following the text , drawing and measures
> > given. I am not a technician or mathematic genius, and I do not own
> > expencive meters or computer programs, so I am very dependable of what
> > I see and read and hear after having built and tested this antenna in
> > practice.
> >
> > I used it inside and connected it through my Wellbrook ALA 100M
> > Amplifier to my TEN-TEC RX3040 DSP Receiver. It is very directive and
> > as is, boosts the signals more than I could expect in advance.
> >
> > You see, I am a pessimist, who does not dare to be too optimistic with
> > these new things, but my curiosity makes me do things like this from
> > year to year...
> >
> > Anyway, I want to thank you for taking the time for measuring and
> > publishing the beneficial information for all us semi-ignorants to see
> > and wonder. Good work! I hope, that you will be seen more with your
> > emails here in the near future.
> >
> > Please be happy and prosper!

> >
> > 73 de Ami
> >
>

5687. Re: [Shortwave-SWL-Antenna] Re: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 20:58:21 UTC
From: aimo ruoho
Topic: 5687 Message: 5687

Do you mean www.ok1rr (OK1RR).com, not oK155.com?
I am very sorry, that I made a mistake here. The address was
underlined, so I couldn' t see the"_" in one place; "e107_plugins".

Please, see the original address down here by Martin Kratoska.
Sorry!
Aimo Ruoho

----- Original Message ----
From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com; Shortwave-SWL-Antenna@yahoogroups.com
Sent: Sunday, September 14, 2008 10:32:14 PM
Subject: [Shortwave-SWL-Antenna] Re: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY

No matter how I try it, I get error messages saying that there is no
such thing as www.oK155.com.

Chris

,---------- --------- --. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,---- --------- -' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlin k.net
| | | | \ '. http://www.home. earthlink. net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "aimo ruoho" <aimounto@yahoo. com>
To: <loopantennas@ yahoogroups. com>; <Shortwave-SWL- Antenna@yahoogro ups.com>
Sent: Sunday, September 14, 2008 1:19 PM
Subject: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY

> Hello, folks!
> Here you will see information, that will be revolutionary!
> Please examine the following address:

> http://www.ok1rr. com/e107plugins/ content/content. php?content. 76
> 73 de Ami
>
>
>
> ----- Forwarded Message ----
> From: Martin Kratoska <martin@ok1rr. com>
> To: K9AYloop@yahoogroup s.com
> Sent: Thursday, September 11, 2008 9:51:23 AM
> Subject: Re: [K9AYloop] Re: Mini-K9AY
>
>
> Slightly off-topic, but there is another very interesting small RX
> antenna - The W2PM Mini Diamond Receiving Flag
>
> http://www.ok1rr. com/e107_ plugins/content/ content.php? content.76
>
> In contrary to the mini K9AY preliminary study it is proven design which
> works. My ~15 dB 2x 2N5109 preamp plus the internal preamp in my Orion
> were not the best but it does listen... The main advantage is that this
> antenna is ground-independent and can be built as rotatable.
>
> 73,
> Martin, OK1RR
>
> Aimo Unto Olavi RUOHO napsal(a):
> > Thank you very much for your expert email with interesting and well
> > made information, Sir!
> >
> > Are you sure,that instead of the 1:4 transformer I have to use a 1:9
> > one? One of these days I will build a 1:9 transformer, too, and test
> > it. I understood, that because my Mini-K9AY uses only 3.69 meter long
> > wire, it would need a 1:4 transformer. .. As terminal resistor I used a
> > 150 Ohm one only. It gives me all frequencies from LW to SW and an
> > unexpectedly high Front/Back-Ratio. I am going to test a linear
> > potentiometer one day soon, to see, if there will be any hope to make
> > things even better...
> >
> > You see, it's the trial and error method, that makes me breath and
> > full of joy, if things work as expected! If I knew all in advance, why
> > continue using my time to build anything?
> >
> > I built "the Mini-Wonder" following the text , drawing and measures
> > given. I am not a technician or mathematic genius, and I do not own
> > expencive meters or computer programs, so I am very dependable of what
> > I see and read and hear after having built and tested this antenna in
> > practice.
> >
> > I used it inside and connected it through my Wellbrook ALA 100M
> > Amplifier to my TEN-TEC RX3040 DSP Receiver. It is very directive and

> > as is, boosts the signals more than I could expect in advance.
> >
> > You see, I am a pessimist, who does not dare to be too optimistic with
> > these new things, but my curiosity makes me do things like this from
> > year to year...
> >
> > Anyway, I want to thank you for taking the time for measuring and
> > publishing the beneficial information for all us semi-ignorants to see
> > and wonder. Good work! I hope, that you will be seen more with your
> > emails here in the near future.
> >
> > Please be happy and prosper!
> >
> > 73 de Ami
> >
> >
> >
> >
> >
> > --- In K9AYloop@yahoogroup s.com, Martin Kratoska <martin@...> wrote:
> >> My analysis of the mini K9AY is here:
> >> http://www.ok1rr. com/e107_ plugins/content/ content.php? content.104
> >>
> >> 73,
> >> Martin, OK1RR
> >>
> >>
> >> Bill Whitacre napsal(a):
> >>> Now if we only had an English translation!
> >>>
> >>> bw
> >>>
> >
> >
> >
> > ------------ --------- --------- ------
> >
> > Community email addresses:
> > Post message: K9AYloop@onelist. com
> > Subscribe: K9AYloop-subscribe@ onelist.com
> > Unsubscribe: K9AYloop-unsubscrib e@onelist. com
> > List owner: K9AYloop-owner@ onelist.com
> >
> > Shortcut URL to this page:
> > http://www.onelist. com/community/ K9AYloopYahoo! Groups Links
> >
> >
> >
> >
>

>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>

------------ --------- --------- --------- --------- --------- -
----

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.6.21/1671 - Release Date: 9/14/08
7:16 AM

[Non-text portions of this message have been removed]

5688. Re: [Shortwave-SWL-Antenna] Re: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-14 21:01:34 UTC
From: Chris Trask
Topic: 5687 Message: 5688

```
>
> Do you mean www.ok1rr (OK1RR).com, not oK155.com?
> I am very sorry, that I made a mistake here. The address was
> underlined, so I couldn' t see the"_" in one place; "e107_plugins".
>
> Please, see the original address down here by Martin Kratoska.
> Sorry!
>

Yes. a little fumble-fingers here when typing it in rather than copying
it. I managed to find it by way of Google.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "aimo ruoho" <aimounto@...>
To: <Shortwave-SWL-Antenna@yahoogroups.com>; <loopantennas@yahoogroups.com>
Sent: Sunday, September 14, 2008 1:58 PM
Subject: Re: [Shortwave-SWL-Antenna] Re: [loopantennas] Fw: [K9AYloop] Re:
Mini-K9AY

> Aimo Ruoho
>
>
> ----- Original Message ----
> From: Chris Trask <christrask@...>
> To: loopantennas@yahoogroups.com; Shortwave-SWL-Antenna@yahoogroups.com
> Sent: Sunday, September 14, 2008 10:32:14 PM
```

> Subject: [Shortwave-SWL-Antenna] Re: [loopantennas] Fw: [K9AYloop] Re:
Mini-K9AY
>
>
> No matter how I try it, I get error messages saying that there is no
> such thing as www.oK155.com.
>
> Chris
>
> ,---------- --------- --. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,---- --------- -' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@earthlin k.net
> | | | | \ '. http://www.home. earthlink. net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
> ----- Original Message -----
> From: "aimo ruoho" <aimounto@yahoo. com>
> To: <loopantennas@ yahoogroups. com>; <Shortwave-SWL- Antenna@yahoogro
ups.com>
> Sent: Sunday, September 14, 2008 1:19 PM
> Subject: [loopantennas] Fw: [K9AYloop] Re: Mini-K9AY
>
> > Hello, folks!
> > Here you will see information, that will be revolutionary!
> > Please examine the following address:
> > http://www.ok1rr. com/e107plugins/ content/content. php?content. 76
> > 73 de Ami
> >
> >
> >
> > ----- Forwarded Message ----
> > From: Martin Kratoska <martin@ok1rr. com>
> > To: K9AYloop@yahoogroup s.com
> > Sent: Thursday, September 11, 2008 9:51:23 AM
> > Subject: Re: [K9AYloop] Re: Mini-K9AY
> >
> >
> > Slightly off-topic, but there is another very interesting small RX
> > antenna - The W2PM Mini Diamond Receiving Flag

> >
> > http://www.ok1rr. com/e107_ plugins/content/ content.php? content.76
> >
> > In contrary to the mini K9AY preliminary study it is proven design which
> > works. My ~15 dB 2x 2N5109 preamp plus the internal preamp in my Orion
> > were not the best but it does listen... The main advantage is that this
> > antenna is ground-independent and can be built as rotatable.
> >
> > 73,
> > Martin, OK1RR
> >
> > Aimo Unto Olavi RUOHO napsal(a):
> > > Thank you very much for your expert email with interesting and well
> > > made information, Sir!
> > >
> > > Are you sure,that instead of the 1:4 transformer I have to use a 1:9
> > > one? One of these days I will build a 1:9 transformer, too, and test
> > > it. I understood, that because my Mini-K9AY uses only 3.69 meter long
> > > wire, it would need a 1:4 transformer. .. As terminal resistor I used
a
> > > 150 Ohm one only. It gives me all frequencies from LW to SW and an
> > > unexpectedly high Front/Back-Ratio. I am going to test a linear
> > > potentiometer one day soon, to see, if there will be any hope to make
> > > things even better...
> > >
> > > You see, it's the trial and error method, that makes me breath and
> > > full of joy, if things work as expected! If I knew all in advance, why
> > > continue using my time to build anything?
> > >
> > > I built "the Mini-Wonder" following the text , drawing and measures
> > > given. I am not a technician or mathematic genius, and I do not own
> > > expencive meters or computer programs, so I am very dependable of what
> > > I see and read and hear after having built and tested this antenna in
> > > practice.
> > >
> > > I used it inside and connected it through my Wellbrook ALA 100M
> > > Amplifier to my TEN-TEC RX3040 DSP Receiver. It is very directive and
> > > as is, boosts the signals more than I could expect in advance.
> > >
> > > You see, I am a pessimist, who does not dare to be too optimistic with
> > > these new things, but my curiosity makes me do things like this from
> > > year to year...
> > >
> > > Anyway, I want to thank you for taking the time for measuring and
> > > publishing the beneficial information for all us semi-ignorants to see
> > > and wonder. Good work! I hope, that you will be seen more with your
> > > emails here in the near future.
> > >
> > > Please be happy and prosper!
> > >

> > > 73 de Ami
> > >
> > >
> > >
> > >
> > >
> > > --- In K9AYloop@yahoogroup s.com, Martin Kratoska <martin@...> wrote:
> > >> My analysis of the mini K9AY is here:
> > >> http://www.ok1rr. com/e107_ plugins/content/ content.php? content.104
> > >>
> > >> 73,
> > >> Martin, OK1RR
> > >>
> > >>
> > >> Bill Whitacre napsal(a):
> > >>> Now if we only had an English translation!
> > >>>
> > >>> bw
> > >>>
> > >
> > >
> > >
> > > ------------ --------- --------- ------
> > >
> > > Community email addresses:
> > > Post message: K9AYloop@onelist. com
> > > Subscribe: K9AYloop-subscribe@ onelist.com
> > > Unsubscribe: K9AYloop-unsubscrib e@onelist. com
> > > List owner: K9AYloop-owner@ onelist.com
> > >
> > > Shortcut URL to this page:
> > > http://www.onelist. com/community/ K9AYloopYahoo! Groups Links
> > >
> > >
> > >
> > >
> >
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
> >
>
> ------------ --------- --------- --------- --------- --------- -
> ----
>
> No virus found in this incoming message.

> Checked by AVG.
> Version: 7.5.526 / Virus Database: 270.6.21/1671 - Release Date: 9/14/08
> 7:16 AM
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
> ------------------------------------
>
> PLEASE - TRIM THE MESSAGE ENDS WHEN YOU REPLY - PLEASE
> .
> Hello Members,
> .
> Here are your Messages from the
> "Shortwave-SWL-Antenna" Group on YAHOO !
> .
> NOTICE : If your are going to re-use the Writings and
> Infomation in-whole or in-part that you have found in
> this YAHOO! Group; at other websites and places on the
> Internet; including other forms of Media.
> THEN - Please give Proper Attribution to this Group.
> By Post the Name of the Group and a Link to the Group.
> Shortwave Listeners (SWL) Antennas Group YAHOO !
> http://groups.yahoo.com/group/Shortwave-SWL-Antenna/
>
> moderately yours ~ RHF
> .
> Yahoo! Groups Links
>
>
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG.
> Version: 7.5.526 / Virus Database: 270.6.21/1671 - Release Date: 9/14/08
7:16 AM
>

5689. home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-15 11:33:15 UTC
From: DAVID
Topic: 5524 Message: 5689

hi i recorded this at around 05.20 utc this morning and just before
and after the presumed espn radio ?? north atlantis am i hearing
things or do i hear CW ???? thanks david .... scotland
listen here http://www.youtube.com/watch?v=KC6hBvHF98Y

5690. Re: [loopantennas] home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-15 18:30:46 UTC
From: John MacKay
Topic: 5524 Message: 5690

North Atlantis ? That would be a great QSL.   VE7AFN.

--- On Mon, 9/15/08, DAVID <dhamilton1@...> wrote:

From: DAVID <dhamilton1@...>
Subject: [loopantennas] home made mw loop
To: loopantennas@yahoogroups.com
Date: Monday, September 15, 2008, 4:33 AM

hi i recorded this at around 05.20 utc this morning and just before
and after the presumed espn radio ?? north atlantis am i hearing
things or do i hear CW ???? thanks david .... scotland
listen here http://www.youtube. com/watch? v=KC6hBvHF98Y

[Non-text portions of this message have been removed]

5691. Re: home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-15 19:01:13 UTC
From: yazoo_63
Topic: 5524 Message: 5691

--- In loopantennas@yahoogroups.com, "DAVID" <dhamilton1@...> wrote:
>
> hi i recorded this at around 05.20 utc this morning and just before
> and after the presumed espn radio ?? north atlantis am i hearing
> things or do i hear CW ???? thanks david .... scotland
> listen here http://www.youtube.com/watch?v=KC6hBvHF98Y
>

David,

What you heard was WLAM 1470, an ESPN affiliate in Lewiston, Maine.

If you listen closely at 0:49 - 0:55 , you'll hear "...the next big
story on 870 and 1470, Maine's sports station ..."

Barry
Sparta, Tennessee

5692. Re: [loopantennas] Re: home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-15 19:56:30 UTC
From: david/lorraine
Topic: 5524 Message: 5692

many thanks..... david
----- Original Message -----
From: yazoo_63
To: loopantennas@yahoogroups.com
Sent: Monday, September 15, 2008 8:01 PM
Subject: [loopantennas] Re: home made mw loop

--- In loopantennas@yahoogroups.com, "DAVID" <dhamilton1@...> wrote:
>
> hi i recorded this at around 05.20 utc this morning and just before
> and after the presumed espn radio ?? north atlantis am i hearing
> things or do i hear CW ???? thanks david .... scotland
> listen here http://www.youtube.com/watch?v=KC6hBvHF98Y
>

David,

What you heard was WLAM 1470, an ESPN affiliate in Lewiston, Maine.

If you listen closely at 0:49 - 0:55 , you'll hear "...the next big
story on 870 and 1470, Maine's sports station ..."

Barry
Sparta, Tennessee

[Non-text portions of this message have been removed]

5693. Re: home made mw loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-16 15:41:47 UTC
From: Steve Baker
Topic: 5524 Message: 5693

ESPN 1470 is located in Lewiston/Auburn Maine.

5694. Re: for sale Wellbrook ala 1530+

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-17 16:26:51 UTC
From: Briggs Longbothum
Topic: 5526 Message: 5694

--- In loopantennas@yahoogroups.com, "spudie14" <riches1234@...> wrote:
>
> Just a quick add for any one that might be intrested in buying my
> wellbrook loop just dont have time for shortwave anymore if your
> intrested drop me an email thanks Edd
>
Edd- This is my fourth and last reply to you FS posting for this antenna. Other have also respsonded and I've not seen any reply from you! If your AL-1530+ is still available, please rsvp asap indicating what you need for it to be shipped to 01930. I am sincerely interested tho very disappointed in the lack of communication. Thank you in advance.

5695. Re: [loopantennas] Re: for sale Wellbrook ala 1530+

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-17 17:25:51 UTC
From: aidehua@aol.com
Topic: 5526 Message: 5695

He didn't respond to me, either.? Maybe he is not well?? Died?

73,
Ed

-----Original Message-----
From: Briggs Longbothum <bruggo@...>
To: loopantennas@yahoogroups.com
Sent: Wed, 17 Sep 2008 9:26 am
Subject: [loopantennas] Re: for sale Wellbrook ala 1530+

--- In loopantennas@yahoogroups.com, "spudie14" <riches1234@...> wrote:
>
> Just a quick add for any one that might be intrested in buying my
> wellbrook loop just dont have time for shortwave anymore if your
> intrested drop me an email thanks Edd
>
Edd- This is my fourth and last reply to you FS posting for this antenna. Other have also respsonded and I've not seen any reply from you! If your AL-1530+ is still available, please rsvp asap indicating what you need for it to be shipped to 01930. I am sincerely interested tho very disappointed in the lack of communication. Thank you in advance.

[Non-text portions of this message have been removed]

5696. Edek 26" Inductively Coupled MW Loop and Wellbrook 1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-17 21:37:47 UTC
From: billmagness
Topic: 5696 Message: 5696

Has anyone had any experience with the Edek 26" MW Loop? I'm considering it for indoor use because of space restrictions. Also, I'm in the market for a Wellbrook 1530 if anyone has one in good shape. I know they make several versions (1530P for indoor use and evidently a 1530+ which is an upgraded version). If anyone has any input into how the 1530 compares to the 5030 I'd be curious to hear that too.

many thanks,
Bill

5697. New to group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-19 12:12:08 UTC
From: David
Topic: 2096 Message: 5697

Hello,

Just joined the group in the hunt for information on loop antennae and
so far found some good info on here.

I'm also trying to find a UK supplier for Amidon T200-2 Toroid cores so
I can wind my own baluns so I can get fully active on HF. Can anyone
point me in the right direction ?

Any help would be appreciated, thanks.

David
GM7UED
Aberdeen
G-QRP 11928

5698. Re: [loopantennas] New to group (T200-2 source)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-19 15:30:00 UTC
From: Steve Ratzlaff
Topic: 5698 Message: 5698

Hi David,
Diz at http://kitsandparts.com/ has the best price and he ships to other countries; maybe consider a non-UK supplier such as that one.
73,
Steve
----- Original Message -----
From: "David" <gm7ued@...>
To: <loopantennas@yahoogroups.com>
Sent: Friday, September 19, 2008 5:12 AM
Subject: [loopantennas] New to group

> Hello,
>
> Just joined the group in the hunt for information on loop antennae and
> so far found some good info on here.
>
> I'm also trying to find a UK supplier for Amidon T200-2 Toroid cores so
> I can wind my own baluns so I can get fully active on HF. Can anyone
> point me in the right direction ?
>
> Any help would be appreciated, thanks.
>
> David
> GM7UED
> Aberdeen
> G-QRP 11928

5699. Re: [loopantennas] New to group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-19 15:41:26 UTC
From: C. Beijersbergen
Topic: 2096 Message: 5699

Not a UK supplier, but he will ship to the UK from the Netherlands:

http://www.xs4all.nl/~barendh/Indexeng.htm

regards,

Cor Beijersbergen

[Non-text portions of this message have been removed]

5700. Re: [loopantennas] New to group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-19 16:31:41 UTC
From: Tracey Gardner
Topic: 2096 Message: 5700

Hello David

That's an easy one :-)

JAB Electronic Components stock it for ?4.00 plus ?3.60 p&p

http://www.jabdog.com/index.htm

73s Tracey G5VU

5701. Re: [loopantennas] New to group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-19 18:30:20 UTC
From: gandalfg8@aol.com
Topic: 2096 Message: 5701

In a message dated 19/09/2008 17:32:20 GMT Daylight Time,
tracey.gardner@... writes:

That's an easy one :-)

JAB Electronic Components stock it for £4.00 plus £3.60 p&p

Hi Tracey

Spratreader has them on ebay for £3.95 and £1.75 p&p:-)

See item 300260087412

R1001 problem seems to have been antenna socket and/or attached LPF, now
singing like a bird:-)

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5702. I finally completed the testing and construction of a new form of transmitting loop antenna. This version does not require the usual high-voltage variable capacitor nor the gamma-match or Mini-Loop matching element. The prototype tunes the entire 40M

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-19 23:21:41 UTC
From: Chris Trask
Topic: 5702 Message: 5702

I finally completed the testing and construction of a new form of transmitting loop antenna. This version does not require the usual high-voltage variable capacitor nor the gamma-match or Mini-Loop matching element. The prototype tunes the entire 40M band and is suitable for power levels up to 100W. Return loss is 20dB or better over the band. Power for the motor that adjusts the variable capacitor is sent up the coaxial cable feedline. The preliminary details are available at:

http://www.home.earthlink.net/~christrask/Paper012.html

I will have the usual full details available before long.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5703. Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-19 23:29:52 UTC
From: Chris Trask
Topic: 5703 Message: 5703

I finally completed the testing and construction of a new form of transmitting loop antenna. This version does not require the usual high-voltage variable capacitor nor the gamma-match or Mini-Loop matching element. The prototype tunes the entire 40M band and is suitable for power levels up to 100W. Return loss is 20dB or better over the band. Power for the motor that adjusts the variable capacitor is sent up the coaxial cable feedline. The preliminary details are available at:

http://www.home.earthlink.net/~christrask/Paper012.html

I will have the usual full details available before long.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5704. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-20 03:14:19 UTC
From: Mike WE0H
Topic: 5703 Message: 5704

Looks darn nice Chris. I was going to ask how long the tubing was but I see you are still in process of finishing the document. How about one for 600 meters??? hi hi...

Mike
WE0H
WD2XSH/16 on 600m

Chris Trask wrote:
> I finally completed the testing and construction of a new form of
> transmitting loop antenna. This version does not require the usual
> high-voltage variable capacitor nor the gamma-match or Mini-Loop matching
> element. The prototype tunes the entire 40M band and is suitable for power
> levels up to 100W. Return loss is 20dB or better over the band. Power for
> the motor that adjusts the variable capacitor is sent up the coaxial cable
> feedline. The preliminary details are available at:
>
> http://www.home.earthlink.net/~christrask/Paper012.html
>
> I will have the usual full details available before long.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>

5705. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-20 13:49:17 UTC
From: Chris Trask
Topic: 5703 Message: 5705

The loop element in this one at 15 feet of 1/2" flexible copper tubing. With the connectors, etc., it ends up being just under 1.5m in diameter.

I already had someone ask about a 600M version. The loop would be at least 2m in diameter, made of three turns of 1/4" tubing spaced 1.5" apart. That comes to about 62 feet of tubing.

The three transformers would be a bit of trouble, just as they have been in this HF design due to the very low impedances in the early stages. T1 and T2 would probably be built on Fair-Rite 67-mix toroids (5967001001, available from Amidon), and T3 would remain being built on a 43-mix toroid (5943001001, also available from Amidon).

>
>Looks darn nice Chris. I was going to ask how long the tubing was but I
>see you are still in process of finishing the document. How about one
>for 600 meters??? hi hi...
>
>Mike
>WE0H
>WD2XSH/16 on 600m
>
>
>Chris Trask wrote:
>> I finally completed the testing and construction of a new form of
>> transmitting loop antenna. This version does not require the usual
>> high-voltage variable capacitor nor the gamma-match or Mini-Loop matching
>> element. The prototype tunes the entire 40M band and is suitable for power
>> levels up to 100W. Return loss is 20dB or better over the band. Power for
>> the motor that adjusts the variable capacitor is sent up the coaxial cable
>> feedline. The preliminary details are available at:
>>
>> http://www.home.earthlink.net/~christrask/Paper012.html
>>
>> I will have the usual full details available before long.
>>
>> Chris
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research

(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5706. Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-20 09:13:49 UTC
From: John
Topic: 5703 Message: 5706

>> I finally completed the testing and construction
>> of a new form of transmitting loop antenna.
Hi Cris,
Have you made any QSO's with this antenna? How does it perform
compared to a random wire? Would it be possible to use this with QRP
rigs? Any restrictions on operating height?

72,
John/AF4EX

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...>
wrote:
>
> I finally completed the testing and construction of a new form
of
> transmitting loop antenna. This version does not require the usual
> high-voltage variable capacitor nor the gamma-match or Mini-Loop
matching
> element. The prototype tunes the entire 40M band and is suitable
for power
> levels up to 100W. Return loss is 20dB or better over the band.
Power for
> the motor that adjusts the variable capacitor is sent up the
coaxial cable
> feedline. The preliminary details are available at:
>
> http://www.home.earthlink.net/~christrask/Paper012.html
>
> I will have the usual full details available before long.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '.

http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

5707. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-20 16:26:16 UTC
From: chas
Topic: 5703 Message: 5707

Chris Trask wrote:
> I finally completed the testing and construction of a new form of
> transmitting loop antenna. This version does not require the usual
> high-voltage variable capacitor nor the gamma-match or Mini-Loop matching
> element. The prototype tunes the entire 40M band and is suitable for power
> levels up to 100W. Return loss is 20dB or better over the band. Power for
> the motor that adjusts the variable capacitor is sent up the coaxial cable
> feedline. The preliminary details are available at:
>
> http://www.home.earthlink.net/~christrask/Paper012.html
>
> I will have the usual full details available before long.
>
> Chris

Chris
how about a QRO, wide band version of this?
as in 20m thru 90m?? actually, 40m and down would be great.

In other words, a MARS ready antenna which would handle 600W instead
of 600m <G> and be useful in the foreseeable propagation conditions
which we have been suffering thru for the past year?

perhaps a spiral of about 2m diam? not sure what would be needed for
the less than 1kw TX.

I would love to put up something like this at my base. OR use it for
deployment as we have done for three hurricanes in a row now.

thanks
chas k5dam

5708. New Ham question?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-20 23:21:54 UTC
From: geo
Topic: 5708 Message: 5708

Hi

My question is about transmitting loops running on low power shortwaves indoors?

I passed my Canadian (southern Ontario) Basic and Advanced tests (no code) and my license is in the mail on it's way to me.

I plan on building my own equipment (I've already started prototyping my ideas). I want to work shortwaves on relatively low power (under 30 watts), AM phone.

Has anyone experimented with low power transmitting loops indoors? Which frequencies should I make the loop for?

Thanks,
geo
VE3GZB

5709. Re: New Ham question?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 02:20:38 UTC
From: John
Topic: 5708 Message: 5709

Geo,
I don't know much about indoor antennas for AM low power, but some guidelines for AM operation (at least in the U.S.) can be found here (including the W1AW AM operation schedule):

http://www.arrl.org/tis/info/am.html

AM Phone enthusiasts seem to hang out here.

http://amfone.net

Try posting a message in their AM Forum.

HTH,
73 de John/AF4EX

--- In loopantennas@yahoogroups.com, "geo" <yaktur@...> wrote:
>
> Hi
>
> My question is about transmitting loops running on low power
> shortwaves indoors?
>
> I passed my Canadian (southern Ontario) Basic and Advanced tests
(no
> code) and my license is in the mail on it's way to me.
>
> I plan on building my own equipment (I've already started
prototyping
> my ideas). I want to work shortwaves on relatively low power
(under 30
> watts), AM phone.
>
> Has anyone experimented with low power transmitting loops indoors?
> Which frequencies should I make the loop for?
>
> Thanks,
> geo
> VE3GZB
>

5710. Capacitor Designs

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-20 21:35:09 UTC
From: Neil McGrath
Topic: 5710 Message: 5710

The most expensive component required for a home-brew loop antenna appears to be the tuning capacitor. Does anyone have any good designs for the construction of a home brew cap using simple tools.

Neil

5711. Re: [loopantennas] Capacitor Designs

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 12:11:54 UTC
From: steve.g4vbd
Topic: 5710 Message: 5711

Hi Neil
Have a look at "Antenna Jottings" by G3JKF

on the Crawley Cclub site at

http://www.carc.org.uk/pdf/Archive_015.pdf

he uses copper clad board as the capacitor plates and an electric screwdriver to move one of them.

I'm also interested in any other ideas !

Regards

Steve, g4vbd

----- Original Message -----
From: Neil McGrath
To: loopantennas@yahoogroups.com
Sent: Saturday, September 20, 2008 10:35 PM
Subject: [loopantennas] Capacitor Designs

The most expensive component required for a home-brew loop antenna
appears to be the tuning capacitor. Does anyone have any good designs
for the construction of a home brew cap using simple tools.

Neil

[Non-text portions of this message have been removed]

5712. Re: [loopantennas] Capacitor Designs

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 15:28:41 UTC
From: toddroberts2001@aol.com
Topic: 5710 Message: 5712

In a message dated 9/21/2008 10:59:48 A.M. Eastern Daylight Time,
steve.g4vbd@... writes:
Hi Neil
Have a look at "Antenna Jottings" by G3JKF

on the Crawley Cclub site at

http://www.carc.org.uk/pdf/Archive_015.pdf

he uses copper clad board as the capacitor plates and an electric
screwdriver to move one of them.

I'm also interested in any other ideas !

Regards

Steve, g4vbd

Hi Neil and Steve,
I think one of the best articles on building a transmitting loop capacitor
was
published in the November 1994 issue of QST magazine. The title is :
A Homebrew Loop Tuning Capacitor - by Bill Jones KD7S.

Bill describes building a trombone-style capacitor out of copper pipe,
elbow fittings, Teflon sheet for insulation, a threaded rod and motor tuning.

I built one similar to it for a 10 meter transmitting loop and it works
flawlessly. Very smooth tuning and not a trace of heating or arcing
at the 100 watt power level. It is much easier to build than trying to
use flat plates or circuit board material.

Also keep in mind the phenolic or epoxy grade circuit board material
is a lossy dielectric and not recommended to be used as a high voltage
RF capacitor. Teflon insulation is the best.

73 Todd WD4NGG

**********Looking for simple solutions to your real-life financial
challenges? Check out WalletPop for the latest news and information, tips and
calculators. (http://www.walletpop.com/?NCID=emlcntuswall00000001)

5713. Re: [loopantennas] Capacitor Designs

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 15:52:39 UTC
From: Chris Trask
Topic: 5710 Message: 5713

>
> > Have a look at "Antenna Jottings" by G3JKF
> > on the Crawley Cclub site at
> >
> > http://www.carc.org.uk/pdf/Archive_015.pdf
> >
> > he uses copper clad board as the capacitor plates and an electric
> > screwdriver to move one of them.
> >
> > I'm also interested in any other ideas !
>
>
> Hi Neil and Steve,
> I think one of the best articles on building a transmitting loop
> capacitor was published in the November 1994 issue of QST magazine.
> The title is :
>
> A Homebrew Loop Tuning Capacitor - by Bill Jones KD7S.
>
> Bill describes building a trombone-style capacitor out of copper
> pipe, elbow fittings, Teflon sheet for insulation, a threaded rod
> and motor tuning.
>
> I built one similar to it for a 10 meter transmitting loop and it
> works flawlessly. Very smooth tuning and not a trace of heating or
> arcing at the 100 watt power level. It is much easier to build than
> trying to use flat plates or circuit board material.
>
> Also keep in mind the phenolic or epoxy grade circuit board material
> is a lossy dielectric and not recommended to be used as a high voltage
> RF capacitor. Teflon insulation is the best.
>

Steve is right about the use of the trombone capacitor. For motorized tuners used over a relatively narrow frequency range, the trombone can be a very inexpensive alternative to buying a commercial variable capacitor. I may try one of these in my motor-driven loop tuner later on so as to further reduce the costs.

Could someone scan that Jones article and add it to the files section?

Chris

```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
```

_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5714. Re: [loopantennas] Capacitor Designs

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 16:50:34 UTC
From: Paul V Birke PEng
Topic: 5710 Message: 5714

not a good design of the caps is the square sheet
you get fringing dielectric field and no wonder he gets rf in the screwdriver windings

again a trombone affair might be better as dielectric field contained between the concentric tubes

wondering if someone supplies teflon tubing as low friction for movement and would stand high voltage

some kind of trombone design here might be best

maybe there are other ways of building tunable capacitors besides the expensive vacuum capacitors

some of these are available on ebay from the former soviet bloc

best
Paul

----- Original Message ----
From: steve.g4vbd <steve.g4vbd@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, September 21, 2008 8:11:54 AM
Subject: Re: [loopantennas] Capacitor Designs

Hi Neil
Have a look at "Antenna Jottings" by G3JKF

on the Crawley Cclub site at

http://www.carc. org.uk/pdf/ Archive_015. pdf

he uses copper clad board as the capacitor plates and an electric screwdriver to move one of them.

I'm also interested in any other ideas !

Regards

Steve, g4vbd

----- Original Message -----
From: Neil McGrath
To: loopantennas@ yahoogroups. com
Sent: Saturday, September 20, 2008 10:35 PM
Subject: [loopantennas] Capacitor Designs

The most expensive component required for a home-brew loop antenna
appears to be the tuning capacitor. Does anyone have any good designs

for the construction of a home brew cap using simple tools.

Neil

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5715. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 21:25:59 UTC
From: Chris Trask
Topic: 5703 Message: 5715

I just completed the detailed description of my transmitting loop
antenna, and it can be obtained from the same URL as before:

http://www.home.earthlink.net/~christrask/Paper012.html

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Chris Trask" <christrask@...>
To: "Loop Antennas" <loopantennas@yahoogroups.com>
Sent: Friday, September 19, 2008 4:29 PM
Subject: [loopantennas] Transmitting Loop Antenna

> I finally completed the testing and construction of a new form of
> transmitting loop antenna. This version does not require the usual
> high-voltage variable capacitor nor the gamma-match or Mini-Loop matching
> element. The prototype tunes the entire 40M band and is suitable for
power
> levels up to 100W. Return loss is 20dB or better over the band. Power
for
> the motor that adjusts the variable capacitor is sent up the coaxial cable
> feedline. The preliminary details are available at:
>
> http://www.home.earthlink.net/~christrask/Paper012.html
>
> I will have the usual full details available before long.
>
> Chris
>

> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
>

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.6.21/1678 - Release Date: 9/18/08
9:01 AM

5716. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 21:38:11 UTC
From: Chris Trask
Topic: 5703 Message: 5716

Mike,
The detailed writeup was just completed, and it's available at:

http://www.home.earthlink.net/~christrask/Paper012.html

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Mike WE0H" <we0h@...>
To: <loopantennas@yahoogroups.com>
Sent: Friday, September 19, 2008 8:14 PM
Subject: Re: [loopantennas] Transmitting Loop Antenna

> Looks darn nice Chris. I was going to ask how long the tubing was but I
> see you are still in process of finishing the document. How about one
> for 600 meters??? hi hi...
>
> Mike
> WE0H
> WD2XSH/16 on 600m
>
>
> Chris Trask wrote:
> > I finally completed the testing and construction of a new form of
> > transmitting loop antenna. This version does not require the usual
> > high-voltage variable capacitor nor the gamma-match or Mini-Loop
matching
> > element. The prototype tunes the entire 40M band and is suitable for
power

> > levels up to 100W. Return loss is 20dB or better over the band. Power
for
> > the motor that adjusts the variable capacitor is sent up the coaxial
cable
> > feedline. The preliminary details are available at:
> >
> > http://www.home.earthlink.net/~christrask/Paper012.html
> >
> > I will have the usual full details available before long.
> >
> > Chris
> >
> > ,----------------------. High Performance Mixers and
> > / What's all this \ Amplifiers for RF Communications
> > / extinct stuff, anyhow? /
> > \ _______,--------------' Chris Trask / N7ZWY
> > _ |/ Principal Engineer
> > oo\ Sonoran Radio Research
> > (__)\ _ P.O. Box 25240
> > \ \ .' `. Tempe, Arizona 85285-5240
> > \ \ / \
> > \ '" \ IEEE Senior Member #40274515
> > . ( ) \
> > '-|)__| :. \ Email: christrask@...
> > | | | | \ '. http://www.home.earthlink.net/~christrask
> > c__; c__; '-..'>.__
> >
> > Graphics by Loek Frederiks
> >
> >
>

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.7.0/1682 - Release Date: 9/20/08
10:24 AM

5717. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 21:58:50 UTC
From: Mike WE0H
Topic: 5703 Message: 5717

Hi Chris,

Just snagged it off the server. Will have to read later tonight.
Building goodies on the bench right now.

tnx,
Mike
WE0H
/16

Chris Trask wrote:
> Mike,
> The detailed writeup was just completed, and it's available at:
>
> http://www.home.earthlink.net/~christrask/Paper012.html
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks

5718. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 22:10:27 UTC
From: Chris Trask
Topic: 5703 Message: 5718

I'm taking a break, myself. I have two active antenna projects pending,
plus a direct-readout VSWR meter. Spent a bit of $$ these past four months
on parts and electricity for the test equipment. The local ACE hardware
store has gotten used to me once again going in and playing with all sorts
of parts.

Plus, this is the beginning of gardening season.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Mike WE0H" <we0h@...>
To: <loopantennas@yahoogroups.com>
Sent: Sunday, September 21, 2008 2:58 PM
Subject: Re: [loopantennas] Transmitting Loop Antenna

> Hi Chris,
>
> Just snagged it off the server. Will have to read later tonight.
> Building goodies on the bench right now.
>
> tnx,
> Mike
> WE0H
> /16
>
>
> Chris Trask wrote:
> > Mike,

> > The detailed writeup was just completed, and it's available at:
> >
> > http://www.home.earthlink.net/~christrask/Paper012.html
> >
> > Chris
> >
> > ,----------------------. High Performance Mixers and
> > / What's all this \ Amplifiers for RF Communications
> > / extinct stuff, anyhow? /
> > \ _______,--------------' Chris Trask / N7ZWY
> > _ |/ Principal Engineer
> > oo\ Sonoran Radio Research
> > (__)\ _ P.O. Box 25240
> > \ \ .' `. Tempe, Arizona 85285-5240
> > \ \ / \
> > \ '" \ IEEE Senior Member #40274515
> > . ( ) \
> > '-|)__| :. \ Email: christrask@...
> > | | | | \ '. http://www.home.earthlink.net/~christrask
> > c__; c__; '-..'>.__
> >
> > Graphics by Loek Frederiks
>

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.7.0/1682 - Release Date: 9/20/08
10:24 AM

5719. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-21 23:51:04 UTC
From: Mike WE0H
Topic: 5703 Message: 5719

Sounds like you are having fun down there. Getting close to the ice
season here. Working on a homebrew microscope LED light tonight.

Mike

Chris Trask wrote:
> I'm taking a break, myself. I have two active antenna projects pending,
> plus a direct-readout VSWR meter. Spent a bit of $$ these past four months
> on parts and electricity for the test equipment. The local ACE hardware
> store has gotten used to me once again going in and playing with all sorts
> of parts.
>
> Plus, this is the beginning of gardening season.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

5720. Re: New to group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-22 08:02:34 UTC
From: David
Topic: 2096 Message: 5720

Hi Guy's (and Ladies)

Many thanks for the quick replies. I followed Nigel's link and purchased them from Spratreader on Ebay. Once they arrive I can wind some "proper" baluns and get my QRP HF station up and running properly.

73's
David
GM7UED
Aberdeen
G-QRP 11928

--- In loopantennas@yahoogroups.com, gandalfg8@... wrote:
>
>
> In a message dated 19/09/2008 17:32:20 GMT Daylight Time,
> tracey.gardner@... writes:
>
> That's an easy one :-)
>
> JAB Electronic Components stock it for £4.00 plus £3.60 p&p
>
>
>
> --------------------
> Hi Tracey
>
> Spratreader has them on ebay for £3.95 and £1.75 p&p:-)
>
> See item 300260087412
>
> R1001 problem seems to have been antenna socket and/or attached
LPF, now
> singing like a bird:-)
>
> regards
>
> Nigel
> GM8PZR
>
>
>
>
>
>

> [Non-text portions of this message have been removed]
>

5721. Re: [loopantennas] Re: New to group

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-22 08:52:52 UTC
From: gandalfg8@aol.com
Topic: 2096 Message: 5721

In a message dated 22/09/2008 09:03:53 GMT Daylight Time,
gm7ued@... writes:

Many thanks for the quick replies. I followed Nigel's link and
purchased them from Spratreader on Ebay. Once they arrive I can wind
some "proper" baluns and get my QRP HF station up and running
properly.

Hi David and All

I'm glad to be of help.
Les is a good seller to deal with , I've not had any problems with anything
I've bought from him.

Did anyone else see the review of the G4TPHJ Mag-Loop antenna in Radcom this
month?
That looks like a possible interesting use for a T200-2, and I'll be trying
one using a 1 metre aluminium circular loop.

There's nothing new there, other than perhaps the "flat pack" construction
method, and I'm not too sure I'd be totally happy with a review of my product
that gave so much information it almost begged to be copied, but it looks
like it could be be fun to play with.

regards

Nigel
GM8PZR

[Non-text portions of this message have been removed]

5722. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-22 13:50:22 UTC
From: Chris Trask
Topic: 5703 Message: 5722

```
>
> Chris
> how about a QRO, wide band version of this?
> as in 20m thru 90m?? actually, 40m and down would be great.
>

You wouldn't be able to tune it as easily as the real part of the
impedance would change too much. THat's why I included that chart of real
impedance (Fig. 1). You would end up with a real impedance that varies from
20 ohms to over 500 ohms at the tuner input.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

5723. my multi turn loop v beverage shootout

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-22 15:01:06 UTC
From: DAVID
Topic: 5723 Message: 5723

this is from this morning and you can hear for yourself how the loop
is doing thanks david
http://www.youtube.com/watch?v=nP_1LJdZFao

5724. Re: [loopantennas] Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-22 15:25:12 UTC
From: sonicxcove@aol.com
Topic: 5703 Message: 5724

Chris,

Very nicely done and easy to follow.

Thanks,

Eric

In a message dated 9/21/2008 5:28:28 P.M. Eastern Daylight Time,
christrask@... writes:

I just completed the detailed description of my transmitting loop
antenna, and it can be obtained from the same URL as before:

http://www.home.earthlink.net/~christrask/Paper012.html

Chris

**********Looking for simple solutions to your real-life financial
challenges? Check out WalletPop for the latest news and information, tips and
calculators. (http://www.walletpop.com/?NCID=emlcntuswall00000001)

[Non-text portions of this message have been removed]

5725. Clear up a doubt about multiband antennas?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-22 15:58:04 UTC
From: Jose Emilio
Topic: 5725 Message: 5725

My name is Jose Emilio Martinez, de Valencia, Spain.

I enjoy hours listening HF signals as CW, SSB and TTY trying to
decode digital modes

I have an antenna discono Diamond D-130, designed for VHF, that I use
for HF listening but with poor results

And this is my doubt

What results will give for listening of utility frequencies bands
betweeen 5 to 10 MHz?), an vertical or horizontal multiband antenna
designed with coil tramps for all HF amateurs bands? or for this ones
announced for all HF broadcasting bands?

I should be grateful if somebody experienced can answer me

Best regards

Kenwood R2000+VHF module, Icom R175
Diamond D-130
Tono Theta-550 and software

jemg461130radio(at)yahoo.es

5726. Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-22 15:00:25 UTC
From: gw_one_hin
Topic: 5703 Message: 5726

Hi,
My son has gone off to the hardware shop nop with a pur5chase list to try and build this antenna. Will report back when completed.
Many Thanks
Ron
(GW1HIN)

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Chris
> > how about a QRO, wide band version of this?
> > as in 20m thru 90m?? actually, 40m and down would be great.
> >
>
> You wouldn't be able to tune it as easily as the real part of the
> impedance would change too much. THat's why I included that chart of real
> impedance (Fig. 1). You would end up with a real impedance that varies from
> 20 ohms to over 500 ohms at the tuner input.
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '.
http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

5727. Re: [loopantennas] Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-23 00:11:36 UTC
From: Chris Trask
Topic: 5703 Message: 5727

>
> Hi,
> My son has gone off to the hardware shop nop with a pur5chase list to
> try and build this antenna. Will report back when completed.
> Many Thanks
> Ron
> (GW1HIN)
>

Seems that quite a few people have become interested in this antenna. I may add to that document to show how to improve the efficiency by using a 2.5m diamter loop and a 1:1 current balun for T3. Not that much of a change, really, since the loop element can be swapped out by way of the PL-259 connectors.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "gw_one_hin" <ronelltom@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, September 22, 2008 8:00 AM
Subject: [loopantennas] Re: Transmitting Loop Antenna

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...>
wrote:
>
> >
> > Chris
> > how about a QRO, wide band version of this?

> > as in 20m thru 90m?? actually, 40m and down would be great.
> >
>
> You wouldn't be able to tune it as easily as the real part of
the
> impedance would change too much. THat's why I included that chart
of real
> impedance (Fig. 1). You would end up with a real impedance that
varies from
> 20 ohms to over 500 ohms at the tuner input.
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '.
http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.7.0/1684 - Release Date: 9/22/08 6:39
AM

5728. Re: [loopantennas] Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-23 00:32:58 UTC
From: Paul V Birke PEng
Topic: 5703 Message: 5728

Not that much of a
change, really, since the loop element can be swapped out by way of the
PL-259 connectors.

****

Dear Chris
I think you have give a lot of thought to this problem.
In particular, I really like the way the PL-259 connectors have been used to solder on the ends of the copper tubes. This provides and easy and very good electrical connection using the male connectors to the female on the pvc post

very well done
Paul V Birke PEng

[Non-text portions of this message have been removed]

5729. Re: [loopantennas] Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-23 02:45:01 UTC
From: Mike WE0H
Topic: 5703 Message: 5729

Chris,

How high of loop current have you tested this antenna at? Wondering when
the connections will start to heat.

tnx,
Mike
WE0H

Chris Trask wrote:
> Seems that quite a few people have become interested in this antenna. I
> may add to that document to show how to improve the efficiency by using a
> 2.5m diamter loop and a 1:1 current balun for T3. Not that much of a
> change, really, since the loop element can be swapped out by way of the
> PL-259 connectors.
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

5730. Re: [loopantennas] Clear up a doubt about multiband antennas?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-23 18:56:15 UTC
From: Andy
Topic: 5725 Message: 5730

> I have an antenna discono Diamond D-130, designed for VHF, that I use
> for HF listening but with poor results

Yes, most discone antennas are made for VHF and up, and do not work well on HF frequencies.

> What results will give for listening of utility frequencies bands
> betweeen 5 to 10 MHz?), an vertical or horizontal multiband antenna
> designed with coil tramps for all HF amateurs bands? or for this ones
> announced for all HF broadcasting bands?

I am not sure ...

But I think the multiband antennas with traps are optimized for only the amateur bands, and might not work that well on the utility frequencies which are between the amateur bands. Also, the trap antennas are specifically designed to minimize the SWR (on the amateur frequencies), which is mainly important for transmitting, not something you need.

I would think about using a simple random wire antenna. Or perhaps a loop, which might be more resistant to noise, though most loops tend to be tuned so they might not work well over a wider frequency range.

An antenna that is advertised for all HF broadcasting bands might be a good choice. But you could probably make one yourself for less money.

Regards,
Andy

5731. Re: [loopantennas] Clear up a doubt about multiband antennas?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-23 20:32:10 UTC
From: aimo ruoho
Topic: 5725 Message: 5731

I would like to suggest an all-band-antenna like DX-1 Professional MK II (mark 2), made in Holland. Universal Radio is still selling it in the USA for $ 699.95.

One other possibility would be the British Wellbrook ALA 100 M for $355.
I suggest it to be used with a rotor to be able to rotate a Loop 360 degrees any time needed.
This is an wide-band antenna amplifier, which wants to have help of a rather small self-made loop to give you most of the reception, you are after...

I have both of them and as now they are the best of the lot of about 40 or so antennas, that I have in my very possession. Most of them are home-brewed and some commercial.

If you have or want to buy the famous PASSPORT TO WORLD BAND RADIO-
book via AMAZON or elsewhere, you will know a lot more about offerings of antennas and add-ons and receivers and radio stations and their frequencies and sending times...

If you are interested, I will try to find and send you addresses of the sellers and other needed information...It is not too difficult to build a good 10 kHz to 50 MHz antenna at home. And it may be a lot better and cheaper, than most offerings around!

Best luck!
Amigo

[Non-text portions of this message have been removed]

5732. Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-24 20:41:34 UTC
From: Neil McGrath
Topic: 5732 Message: 5732

I am currently building a loop from 7/8 inch heliax using just the outer screen as the radiator. Has anyone else tried this approach and how well did it work? Should I leave the centre of the heliax unterminated or short it to the to the outer?

Neil
G7AQK

5733. Re: [loopantennas] Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-24 23:27:14 UTC
From: Paul V Birke PEng
Topic: 5732 Message: 5733

I was going to try this also with say 1/2" Andrew Heliax

can you please keep me informed how you make ou

studying for my ham license here and will take test in Oct

best
Paul

----- Original Message ----
From: Neil McGrath <fast.electrics@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, September 24, 2008 4:41:34 PM
Subject: [loopantennas] Anyone using heliax for their loop?

I am currently building a loop from 7/8 inch heliax using just the
outer screen as the radiator. Has anyone else tried this approach and
how well did it work? Should I leave the centre of the heliax
unterminated or short it to the to the outer?

Neil
G7AQK

[Non-text portions of this message have been removed]

5734. Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-25 15:46:52 UTC
From: Brian Kassel
Topic: 5732 Message: 5734

I also would be very interested in seeing how Heliax works out as a Loop.

73, Brian K7RE

5735. Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-26 11:19:01 UTC
From: Jose HF Silva
Topic: 5732 Message: 5735

See this

http://www.tnni.net/~n4tb/160%2080%20meter%20loop%20construction.html

73 joe / ct1axg

5736. Re: [loopantennas] Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-26 17:03:01 UTC
From: Paul V Birke PEng
Topic: 5732 Message: 5736

Dear Jose

we were thinking more transmitting than receiving

best
Paul

----- Original Message ----
From: Jose HF Silva <zehelmer@...>
To: loopantennas@yahoogroups.com
Sent: Friday, September 26, 2008 7:19:01 AM
Subject: [loopantennas] Re:Anyone using heliax for their loop?

See this

http://www.tnni. net/~n4tb/ 160%2080% 20meter%20loop% 20construction. html

73 joe / ct1axg

[Non-text portions of this message have been removed]

5737. Re: [loopantennas] Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-26 17:16:37 UTC
From: toddroberts2001@aol.com
Topic: 5732 Message: 5737

In a message dated 9/24/2008 4:42:53 P.M. Eastern Daylight Time,
fast.electrics@... writes:

I am currently building a loop from 7/8 inch heliax using just the
outer screen as the radiator. Has anyone else tried this approach and
how well did it work? Should I leave the centre of the heliax
unterminated or short it to the to the outer?

Neil
G7AQK

I have read opinions that using Heliax for a transmitting loop may not be
as efficient as using plain copper tubing. The outer copper shield in Heliax
is
corrugated copper and may have higher RF resistance compared to smooth
copper pipe. Also the plastic covering may lower Q especially with the high
voltage RF potential developed across the loop.

Those potential problems may not affect performance that much but did want
to pass along what I have read. If you have some Heliax to play with it
wouldn't hurt to give it a try. It shouldn't make any difference if you
connect the
inner conductor to the outer shield or leave it floating as all the RF
current is on the
outside of the shield.

73 Todd WD4NGG

**********Looking for simple solutions to your real-life financial
challenges? Check out WalletPop for the latest news and information, tips and
calculators. (http://www.walletpop.com/?NCID=emlcntuswall00000001)

5738. Re: [loopantennas] Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-26 17:22:50 UTC
From: Paul V Birke PEng
Topic: 5732 Message: 5738

Also the plastic covering may lower Q especially with the high
voltage RF potential developed across the loop.

****

good point stuff what is black usually contains carbon a semiconductor
we could strip the covering of course

best
Paul

[Non-text portions of this message have been removed]

5739. Re: [loopantennas] Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-27 11:04:41 UTC
From: gandalfg8@aol.com
Topic: 5732 Message: 5739

In a message dated 26/09/2008 18:03:58 GMT Daylight Time,
nonlinear@... writes:

we were thinking more transmitting than receiving

Is that the Royal "we"?

[Non-text portions of this message have been removed]

5740. FS Large Air Variable Capacitors NEW

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-27 17:13:46 UTC
From: Bill
Topic: 5740 Message: 5740

Howdy group.
I have some new Air Variable Capacitors for sale. They are new still in plastic wrap. Here is the link with the photos and specs:
http://illumiview.com/Air%20Variable.htm
I used two to make a Pi network tuner and they mount well with the casting they have. I used a pair of turns counters on the shafts.
Del N5ZTW

5741. Re: [loopantennas] Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 00:52:15 UTC
From: gandalfg8@aol.com
Topic: 5732 Message: 5741

In a message dated 27/09/2008 22:23:08 GMT Daylight Time,
christrask@... writes:

Do you ever have anything of any value to post on these groups, or are
you simply trying to establish yourself as a widely-recognized moron?

Interesting that you should respond in such fashion to what was actually
quite a harmless remark, we are a bit sensitive where Mr Birke's concerned
aren't we?
Interesting too that whilst I never quite judged Paul Birke as a moron I did
realise some while ago that he does have a rather worrying personality, and
that you do yourself no favours by association.

When Paul first appeared on this group he was asking questions that
indicated he had little prior knowledge of radio and/or antennas in general, and I
went out of my way to help him and to answer his questions.
However, after a while I was intrigued, and eventually annoyed, when I
realised that he was using a technique of turning around the answers he received,
not just mine, as further questions, in a way that sought to imply
understanding but in fact landed a heavier burden on those trying to help him.
He may have thought nothing of this but, to someone taking time out of an
extremely busy schedule to help him, it felt very much like what we call here
"taking the piss".

His behaviour at that time was extremely reminiscent of some of the crude
artificial intelligence software from the 70s and one such program, LISA,
particularly comes to mind.
This software was claimed to be able to hold an "intelligent" conversation
but did so by using a very similar technique whereby, for example, answering
"it's cloudy" to the question "what's the weather like where you are?" would
draw a response something like "do you like clouds" etc etc.
This is a rather simplistic example but suffice it to say that 25 years
experience of security surveillance and monitoring never threw up a "real" person
who behaved in quite that same way, it is indeed most peculiar.

I've still to decide whether he's very clever, and by that I do NOT mean
intelligent, or just mentally unstable but, either way, such things are no
longer my problem.
Unfortunately, his mental state does seem to have deteriorated since he's
adopted his rather sycophantic attachment to you, and, again, you don't really
do yourself any favours by encouraging it.
That, coupled with your derogatory and condescending attitude to any who've
attempted to duplicate some of your technical claims but have found the
measurements don't hold up, has considerably reduced any respect I might have had
for you and the information in your so called "papers", which is a shame

really as there are a few interesting ideas in there.

So there you have it.
If you wish to consider me a moron please feel free but, with a certified IQ well above the 99th percentile, I'm happy to assume your judgement there is as much at fault as it is in your choice of pets.

I'm still not sure if you bit on my comment through your usual arrogance or just through an ignorance of things British but, in case it's the latter, perhaps I should explain that the "Royal" "we" has become a bit of a joke over here.
For some obscure reason it's customary for the British monarch to use "We" when meaning "I" and the question "is that the Royal we?" has come to be a light hearted response to anyone suggesting that "we" were doing or thought something or other, etc etc, when what they really should have said was "I".
In this instance, when Mr Birke suggested, somewhat patronisingly, that "we" had been discussing receiving antennas only, it didn't seem unreasonable to suggest that may have only been his opinion, or of course yours as they're the same thing anyway.

Hmmmmmmmm.....
I really don't know why I'm even bothering to answer you, what on earth have YOU ever done anyway to deserve MY time??

However, since I have blessed you with a response I will of course include the group in my reply, as well as Mr Birke, since even those so severely challenged as he still deserve to be considered normal until there really is no hope.

It is, of course, an interesting consideration that, in groups such as this, the relatively unskilled and uneducated can generate a "name" for themselves by quoting a few formulae and churning out some "papers" that, in the real world, would be subjected to a much more intense and well informed scrutiny.

Go walk your dog, Sweetie.

regards

Dr Nigel Clarke
GM8PZR

[Non-text portions of this message have been removed]

5742. Re: [loopantennas] Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 01:10:43 UTC
From: Chris Trask
Topic: 5732 Message: 5742

Despite what you perceive to be faults, he is at least civil, which is
far more than we can say for you, especially after your last outrage
resulted in the lockdown of one of the other antenna-related lists.

And it's very unfortunate that you have chosen to take an off-list
remark and turn it into a public display of your own peculiar shortcomings,
pouring your outrage on yet another audience that really doesn't deserve
such absolute nonsense.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: <gandalfg8@...>
To: <christrask@...>; <nonlinear@...>
Cc: <loopantennas@yahoogroups.com>
Sent: Saturday, September 27, 2008 5:52 PM
Subject: Re: [loopantennas] Re:Anyone using heliax for their loop?

>
> In a message dated 27/09/2008 22:23:08 GMT Daylight Time,
> christrask@... writes:
>
> Do you ever have anything of any value to post on these groups, or are
> you simply trying to establish yourself as a widely-recognized moron?
>
>
>
> ------------------
> Interesting that you should respond in such fashion to what was actually

> quite a harmless remark, we are a bit sensitive where Mr Birke's concerned
> aren't we?
> Interesting too that whilst I never quite judged Paul Birke as a moron I
did
> realise some while ago that he does have a rather worrying personality,
and
> that you do yourself no favours by association.
>
> When Paul first appeared on this group he was asking questions that
> indicated he had little prior knowledge of radio and/or antennas in
general, and I
> went out of my way to help him and to answer his questions.
> However, after a while I was intrigued, and eventually annoyed, when I
> realised that he was using a technique of turning around the answers he
received,
> not just mine, as further questions, in a way that sought to imply
> understanding but in fact landed a heavier burden on those trying to help
him.
> He may have thought nothing of this but, to someone taking time out of an
> extremely busy schedule to help him, it felt very much like what we call
here
> "taking the piss".
>
> His behaviour at that time was extremely reminiscent of some of the crude
> artificial intelligence software from the 70s and one such program, LISA,
> particularly comes to mind.
> This software was claimed to be able to hold an "intelligent" conversation
> but did so by using a very similar technique whereby, for example,
answering
> "it's cloudy" to the question "what's the weather like where you are?"
would
> draw a response something like "do you like clouds" etc etc.
> This is a rather simplistic example but suffice it to say that 25 years
> experience of security surveillance and monitoring never threw up a
"real" person
> who behaved in quite that same way, it is indeed most peculiar.
>
> I've still to decide whether he's very clever, and by that I do NOT mean
> intelligent, or just mentally unstable but, either way, such things are
no
> longer my problem.
> Unfortunately, his mental state does seem to have deteriorated since he's
> adopted his rather sycophantic attachment to you, and, again, you don't
really
> do yourself any favours by encouraging it.
> That, coupled with your derogatory and condescending attitude to any
who've
> attempted to duplicate some of your technical claims but have found the
> measurements don't hold up, has considerably reduced any respect I might
have had

> for you and the information in your so called "papers", which is a shame
> really as there are a few interesting ideas in there.
>
> So there you have it.
> If you wish to consider me a moron please feel free but, with a certified
IQ
> well above the 99th percentile, I'm happy to assume your judgement there
is
> as much at fault as it is in your choice of pets.
>
> I'm still not sure if you bit on my comment through your usual arrogance
or
> just through an ignorance of things British but, in case it's the latter,
> perhaps I should explain that the "Royal" "we" has become a bit of a
joke over
> here.
> For some obscure reason it's customary for the British monarch to use "We"
> when meaning "I" and the question "is that the Royal we?" has come to be a
> light hearted response to anyone suggesting that "we" were doing or
thought
> something or other, etc etc, when what they really should have said was
"I".
> In this instance, when Mr Birke suggested, somewhat patronisingly, that
"we"
> had been discussing receiving antennas only, it didn't seem unreasonable
to
> suggest that may have only been his opinion, or of course yours as they're
the
> same thing anyway.
>
> Hmmmmmmmmm.......
> I really don't know why I'm even bothering to answer you, what on earth
have
> YOU ever done anyway to deserve MY time??
>
> However, since I have blessed you with a response I will of course include
> the group in my reply, as well as Mr Birke, since even those so severely
> challenged as he still deserve to be considered normal until there really
is no
> hope.
>
> It is, of course, an interesting consideration that, in groups such as
this,
> the relatively unskilled and uneducated can generate a "name" for
themselves
> by quoting a few formulae and churning out some "papers" that, in the
real
> world, would be subjected to a much more intense and well informed
scrutiny.
>

> Go walk your dog, Sweetie.
>
> regards
>
> Dr Nigel Clarke
> GM8PZR
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.7.4/1695 - Release Date: 9/27/08 1:11
PM

5743. Re: [loopantennas] Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:07:06 UTC
From: gandalfg8@aol.com
Topic: 5732 Message: 5743

In a message dated 28/09/2008 02:12:42 GMT Daylight Time,
christrask@... writes:

Despite what you perceive to be faults, he is at least civil, which is
far more than we can say for you, especially after your last outrage
resulted in the lockdown of one of the other antenna-related lists.

I wish you both a long and happy life together, he certainly sounds much
more wonderful than I ever imagined, but I don't think I ever achieved quite the
fame you claimed.
I hate to call you a liar deary, that would be ever so naughty, but perhaps
you could explain further about the "lockdown", as I certainly think you
might just be telling porkies.....tsk tsk...or should that be......trask trask is
perhaps a bare faced liar after all?

And it's very unfortunate that you have chosen to take an off-list
remark and turn it into a public display of your own peculiar shortcomings,
pouring your outrage on yet another audience that really doesn't deserve
such absolute nonsense.

An off list "remark"?

Come on turd brain, even someone as mentally challenged as you must be can't
possibly deny that you offered that "remark" as a supposedly "superior
person" comment, but were short changed when it was shown to be load of mindless
crap that demonstrated the sickness in your soul.
I have no outrage, I smile benignly:-).....but I do worry about you.
Tell me dear, have you been taking your tablets?

You know what the doctor said about you getting stressed, and that's why I
worry about you and that Paul, he may be a sweetie but are you really sure
he's the one to have your babies?

I do so wish we could stick to those wireless loop thingies and forget all
about these smutty sidelines, whatever would that nice Mr Marconi have thought,
that's what I'd like to know?

PLEEEEEEEEASE do take your medication

Lots of love

Mummy

[Non-text portions of this message have been removed]

5744. Re: [loopantennas] Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:11:18 UTC
From: Chris Trask
Topic: 5732 Message: 5744

You really are a very sick, disturbed individual.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: <gandalfg8@...>
To: <loopantennas@yahoogroups.com>
Sent: Saturday, September 27, 2008 7:07 PM
Subject: Re: [loopantennas] Re:Anyone using heliax for their loop?

> In a message dated 28/09/2008 02:12:42 GMT Daylight Time,
> christrask@... writes:
>
> Despite what you perceive to be faults, he is at least civil, which is
> far more than we can say for you, especially after your last outrage
> resulted in the lockdown of one of the other antenna-related lists.
> -------------------------
> I wish you both a long and happy life together, he certainly sounds much
> more wonderful than I ever imagined, but I don't think I ever achieved
quite the
> fame you claimed.
> I hate to call you a liar deary, that would be ever so naughty, but
perhaps
> you could explain further about the "lockdown", as I certainly think you
> might just be telling porkies.....tsk tsk...or should that be......trask
trask is
> perhaps a bare faced liar after all?
> ------------------------
>

>
>
> And it's very unfortunate that you have chosen to take an off-list
> remark and turn it into a public display of your own peculiar
shortcomings,
> pouring your outrage on yet another audience that really doesn't deserve
> such absolute nonsense.
> ---------------------------
> An off list "remark"?
>
> Come on turd brain, even someone as mentally challenged as you must be
can't
> possibly deny that you offered that "remark" as a supposedly "superior
> person" comment, but were short changed when it was shown to be load of
mindless
> crap that demonstrated the sickness in your soul.
> I have no outrage, I smile benignly:-).....but I do worry about you.
> Tell me dear, have you been taking your tablets?
>
> You know what the doctor said about you getting stressed, and that's why
I
> worry about you and that Paul, he may be a sweetie but are you really sure
> he's the one to have your babies?
>
> I do so wish we could stick to those wireless loop thingies and forget all
> about these smutty sidelines, whatever would that nice Mr Marconi have
thought,
> that's what I'd like to know?
>
> PLEEEEEEEEASE do take your medication
>
> Lots of love
>
> Mummy
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

>

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.7.4/1695 - Release Date: 9/27/08 1:11
PM

5745. Re: [loopantennas] Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:18:46 UTC
From: gandalfg8@aol.com
Topic: 5732 Message: 5745

In a message dated 28/09/2008 02:43:51 GMT Daylight Time,
christrask@... writes:

You certainly are a pompous bastard, aren't you?

Chris
Moi?

I may have pomp, although, of course, that depends upon the circumstance, but not sure a foreigner such as you would understand that:-), but marital records do suggest I'm probably not a bastard.

However, I'm always open to suggestion:-)

GM8PZR

[Non-text portions of this message have been removed]

5746. OK, that's over...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:35:49 UTC
From: Steve
Topic: 5746 Message: 5746

The foolishness is over. Let's get back to loop antennas.

Steve Greenfield

5747. Re: [loopantennas] Re:Anyone using heliax for their loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:37:30 UTC
From: RexR
Topic: 5732 Message: 5747

Grow Up!

Rex in Jamestown!!!

I'm not particularly humbled to be in your presence!

In a message dated 28/09/2008 02:43:51 GMT Daylight Time,
christrask@... writes:

You certainly are a pompous bastard, aren't you?

Chris
Moi?

I may have pomp, although, of course, that depends upon the circumstance,
but not sure a foreigner such as you would understand that:-), but marital
records do suggest I'm probably not a bastard.

However, I'm always open to suggestion:-)

GM8PZR

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.169 / Virus Database: 270.7.4/1695 - Release Date: 9/27/2008 1:11 PM

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.169 / Virus Database: 270.7.4/1695 - Release Date: 9/27/2008 1:11 PM

[Non-text portions of this message have been removed]

5748. Re: [loopantennas] OK, that's over...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:41:27 UTC
From: Chris Trask
Topic: 5746 Message: 5748

God, I'm certainly glad to hear that. He had done the same thing
earlier on the 2N5160 antenna group, which resulted in it being locked down.
He's obviously very, very disturbed and shouldn't have access to any of
these groups at all.

I reported him to Yahoo! abuse and encouraged a few others to do so as
well. He needs to be gotten rid of permanently.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Steve" <alienrelics@...>
To: <loopantennas@yahoogroups.com>
Sent: Saturday, September 27, 2008 7:35 PM
Subject: [loopantennas] OK, that's over...

The foolishness is over. Let's get back to loop antennas.

Steve Greenfield

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.526 / Virus Database: 270.7.4/1695 - Release Date: 9/27/08 1:11
PM

5749. Re: [loopantennas] OK, that's over...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:44:24 UTC
From: Chris Trask
Topic: 5746 Message: 5749

>
> The foolishness is over. Let's get back to loop antennas.
>
> Steve Greenfield
>

Certainly glad to hear that. We don't need a second Yahoo! antenna group ruined by that sort of nonsense, if any at all. Thank you for taking care of it.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5750. Re: [loopantennas] OK, that's over...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:50:05 UTC
From: Mike WE0H
Topic: 5746 Message: 5750

Deleted user I presume? Good to have a moderator present at all times
for such dealings.

Mike
WE0H
>

5751. Re: OK, that's over...

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 02:57:37 UTC
From: Paul V Birke PEng
Topic: 5746 Message: 5751

--- In loopantennas@yahoogroups.com, "Steve" <alienrelics@...> wrote:
>
> The foolishness is over. Let's get back to loop antennas.
>
> Steve Greenfield
>
****

Yes thanks Steve

my question relates to the fact that receiving and transmitting
antennae are or can be quite different animals

what is good for receiving may not be reciprocated for transmitting

my interest remains with the original question raised re the use of
Heliax in a transmitting loop configuration and to what power levels
with what size of Heliax (without the black covering but maybe some
other covering not affected by rf em field and heat)

best
Paul

5752. It's over

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 06:06:22 UTC
From: Graeme
Topic: 5752 Message: 5752

I'm glad the dust has settled, now maybe we can see some loops around
our humble hobby
Graeme

5753. Re: [loopantennas] It's over

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 13:45:48 UTC
From: Chris Trask
Topic: 5752 Message: 5753

>
>I'm glad the dust has settled, now maybe we can see some loops around
>our humble hobby
>Graeme
>

It has settled on the list but it has become worse off-list. Can't help but wonder where people like that come from.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5754. Re: [loopantennas] It's over

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 14:30:19 UTC
From: Mike WE0H
Topic: 5752 Message: 5754

How do we report him to his ISP as a Spammer? The SOB emailed me direct.
He needs his Internet service suspended.

Mike

Chris Trask wrote:
>> I'm glad the dust has settled, now maybe we can see some loops around
>> our humble hobby
>> Graeme
>>
>>
>
> It has settled on the list but it has become worse off-list. Can't help but wonder where people like that come from.
>
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks

5755. Re: [loopantennas] It's over

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-28 14:37:04 UTC
From: Chris Trask
Topic: 5752 Message: 5755

>
>How do we report him to his ISP as a Spammer? The SOB emailed me direct.
>He needs his Internet service suspended.
>
>Mike
>
>
>Chris Trask wrote:
>>> I'm glad the dust has settled, now maybe we can see some loops around
>>> our humble hobby
>>> Graeme
>>>
>>>
>>
>> It has settled on the list but it has become worse off-list.
>> Can't help but wonder where people like that come from.
>

Forward the email with an introductory complaint paragraph to abuse@.... Normally I would put such people into the spam filter, but in this case I'm letting him continue with his venting and later I'll forward them one at a time. The more the better, as one or two complaints has little impact, if any at all.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5756. single turn loop v multi turn loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-29 08:35:09 UTC
From: DAVID
Topic: 5756 Message: 5756

i have been doing a few tests on a single turn mw loop against a 6 turn mw loop and i have found the single turn loop is MUCH quieter than the multi turn loop and is rejecting the european splatter off the back of the loop with ease. the single loop is the same dimensions as the pick up loop in the multi turn loop ie 7 feet long and 5.9 feet high its fed at the corner i want for maximum direction with a 48/11 turn ol balun and in the oppostie corner i have a 1000 ohm terminating resistor i did try a viariable resistor here but couldnt get a dip. i also use the palstar aa30 active antenna / pre selector on the single loop. the results have surprised me as i didnt think there would be much of a difference but there is a big difference. both loops are in my attic and i think the 6 turn loop will be made into a single turn and pointed to africa. you can hear the difference here
http://www.youtube.com/watch?v=Kociy23DBuk
many thanks david ... ayrshire scotland

5757. Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-29 14:59:25 UTC
From: al_ka5jgv
Topic: 5757 Message: 5757

I am seriously considering purchase of a phasing unit such as the Timewave ANC-4 or the MFJ-1026. My main application for the unit is in the 200 to 550kHz range and my main purpose is to eliminate 60/120Hz noise. My main antenna is a 4-1/2 foot diameter multi-turn tuned loop. I would like to continue to use this as my main and I'm open to opinions on what to use for the second antenna.

I have done a pretty good scan on the Internet and found quite a few articles including the one by Mark Connelly on modifying the MFJ-1026 for LF coverage. I therefore somewhat favor the MFJ over the Timewave because of this.

I would really like to hear views on the usefullness of one of these units for eliminating line-type noise in the frequency range mentioned.

I have posted this message to various groups in order to get a broader coverage. I hope this is acceptable and not in violation of group policies. I apologize if it is.

Thank you.

Al KA5JGV
San Antonio, TX

5758. Re: [loopantennas] Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-29 16:27:31 UTC
From: david/lorraine
Topic: 5757 Message: 5758

hi if you look at this clip towards the end you will hear me using the mfj 1026 to null out my local power house and get another station about 100 miles to the north east of me i was using 2 multi turn loops at the time
http://www.youtube.com/watch?v=TpYtFssuZc8 hope this helps ... thanks david .... ayrshire scotland
----- Original Message -----
From: al_ka5jgv
To: loopantennas@yahoogroups.com
Sent: Monday, September 29, 2008 3:59 PM
Subject: [loopantennas] Timewave ANC-4 or MFJ-1026 phaser with loop antenna

I am seriously considering purchase of a phasing unit such as the Timewave ANC-4 or the MFJ-1026. My main application for the unit is in the 200 to 550kHz range and my main purpose is to eliminate 60/120Hz noise. My main antenna is a 4-1/2 foot diameter multi-turn tuned loop. I would like to continue to use this as my main and I'm open to opinions on what to use for the second antenna.

I have done a pretty good scan on the Internet and found quite a few articles including the one by Mark Connelly on modifying the MFJ-1026 for LF coverage. I therefore somewhat favor the MFJ over the Timewave because of this.

I would really like to hear views on the usefullness of one of these units for eliminating line-type noise in the frequency range mentioned.

I have posted this message to various groups in order to get a broader coverage. I hope this is acceptable and not in violation of group policies. I apologize if it is.

Thank you.

Al KA5JGV
San Antonio, TX

[Non-text portions of this message have been removed]

5759. Re: [loopantennas] Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-29 17:08:50 UTC
From: Mike WE0H
Topic: 5757 Message: 5759

That is a good demonstration of the MFJ-1026. I used mine to take a
60/9 830kc signal and null it down to barely audible. It works very well.

Mike
WE0H

david/lorraine wrote:
> hi if you look at this clip towards the end you will hear me using the mfj 1026 to null out my local power house and get another station about 100 miles to the north east of me i was using 2 multi turn loops at the time
> http://www.youtube.com/watch?v=TpYtFssuZc8 hope this helps ... thanks david .... ayrshire scotland
>

5760. Re: Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-29 19:27:01 UTC
From: al_ka5jgv
Topic: 5757 Message: 5760

--- In loopantennas@yahoogroups.com, "david/lorraine" <dhamilton1@...>
wrote:
>
> hi if you look at this clip towards the end you will hear me using
the mfj 1026 to null out my local power house and get another station
about 100 miles to the north east of me i was using 2 multi turn loops
at the time
> http://www.youtube.com/watch?v=TpYtFssuZc8 hope this helps ...
thanks david .... ayrshire scotland

Hello David,
Thank you for the link. A definite change recorded there. If it does
the same thing to line-type noise, I will be very happy.

P.S. Pretty country you live in.

Al KA5JGV
San Antonio, TX

5761. Re: [loopantennas] Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-29 23:40:53 UTC
From: Jay Heyl
Topic: 5757 Message: 5761

On Mon, Sep 29, 2008 at 10:59 AM, al_ka5jgv <aburzynski@...> wrote:
> I am seriously considering purchase of a phasing unit such as the
> Timewave ANC-4 or the MFJ-1026. My main application for the unit is
> in the 200 to 550kHz range and my main purpose is to eliminate
> 60/120Hz noise. My main antenna is a 4-1/2 foot diameter multi-turn

Unless all your noise is coming from one specific source, I don't think a phaser is going to really help you. They allow you to combine the inputs from two antennas to create a single null region and steer it electrically. They're great for reducing interference, be it a nuisance local station or a source of QRM, but only if that interference is coming from just one point source. If you're getting 60Hz noise from the electrical system in your house or your neighbors house, a phaser is not going to help because the noise is coming from all around.

-- Jay

5762. Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-30 22:54:07 UTC
From: Anthony Parise
Topic: 5703 Message: 5762

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> I finally completed the testing and construction of a new form of
> transmitting loop antenna. .....

Looks great, Chris. I studied the paper, and have one question.

Figure 1. shows the radiation resistance vs. frequency of a 1.5 M
loop, which are the measured, not calculated, values.

My question is, how is the radiation resistance so high? The highest I
have ever seen as a predicted value is much lower than that, even for
methods that claim traditional values are too small.

To what do you attribute this high radiation resistance? I would like
to build one of these, but would like to believe it works as it is
supposed to.

Thanks.

Tony WA3HRL

5763. Re: [loopantennas] Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-01 14:12:50 UTC
From: Chris Trask
Topic: 5703 Message: 5763

Tony,
That chart is total resistance (radiation plus loss). In a 2-part series I wrote for QEX back in 2003, I had a similar chart for a 1m diameter loop made with 0.25" tubing. There, you can see that the resistance is going from a first-order (linear) to second-order (nonlinear) curve as it approaches the first parallel resonance. The analytical approaches used in that article show this as well.

I'm going to make a bending form so that I can make loops from 1/2" rigid copper pipe and see if there's a difference in the resistance. I'm curious as to whether the other metals in the flexible tubing alloy (zinc?) are significantly raising the loss resistance. I couldn't find anything online about this.

Nor could I find anything about a homebrewed pipe bender. It was suggested some time ago to use a large spring that plumbers use in bending PVC pipe, but those are not long enough for bending a 10-foot piece of copper pipe into a 1m radius arc. Guess I'll make a heavy form out of plywood and fill the pipe with sand.

>
>> I finally completed the testing and construction of a new form of
>> transmitting loop antenna. .....
>
>Looks great, Chris. I studied the paper, and have one question.
>
>Figure 1. shows the radiation resistance vs. frequency of a 1.5 M
>loop, which are the measured, not calculated, values.
>
>My question is, how is the radiation resistance so high? The highest I
>have ever seen as a predicted value is much lower than that, even for
>methods that claim traditional values are too small.
>
>To what do you attribute this high radiation resistance? I would like
>to build one of these, but would like to believe it works as it is
>supposed to.
>
>Thanks.
>
>Tony WA3HRL
>

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer

oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5764. Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-01 20:18:14 UTC
From: dldorrance
Topic: 5703 Message: 5764

Hi Chris,

Like Tony, I would like to see some way of estimating total total resistance, in order to know what size loop for what band(s) will transform with what total step up value of transmission line transformer(s).

Regarding bending copper pipe. Are you talking about standard copper pipe, or are you talking about soft copper tubing, which comes in 1/2 diameters in most hardware stores and should be easy to fashion into a circle?

Dave WA6YSO

5765. Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-01 20:22:45 UTC
From: dldorrance
Topic: 5703 Message: 5765

last sentence should be 1/2 inch *diameter* copper tubing...

Dave WA6YSO

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> Hi Chris,
>
> Like Tony, I would like to see some way of estimating total total
> resistance, in order to know what size loop for what band(s) will
> transform with what total step up value of transmission line
> transformer(s).
>
> Regarding bending copper pipe. Are you talking about standard copper
> pipe, or are you talking about soft copper tubing, which comes in 1/2
> diameters in most hardware stores and should be easy to fashion into a
> circle?
>
> Dave WA6YSO
>

5766. Re: [loopantennas] Re: Transmitting Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-01 20:29:46 UTC
From: Chris Trask
Topic: 5703 Message: 5766

>
> Like Tony, I would like to see some way of estimating total total
> resistance, in order to know what size loop for what band(s) will
> transform with what total step up value of transmission line
> transformer(s).
>

I've already published measured resistances for 1/4" and 1/2" copper
tubing for a couple of different diameter loops. You can estimate the
resistance for other sizes and bands by scaling them.

>
> Regarding bending copper pipe. Are you talking about standard copper
> pipe, or are you talking about soft copper tubing, which comes in 1/2
> diameters in most hardware stores and should be easy to fashion into a
> circle?
>

That would be 1/2" rigid copper pipe for later on. I'm already using
the flexible tubing in 1/4" and 1/2" diameters.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5767. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-01 23:26:42 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 5767

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

5768. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-01 23:26:42 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 5768

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

5769. Bum links need mod to clear out or fix

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-02 00:15:29 UTC
From: Mike WE0H
Topic: 5136 Message: 5769

Can we get a moderator to either fix the bad links or delete them? There are too many dead links on the Groups link page.

tnx,
Mike
WE0H

5770. Re: Bum links need mod to clear out or fix

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-02 01:23:46 UTC
From: Steve
Topic: 5136 Message: 5770

In the Groups Links page, or in the Links.txt file?

Are you volunteering? ;')

Steve Greenfield

--- In loopantennas@yahoogroups.com, Mike WE0H <we0h@...> wrote:
>
> Can we get a moderator to either fix the bad links or delete them?
There
> are too many dead links on the Groups link page.
>
> tnx,
> Mike
> WE0H
>

5771. Re: [loopantennas] Re: Bum links need mod to clear out or fix

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-02 02:40:36 UTC
From: Mike WE0H
Topic: 5136 Message: 5771

They were in the links. I can do it tonight but need rights to do the task.

Mike
WE0H

Steve wrote:
> In the Groups Links page, or in the Links.txt file?
>
> Are you volunteering? ;')
>
> Steve Greenfield

5772. Re: [loopantennas] Re: Bum links need mod to clear out or fix

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-02 02:48:45 UTC
From: Mike WE0H
Topic: 5136 Message: 5772

I should have said Group links.

Mike

Mike WE0H wrote:
> They were in the links. I can do it tonight but need rights to do the task.
>
> Mike
> WE0H
>
>
> Steve wrote:
>
>> In the Groups Links page, or in the Links.txt file?
>>
>> Are you volunteering? ;')
>>
>> Steve Greenfield

5773. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-02 08:11:17 UTC
From: C. Beijersbergen
Topic: 5773 Message: 5773

The pages described herunder can now be found at:

http://jlkolb.cts.com/site/ant.htm
http://jlkolb.cts.com/site/aa-1.pdf
http://jlkolb.cts.com/site/fet_pre.pdf
http://jlkolb.cts.com/site/dual_fet.pdf
http://jlkolb.cts.com/site/dif_fet.pdf

regards,

Cor Beijersbergen

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

[Non-text portions of this message have been removed]

5774. Re: [loopantennas] Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-09-29 19:40:46 UTC
From: Jim Dunstan
Topic: 5757 Message: 5774

At 02:59 PM 9/29/2008 +0000, you wrote:

>I am seriously considering purchase of a phasing unit such as the
>Timewave ANC-4 or the MFJ-1026. My main application for the unit is
>in the 200 to 550kHz range and my main purpose is to eliminate
>60/120Hz noise. My main antenna is a 4-1/2 foot diameter multi-turn
>tuned loop. I would like to continue to use this as my main and I'm
>open to opinions on what to use for the second antenna.
>
>I have done a pretty good scan on the Internet and found quite a few
>articles including the one by Mark Connelly on modifying the MFJ-1026
>for LF coverage. I therefore somewhat favor the MFJ over the Timewave
>because of this.
>
>I would really like to hear views on the usefullness of one of these
>units for eliminating line-type noise in the frequency range
>mentioned.
>
>I have posted this message to various groups in order to get a
>broader coverage. I hope this is acceptable and not in violation of
>group policies. I apologize if it is.
>
>Thank you.
>
>Al KA5JGV
>San Antonio, TX

.
Hi Al,

First I am not sure you actually mean 60/120HZ noise. For the most part such 'noise' that appears in your speaker or earphones is usually not radiated, but is propagated by the power system ... in which case the antenna phasing unit would be of minimal value. Not to be a stick in the mud, the phasing unit is most useful on particular frequencies and not generally noise that appears across the band. For example ... the fish tank heater or electric blanket next door may have a control unit that radiates loud RFI across most of the spectrum. Phasing will give little help. However, if you have two signals on the same frequency coming from 2 different sources it is possible to adjust the phasing such that one of the two signals will be greatly reduced in strength.

In my experience a phasing unit is of minimal use for general line 'noise'.

Now as far as the receiving antenna ... If you are dealing with a locally generated signal then almost anything will do ... a local whip would be sufficient. However if you are trying to separate out 2 MW signals on the same frequency ... or adjacent frequencies ... then the 'second' antenna must produce sufficient signal in order to cancel out 'phase out' the signal received on the primary antenna.

I have no experience with the particular units you mention ... (I have also thought of getting the MFJ unit) .... but I have used the technique in other venues and I must say i am always amazed how it is possible to make one signal disappear leaving the other one (next to it) intact.

Jim, VE3CI

5775. Just made my first transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-03 08:24:41 UTC
From: Dave Andrus - K7DAA
Topic: 5775 Message: 5775

Folks:

Even though I've been a member for a bit, I haven't tried my hand at making my own transmitting loop until now.

I just completed my first one, and wanted to share my info and ask a question or three. Sorry in advance for the long posting. I hope that someone might find it interesting! ;-)

I made a single-turn loop using 5/8" copper pipe from a roll I bought at Home Depot. It helped that the roll was already formed into a coil that was about 18 inches in diameter, so it was a simple matter to uncoil the roll into a larger loop without any serious distortion or kinks.

I had previously bought a very nice Hammarlund dual-gang capacitor from eBay that works very nicely for this purpose. Since the two 8-220pF sections are electrically separated, I don't have to make a connection to the rotor, so this is the ideal capacitor. I wish I had a few more of them. Anyway, in this split configuration, I've got an effective capacitance range of about 4 to 110pF.

I mounted the loop with tie wraps on a piece of wood that's .75 by 1.5 inches. The capacitor is also securely mounted to the wood with tie wraps, and soldered to the top of the loop with very short pieces of 10 gauge solid copper wire that I hammered flat--just to make it easier to shape and bend them. So from a distance, the overall design looks like a big lollipop, so to speak.

For the feed, I used the conventional RG-58 loop 1/5 (actually a bit closer to 1/6--about 6 inches dia.) the diameter of the main loop. The center conductor is soldered to the shield at the half-way point, with the shields soldered together at the bottom. This smaller loop is then tie-wrapped securely to the bottom of the main loop, with no electrical or metallic bond between them.

Oh, and I forgot to mention that the main loop diameter is 39 inches. It is one continuous circle with no breaks or solder points other than where the tuning capacitor attaches at the top. This was just a convenient size for me to shoot for--1 meter in diameter.

I've checked the expected 2:1 SWR bandwidth at 10.1 and 14.2 MHz, and those numbers agree very closely with the predicted values that the loop design software suggests, so this tells me that I've got decent loop "Q". Good.

So, I'm VERY pleased with its functionality so far. I know this might sound like a cliche, but my very first two QSO's I tried yesterday late afternoon on 17 meters netted me some great DX! Both stations that I called heard me on my first call. I was using an Elecraft K2 transceiver running on its internal battery, using about 10 watts on SSB. The wooden boom for the loop was pushed into soft, wet grass, so the bottom of the loop was about 12 inches above the grass.

I'm near San Jose, California, and I first called a station in Hawaii at the end of a QSO, and got a 5-7 report. He was running about 400 watts, and I also gave him a 5-7! Ten minutes later, I called a station in Maryland, and got a 5-5. He was running 900 watts, and I gave him a 5-8. Both stations were very surprised that they could hear me as well as they could, considering my low power and small antenna. (By the way, the late-afternoon QSB on 17 meters yesterday was tremendously long and deep--almost like 10 meters during a sporadic E opening.)

So...I have a couple of observations, mostly about the feed system, and I wonder if those of you with way more experience than me could comment and offer suggestions and improvements.

With the first feed loop (described above), I was not very pleased with the SWR I could get, even after fooling around with the loop shape and amount of coupling with the main loop. I did not attempt to increase or decrease the diameter of this loop, and I know it was a bit smaller than the suggested 20% of the outer loop's circumference. Had I fiddled with this for awhile, I'm assuming that I could have gotten the SWR down. Best I could get was about 1.6 or 1.7 to one. Not horrible, but everyone else seems to report something approaching unity.

Instead of doing that, though, I decided to try the "other" type of feed I've seen suggested, so I changed it to the type where you ground the coax shield to the bottom of the main loop with a stainless hose clamp, then solder the coax center conductor to about 14 inches of 10 gauge wire that follows the inner curvature of the main loop, but about 2 inches to the inside of it--out to about 10 inches, where another pipe clamp shorts it to the main loop. This is just like the feed that W2BRI shows on the "build it yourself" square loop article on his web site. I experimented with the length and proximity of this feed, and was easily able to get my SWR down to 1.1:1 pretty much anywhere from about 10.1 to 21.45 MHz.

What I didn't realize until today is that this nice, low SWR is not going to be realized continuously from the lowest to the highest frequency that the loop can cover without changing the length of this new feed system. For instance, I'm only able to get about 2:1 SWR at 28.1 MHz unless I shorten the coupling loop wire length, but then my SWR at the loop's lowest frequency increases to about 1.7:1 at best. Am I doing something wrong here, or is this to be

expected? Am I just looking for a compromise value, or should
I really expect something close to unity SWR from top to bottom?

Also, is the first feed system I tried better than what I'm using now
for broader-band use, or are they pretty much the same expected
performance? Why use one over the other, then?

The reason I'm asking about this is that if I end up putting a motor on
the tuning capacitor for remote, continuous tuning, I can so far only
get good SWR for the lower half of the loop's frequency range, or for
the upper half, but not for the complete range that my tuning cap
will cover. I'd obviously like to be able to get a nice, low SWR across
the entire frequency range that the loop can cover.

Last question: I note that on one or two ham websites, there is a
warning that the tuning or shape of the coupling loop will change
when you move the loop around. One even suggested that you
really haven't "tuned" your loop until you get it into final position,
and only then can you make your final adjustments. Great, but that's
kinda difficult to do when you have it hoisted out of reach. My limited
observations so far seem to suggest that the actual frequency that the
outer loop is tuned to changes a bit, of course, but the SWR seems to
change much more noticeably than the tuning when going from 12"
above ground to 12 feet.

For instance, I get 1.2:1 SWR mounted near ground level at 14.060 MHz,
but then when I move the loop so that it is supported by a fiberglas
ladder at a height of about 8 feet, the SWR goes up to maybe 1.9:1,
but the resonant frequency only shifts down (at least in my case) by
maybe 20 or 30 kHz or so. I can live with the frequency shift, and it's
simple to retouch the tuning cap, but to change the SWR, I've got to fiddle
with the coupling loop length or position--not nearly as easy to do.

Any suggestions are very welcome, and thanks in advance for your
kind thoughts or encouragement. I'm getting a real kick out of this,
especially because my local CC&R's will never allow me to put up
even a simple dipole. I expect to park my loop in my small attic
eventually, and am looking forward to having a semi-decent stealth
antenna!

73,

Dave--K7DAA

5776. Re: Bum links need mod to clear out or fix

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-03 13:25:27 UTC
From: Steve
Topic: 5136 Message: 5776

Sorry I didn't respond sooner.

Done!

And thank you very much. I own or moderate about 20 groups/forums and am quite busy, so the help is very much appreciated.

Just a caution, sometimes pages hosted on free sites may only be temporarily unavailable.

Steve Greenfield

--- In loopantennas@yahoogroups.com, Mike WE0H <we0h@...> wrote:
>
> They were in the links. I can do it tonight but need rights to do the task.
>
> Mike
> WE0H
>
>
> Steve wrote:
> > In the Groups Links page, or in the Links.txt file?
> >
> > Are you volunteering? ;')
> >
> > Steve Greenfield
>

5777. Re: [loopantennas] Just made my first transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-03 16:54:46 UTC
From: Paul V Birke PEng
Topic: 5775 Message: 5777

The wooden boom for the loop was pushed into soft, wet grass,
so the bottom of the loop was about 12 inches above the grass.

****

Dear Dave
from what I have read in the literature magnetic loops seem to work well closer to ground than farther away--so what you have is good as indicated by the excellent contacts you have reported

yet I am wondering if 12" is too close
However I have a photo of a German Military loop and it seems to be near yours being between 14" and 20" of the ground ground from what I can scale from the picture

it also has a more elliptical shape with the long axis parallel the ground

I am wondering if perhaps 12" is "too close" and is affecting the SWR minimun and by increasing the spacing somewhat you might be able to get a better minimun
and also and perhaps more importantly to SWR,I have a paper from Switzerland showing the optimal shape for a transmitting loop is more like a rectangle with well rounded corners hence the nice shape of the German loop which is like a flattened loop
it could be easy for you to raise the height of the loop to say 24" and maybe also to force flatten the circular loop you have and see if SWR minimum is affected

best
Paul

[Non-text portions of this message have been removed]

5778. Re: Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-03 20:39:59 UTC
From: al_ka5jgv
Topic: 5757 Message: 5778

Hello Jim,
Thank you for your reply. My comments are between your message.

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
> Hi Al,
> First I am not sure you actually mean 60/120HZ noise. For the most
> part such 'noise' that appears in your speaker or earphones is
> usually not radiated, but is propagated by the power system ... in
> which case the antenna phasing unit would be of minimal value.

If I disconnect the antenna and the noise goes away, can I confidently say that the noise is propogated rather than conducted? That is the situation in my case. I now suspect that the noise is coming from a nearby power pole light. I will time it's turn on and off time and see if there is a relationship. Is there a sure way of testing a noisy power pole, other than shooting the light out? I believe the city does not like that.

> Not to be a stick in the mud, the phasing unit is most useful on
> particular frequencies and not> generally noise that appears across
> the band.

Unfortunately that is what most of the replys have said and unfortunately my noise is across the whole LF band and into MW AM.

> However, if you have two signals on the same frequency coming from
> 2 different sources it is possible to adjust the phasing such that
> one of the two signals will be greatly reduced in strength.

There are times I like to chase AM signals and I do find multiple signals on one frequency. It will be interesting to see how the 1026 does in these situations. I use a 4-1/2 foot loop for direction control and it helps a lot. If the 1026 adds to this then things will be better. If I could just get rid of that noise.

Thanks Jim.

Al KA5JGV
San Antonio, TX

5779. Re: Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-04 13:35:20 UTC
From: rhblumeng
Topic: 5757 Message: 5779

Al -

The Timewave is a DSP noise remover as opposed to the MFJ phaser. Are you using an R-75 (I think)? If so does that units DSP noise reduction have any effect at all on your noise?

Bob

5780. Re: [loopantennas] Just made my first transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-04 14:31:25 UTC
From: toddroberts2001@aol.com
Topic: 5775 Message: 5780

Hi Dave,

Sounds like you have your new loop working pretty well using the Gamma match type feed. That seems to work best for me also. It is to be expected the SWR will change when trying to use the loop over so broad a frequency range with one set length for the Gamma match.

I would recommend building two loops - one for the high range 15-10 meters and build a larger one for the lower range 30-20 meters. A larger loop will give you better efficiency on the lower bands also. If you use only one loop to cover that wide a range it will have to be a compromise setting for lowest SWR.

Best to adjust the SWR of the loop at least 6 feet off the ground. If you can get it 8 feet off the ground adjust it there. The SWR should hold pretty close from there if you hoist it up higher. Or if you put it in an attic then set the SWR there.

I would recommend looking into building a better tuning cap also like the trombone-style cap made out of short lengths of copper pipe and using Teflon insulation between the pipes. A regular 'bread-slicer' variable cap is not considered efficient enough for a transmitting loop unless the plates are welded together but many people seem to report good results using them. You wouldn't notice any problems using them at low power but the loss might still be there. Any bolt-on or screw-on connections to a capacitor should be avoided. A trombone cap is soldered directly onto the ends of the loop so it is very low loss.

Also beware of any connecting wires between the loop and the capacitor. Just a few short inches of #10 wire has more RF resistance than the entire loop conductor. Using flexible braid is reported as being very lossy also. If you have to make any connections between the loop and a capacitor use only flat copper strip at least 1 inch wide like copper flashing.

Band conditions are so variable that it might be hard to notice if a loop was really running at top efficiency or not depending on skip. Best way to really tell is if you have someone local within 10-30 miles that can hear you on groundwave. Then any changes will show up on his S-meter that you can rely on.

73 - Todd WD4NGG

**********New MapQuest Local shows what's happening at your destination. Dining, Movies, Events, News & more. Try it out!
(http://local.mapquest.com/?ncid=emlcntnew00000001)

5781. Rectangular loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-04 22:24:21 UTC
From: Hue Miller
Topic: 4475 Message: 5781

> Dear Dave
> from what I have read in the literature magnetic loops seem to work well closer to ground than
farther away--so what you have is good as indicated by the excellent contacts you have reported
>I have a paper from Switzerland showing the optimal shape for a transmitting loop is more like a
rectangle with well rounded corners hence the nice shape of the German loop which is like a flattened loop
> Paul

Paul - a couple questions. Why should a loop work closer to ground if it's basically a ground-independent antenna? I would think more height = better. Also, i think to maximize inductance a round coil is best, so why would the rounded rectangle in the Swiss study be preferable? Just briefly, how do they explain the reason for its advantage? Thanks- Hue Miller / K7HUE Newport, Oregon

5782. Re: Just made my first transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-04 22:43:20 UTC
From: Dave Andrus - K7DAA
Topic: 5775 Message: 5782

Todd (and Paul):

Thanks for your thoughts!

I just bought some 2-inch wide copper flashing from HRO, and I'm going to try using a narrowed strip of it on the tuning cap connections instead of what I have now. You make a very good point about the losses in even a short piece of 10 ga. wire. I hadn't thought seriously about that, but it makes sense.

I'm also going to try adjusting the loop in a fixed position about 6 feet high and see what results I get. I'm also planning on running steel wool around the copper pipe to clean off any oxidation and then spray it with urethane or something similar.

I'll share my results here when I get the time to experiment more. I actually took a day off
from work just to build the loop! Now I've got to find more time to tweak and poke at the basic design. I'm very encouraged by what I've seen so far, though.

I'd like to try a 40 meter loop next, maybe an octagonal shape using straight pieces of 1 inch diameter copper pipe that's maybe 1.5 to 2 meters in diameter.

It's very instructive to feed these various dimensions in to the loop design software and see what the results are--also very gratifying to find out that I can build something that comes pretty close to the predicted values!

Thanks and 73,

Dave K7DAA

--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:
>
> Hi Dave,
>
> Sounds like you have your new loop working pretty well using the Gamma match
> type feed. That seems to work best for me also. It is to be expected the SWR
> will change when trying to use the loop over so broad a frequency range with
> one set length for the Gamma match.
>
> I would recommend building two loops - one for the high range 15-10 meters
> and build a larger one for the lower range 30-20 meters. A larger loop will
> give you better efficiency on the lower bands also. If you use only one loop to
> cover that wide a range it will have to be a compromise setting for lowest
> SWR.
>
> Best to adjust the SWR of the loop at least 6 feet off the ground. If you
> can get it 8 feet off the ground adjust it there. The SWR should hold pretty
> close from there if you hoist it up higher. Or if you put it in an attic then

> set the SWR there.
>
> I would recommend looking into building a better tuning cap also like the
> trombone-style cap made out of short lengths of copper pipe and using Teflon
> insulation between the pipes. A regular 'bread-slicer' variable cap is not
> considered efficient enough for a transmitting loop unless the plates are welded
> together but many people seem to report good results using them. You wouldn't
> notice any problems using them at low power but the loss might still be
> there. Any bolt-on or screw-on connections to a capacitor should be avoided. A
> trombone cap is soldered directly onto the ends of the loop so it is very low
> loss.
>
> Also beware of any connecting wires between the loop and the capacitor. Just
> a few short inches of #10 wire has more RF resistance than the entire loop
> conductor. Using flexible braid is reported as being very lossy also. If you
> have to make any connections between the loop and a capacitor use only flat
> copper strip at least 1 inch wide like copper flashing.
>
> Band conditions are so variable that it might be hard to notice if a loop
> was really running at top efficiency or not depending on skip. Best way to
> really tell is if you have someone local within 10-30 miles that can hear you on
> groundwave. Then any changes will show up on his S-meter that you can rely on.
>
> 73 - Todd WD4NGG
>
>
>
> **********New MapQuest Local shows what's happening at your destination.
> Dining, Movies, Events, News & more. Try it out!
> (http://local.mapquest.com/?ncid=emlcntnew00000001)
>

5783. The RF Noise Identification Website

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-04 23:09:54 UTC
From: Jeff
Topic: 5783 Message: 5783

This link has been very helpful to me in the past:

http://www.arrl.org/tis/info/HTML/rfi-noise/

There are audio clips of different types of noise.

Jeff - NE0DX

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.173 / Virus Database: 270.7.5/1708 - Release Date: 10/4/2008 11:35 AM

[Non-text portions of this message have been removed]

5784. Re: [loopantennas] Rectangular loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-04 23:55:22 UTC
From: Paul V Birke PEng
Topic: 4475 Message: 5784

----- Original Message ----
From: Hue Miller <kargo_cult@...>
To: No Reply <notify-dg-loopantennas@yahoogroups.com>; loopantennas@yahoogroups.com
Sent: Saturday, October 4, 2008 6:24:21 PM
Subject: [loopantennas] Rectangular loop?

> Dear Dave
> from what I have read in the literature magnetic loops seem to work well closer to ground than
farther away--so what you have is good as indicated by the excellent contacts you have reported
>I have a paper from Switzerland showing the optimal shape for a transmitting loop is more like a
rectangle with well rounded corners hence the nice shape of the German loop which is like a flattened loop
> Paul

Paul - a couple questions. Why should a loop work closer to ground if it's
basically a ground-independent antenna?

the use via pictures I have observed are close to the ground
If you look at the information on the internet it seems it performs well enough in this position

I would think more height = better.

one would think so

Also, i think to maximize inductance a round coil is best, so why would the
rounded rectangle in the Swiss study be preferable?

well they went overboard a bit, rereading I notice the constraint was a rectangular shape so it remains a question is circle better than rectangle shape for gain-what they were looking at optimizing

they used calculus of variation to find the optimal and this was with large rounded edges but the gain advantage was only 0.12 dB

Just briefly, how do
they explain the reason for its advantage? Thanks- Hue Miller / K7HUE
Newport, Oregon

Again it is an interesting question as to whether a more rectangular shape of elliptical is somehow better than a circle

I will try to find out more about this

The German photo I have show an industrial antenna (not necessarily military as I first suggested)
however it is definitely a flattend circle and mounted on a multi pod about 20" from the ground

There are loops for the us military and they are rectangular in shape, maybe because of the vehicle but nontheless
rectangular with rounded corner just like the Swiss solution

others may know more the reasons why

[1] some advantage to gain or directivity
[2] swr
[3] bandwidth
[4] other

best
Paul

[Non-text portions of this message have been removed]

5785. Re: Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-05 04:36:55 UTC
From: Hiram
Topic: 5757 Message: 5785

Street lights, refrigerator motors, neon signs, fluorescent lights,
and a multitude of other things can make wide band noise. I used to
hear horrific noise from some motor or another at a machine shop 1/4
mile away back in my Novice days. Fortunately it was intermittent,
else 80 meters would have been unusable. Maybe some sort of "high
pass" filter would help on the antenna feed.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "al_ka5jgv" <aburzynski@...> wrote:
>
> Hello Jim,
> Thank you for your reply. My comments are between your message.
>
> --- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@> wrote:
> > Hi Al,
> > First I am not sure you actually mean 60/120HZ noise. For the most
> > part such 'noise' that appears in your speaker or earphones is
> > usually not radiated, but is propagated by the power system ... in
> > which case the antenna phasing unit would be of minimal value.
>
>
> If I disconnect the antenna and the noise goes away, can I
> confidently say that the noise is propogated rather than conducted?
> That is the situation in my case. I now suspect that the noise is
> coming from a nearby power pole light. I will time it's turn on and
> off time and see if there is a relationship. Is there a sure way of
> testing a noisy power pole, other than shooting the light out? I
> believe the city does not like that.
>
>
> > Not to be a stick in the mud, the phasing unit is most useful on
> > particular frequencies and not> generally noise that appears across
> > the band.
>
>
> Unfortunately that is what most of the replys have said and
> unfortunately my noise is across the whole LF band and into MW AM.
>
>
> > However, if you have two signals on the same frequency coming from
> > 2 different sources it is possible to adjust the phasing such that
> > one of the two signals will be greatly reduced in strength.
>
> There are times I like to chase AM signals and I do find multiple

> signals on one frequency. It will be interesting to see how the 1026
> does in these situations. I use a 4-1/2 foot loop for direction
> control and it helps a lot. If the 1026 adds to this then things will
> be better. If I could just get rid of that noise.
>
> Thanks Jim.
>
> Al KA5JGV
> San Antonio, TX
>

5786. Re: [loopantennas] Rectangular loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-05 07:52:06 UTC
From: jose alonso
Topic: 4475 Message: 5786

----- Mensaje original ----
De: Hue Miller <kargo_cult@...>
Para: No Reply <notify-dg-loopantennas@yahoogroups.com>; loopantennas@...m
Enviado: domingo, 5 de octubre, 2008 0:24:21
Asunto: [loopantennas] Rectangular loop?

> Dear Dave
> from what I have read in the literature magnetic loops seem to work well closer to ground than
farther away--so what you have is good as indicated by the excellent contacts you have reported
>I have a paper from Switzerland showing the optimal shape for a transmitting loop is more like a
rectangle with well rounded corners hence the nice shape of the German loop which is like a flattened loop
> Paul

> Paul - a couple questions. Why should a loop work closer to ground if it's basically a ground-independent antenna? I would think more height = better.
> Also, i think to maximize inductance a round coil is best, so why would the rounded rectangle in the Swiss study be preferable? Just briefly, how do they explain the reason for its advantage? Thanks- Hue Miller / K7HUE
> Newport, Oregon

.....
.....

Hi Hue, to your first question, maybe the magnetic field is stronger near ground.

I think in a transmiter using a vertical antenna and ground, the electical field lines going far from the antenna and returning by the ground as hf currents. In that case, near ground means more coupling to the loop (that is really a coil)

My two cents?
Jose

[Non-text portions of this message have been removed]

5787. Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-05 10:17:54 UTC
From: Neil McGrath
Topic: 5787 Message: 5787

I have just completed my first magnetic loop and the initial results look promising. It is a circular 4 ft diameter design made from heliax ,Farady loop fed and tuned using a 120pf air spaced capacitor. The design tuned well on 14Mhz showing an SWR close to 1:1 inside my garage with plenty of metal in close proximity. The variable cap still had too much capacitance on its minimum setting to operate the antenna on 21MHz and on 7Mhz I could hear the background noise start to rise but ran out of adjustment before I could get a decent SWR. I am thinking about making a capacitor to be connected across the variable for operation on 40m and have considered using a piece of double sided PCB cut to a suitable size. Is there a better option using off the shelf components?

Neil

5788. Re: Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-05 13:13:49 UTC
From: al_ka5jgv
Topic: 5757 Message: 5788

--- In loopantennas@yahoogroups.com, "rhblumeng" <blum.robert1@...>
wrote:
>
> Al -
>
> The Timewave is a DSP noise remover as opposed to the MFJ phaser. Are
> you using an R-75 (I think)? If so does that units DSP noise
> reduction have any effect at all on your noise?
>
> Bob
>

Hello Bob,
Yes I'm using the R75 receiver and it does have DSP noise reduction (NR). When you turn on the NR things do get quieter, but if you listen carefully, the signal also get quieter. If you look at the signals using Spectran, the drop in the signal is the same as the noise so the net reduction in signal-to-noise ratio is near nothing.

I did get an MFJ-1026 modified for the LF range. I'm in the process of figuring out how it works and can it be used that low in frequency. If not, it still should be helpfull for general SWLing.

Al KA5JGV

5789. loop updates & phasing without a phasing unit

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-05 13:58:12 UTC
From: DAVID
Topic: 5789 Message: 5789

hi and sorry if you are getting bored with the antenna updates but i spend more time tweaking/making antennas than i actually do listening.

the story so far the 7 by 6 feet multi turn loops are now down i have 2 single turn loops 1 nw and 1 w and yes even at that the difference is amazing.

both are fed with a 48/11 turn overlaping baluns and each has a 1000 ohm resistor in the opposite corner.

i cant get over the back rejection on these antennas i put a switch on the nw loop at the resistor so its inline and off and i sent my freind some clips of what it can do ie slovenia on 918 khz when the resistor is open its a s9 but put the resistor in use so the main lobe is nw its either not there or very weak in the noise and i think my friend is going to make one as well and join the group.

the next thing i am going to do is setup a series of switching so i can have all the directions just like a k9ay loop not to bad for antennas in the attic.

PHASING WITHOUT A PHASING UNIT

IF I PUT A SMALL 1X1 MULTI TURN LOOP WITH A TUNING CAP IN SIDE MY FLAG/LOOP AT THE FEED POINT OR RESISTOR I CAN EASILY NULL OUT STRONG LOCALS IE RADIO SCOTLAND

ON 810 KHz AND GET EUROPEAN SIGNALS. I MUST POINT OUT THAT THE RESISTOR IS IN THE OPEN POSITION IE NOT IN USE THIS SAVES ME BORROWING MY FRENDS MFJ ALL THE TIME LOL

david h ayrshire scotland
aor 7030 or perseus sdr
2 x flag/loops
palstar aa30

5790. Re: loop updates & phasing without a phasing unit

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-05 19:52:13 UTC
From: Hiram
Topic: 5789 Message: 5790

David,
So, are you getting better signal strength with the single turn loop?
Or just better rejection? How about coverage? Do they tune the same
range as before? Are you switching the resistor out manually or is
there a remote of some sort?

Pappy Hiram

--- In loopantennas@yahoogroups.com, "DAVID" <dhamilton1@...> wrote:
>
> hi and sorry if you are getting bored with the antenna updates but i
> spend more time tweaking/making antennas than i actually do listening.
>
> the story so far the 7 by 6 feet multi turn loops are now down i have
> 2 single turn loops 1 nw and 1 w and yes even at that the difference
> is amazing.
>
> both are fed with a 48/11 turn overlaping baluns and each has a 1000
> ohm resistor in the opposite corner.
>
> i cant get over the back rejection on these antennas i put a switch
> on the nw loop at the resistor so its inline and off and i sent my
> freind some clips of what it can do ie slovenia on 918 khz when the
> resistor is open its a s9 but put the resistor in use so the main lobe
> is nw its either not there or very weak in the noise and i think my
> friend is going to make one as well and join the group.
>
> the next thing i am going to do is setup a series of switching so i
> can have all the directions just like a k9ay loop not to bad for
> antennas in the attic.
>
> PHASING WITHOUT A PHASING UNIT
>
> IF I PUT A SMALL 1X1 MULTI TURN LOOP WITH A TUNING CAP IN SIDE MY
> FLAG/LOOP AT THE FEED POINT OR RESISTOR I CAN EASILY NULL OUT STRONG
> LOCALS IE RADIO SCOTLAND
>
> ON 810 KHz AND GET EUROPEAN SIGNALS. I MUST POINT OUT THAT THE
> RESISTOR IS IN THE OPEN POSITION IE NOT IN USE THIS SAVES ME BORROWING
> MY FRENDS MFJ ALL THE TIME LOL
>
> david h ayrshire scotland
> aor 7030 or perseus sdr
> 2 x flag/loops
> palstar aa30

>

5791. Re: [loopantennas] Re: loop updates & phasing without a phasing unit

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-05 21:14:06 UTC
From: david/lorraine
Topic: 5789 Message: 5791

hi i would say the single loop is down on signal to the multi turn loop BUT much more quiet and the single loop can hear things the multi loop cant to the direction the single loops are beaming due to no splatter.

i cant get over how the single loop with one resistor rejects the europeans so well. the single loop can cover the whole mw band which is all i am interested in i havent checked above. i am manually switching the resistor in and out as they are in my attic with my radios its not a problem. so in summary the single loop while slightly down on signal for me anyway is a better dx antenna as it can hear things that the multi loop cant due to splatter/noise etc .... thanks david h
----- Original Message -----
From: Hiram
To: loopantennas@yahoogroups.com
Sent: Sunday, October 05, 2008 8:52 PM
Subject: [loopantennas] Re: loop updates & phasing without a phasing unit

David,
So, are you getting better signal strength with the single turn loop?
Or just better rejection? How about coverage? Do they tune the same
range as before? Are you switching the resistor out manually or is
there a remote of some sort?

Pappy Hiram

--- In loopantennas@yahoogroups.com, "DAVID" <dhamilton1@...> wrote:
>
> hi and sorry if you are getting bored with the antenna updates but i
> spend more time tweaking/making antennas than i actually do listening.
>
> the story so far the 7 by 6 feet multi turn loops are now down i have
> 2 single turn loops 1 nw and 1 w and yes even at that the difference
> is amazing.
>
> both are fed with a 48/11 turn overlaping baluns and each has a 1000
> ohm resistor in the opposite corner.
>
> i cant get over the back rejection on these antennas i put a switch
> on the nw loop at the resistor so its inline and off and i sent my
> freind some clips of what it can do ie slovenia on 918 khz when the
> resistor is open its a s9 but put the resistor in use so the main lobe
> is nw its either not there or very weak in the noise and i think my
> friend is going to make one as well and join the group.
>
> the next thing i am going to do is setup a series of switching so i
> can have all the directions just like a k9ay loop not to bad for
> antennas in the attic.

>
> PHASING WITHOUT A PHASING UNIT
>
> IF I PUT A SMALL 1X1 MULTI TURN LOOP WITH A TUNING CAP IN SIDE MY
> FLAG/LOOP AT THE FEED POINT OR RESISTOR I CAN EASILY NULL OUT STRONG
> LOCALS IE RADIO SCOTLAND
>
> ON 810 KHz AND GET EUROPEAN SIGNALS. I MUST POINT OUT THAT THE
> RESISTOR IS IN THE OPEN POSITION IE NOT IN USE THIS SAVES ME BORROWING
> MY FRENDS MFJ ALL THE TIME LOL
>
> david h ayrshire scotland
> aor 7030 or perseus sdr
> 2 x flag/loops
> palstar aa30
>

[Non-text portions of this message have been removed]

5792. Re: Timewave ANC-4 or MFJ-1026 phaser with loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-06 14:04:12 UTC
From: rhblumeng
Topic: 5757 Message: 5792

--- In loopantennas@yahoogroups.com, "al_ka5jgv" <aburzynski@...> wrote:
>
>When you turn on the NR things do get quieter, but if you listen
> carefully, the signal also get quieter. If you look at the signals
> using Spectran, the drop in the signal is the same as the noise so the
> net reduction in signal-to-noise ratio is near nothing.

Al -

Well, the dsp should be better, but that built in one is not so great
as some of the externals..

By the way, I confused the Timewave units - I guess when I think
Timewave, I immediately think of dsp, but you were talking about their
antenna phaser... sorry for any confusion.

Bob

5793. Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-06 18:10:05 UTC
From: John
Topic: 5793 Message: 5793

Hello,
I've been lurking on the group for a few months & have a few questions.

I've been reading the literature on antennas and picked up the
following facts, which are slightly contradictory:

1) In general, a doublet (dipole) is resonant on odd harmonics, but
can be multi-band if fed by twin feeder from an ATU.

2) Folded dipoles tend to be resonant on only the fundamental
frequency & make poor multi-band antennas.

3) Full wave loops are resonant on even harmonics, and make good
multi-band antennas when fed from an ATU. They also appear less
affected by low heights than dipoles.

Is not a full wave loop merely a folded dipole stretched out, in which
case why do they behave so differently?

I have a 160 metre dipole for which I've just got an SGC auto tuner.
It works OK, but I can only manage a height of 10 metres which is a
tiny fraction of a wavelength. I've thought of joining the ends
together to make an 80 metre loop, or even of adding another 80 metres
wire to make a top band loop - I've got plenty of flat space, but not
many supports!

Any recommendations? Like David, I live in Scotland, in Lanarkshire.

Thanks,

John

5794. Re: [loopantennas] Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-06 20:36:58 UTC
From: Paul V Birke PEng
Topic: 5793 Message: 5794

Is not a full wave loop merely a folded dipole stretched out, in which
case why do they behave so differently?

****
one thing is that there is magnetic coupling between the currents in the foldeded loop

ie the mutual inductance between top and bottom is not zero

best
Paul

[Non-text portions of this message have been removed]

5795. Re: [loopantennas] Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-06 20:47:34 UTC
From: Jim Dunstan
Topic: 5793 Message: 5795

At 06:10 PM 10/6/2008 +0000, you wrote:

>Hello,
>I've been lurking on the group for a few months & have a few questions.
>
>I've been reading the literature on antennas and picked up the
>following facts, which are slightly contradictory:
>
>1) In general, a doublet (dipole) is resonant on odd harmonics, but
>can be multi-band if fed by twin feeder from an ATU.

Hi,

Yes, for example a 64' dipole is a resonant 1/2 wave on 40m, a resonant 1 wave on 20m and 2 resonant full waves on 10m. It is not a resonant length on 15m . However, if you feed the 64' dipole with 50 ohm coax it will only represent a workable load on 40m. The fact it is resonant on 20 and 10 m as well is simply an academic fact. However, if you feed the 64' dipole ... or in fact just about any length as long as it is at least close to 1/2 wave length on the lowest frequency of operation ... with open wire line and an appropriate tuner ... it can be workable and efficient on all bands .... (due to the low loss of the balanced feed line in the face of high SWR).

>2) Folded dipoles tend to be resonant on only the fundamental
>frequency & make poor multi-band antennas.

Interesting ... I have used a number of folded dipoles in the past and always for a single band ... I never really tried multi-band operation ... or gave it any thought ... I would be interested in results others may have experienced. A folded dipole fed with a 4:1 BALUN makes a great antenna which will handle high power with high efficiency ... albeit on a single band.

>3) Full wave loops are resonant on even harmonics, and make good
>multi-band antennas when fed from an ATU. They also appear less
>affected by low heights than dipoles.

I have less experience here .... and defer to those with more experience ..... again, what experience I have would indicate that as with a doublet/dipole .... resonance is not necessary for effective all band operation .... as long as the loop is close to a full wavelength at the lowest frequency .... again ... fed with open wire line and tuner.

>Is not a full wave loop merely a folded dipole stretched out, in which
>case why do they behave so differently?

Definitely not ..... the close proximity of the wires in the folded dipole causes the antenna currents to flow 'AS ONE'. In a loop the antenna

current at points opposite to each other flow in opposite directions .... the folded dipole the flow in the same direction .... as if they were 1 wire. Breaking into only 1 wire at the feed point causes the antenna to function as a transmission line transformer, (4:1), transforming the feed point impedance from 50 ohm to 200 ohm (approx).

>I have a 160 metre dipole for which I've just got an SGC auto tuner.
>It works OK, but I can only manage a height of 10 metres which is a
>tiny fraction of a wavelength. I've thought of joining the ends
>together to make an 80 metre loop, or even of adding another 80 metres
>wire to make a top band loop - I've got plenty of flat space, but not
>many supports!
>
>Any recommendations? Like David, I live in Scotland, in Lanarkshire.

Again I defer to those with more experience. Most of my experience is with vertically oriented loops.

>Thanks,
>
>John

Cu agn John, 73

DE VE3CI (Jim)

5796. Re: [loopantennas] Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-06 21:18:58 UTC
From: John Popelish
Topic: 5793 Message: 5796

John wrote:

I'll take a crack at some of your questions, just to bring
out those who would rather correct my mistakes than just
answer the questions themselves. ;-)

Also, see:
http://personal.ee.surrey.ac.uk/Personal/D.Jefferies/loop.html

(snip)
> I've been reading the literature on antennas and picked up the
> following facts, which are slightly contradictory:
>
> 1) In general, a doublet (dipole) is resonant on odd harmonics, but
> can be multi-band if fed by twin feeder from an ATU.

Right. The dipole is resonant with half a wave stored along
its length (a pair of quarter wave elements, fed from one
end, with a total propagation delay out and back, of a half
wave, with the polarity reversal at the reflection off the
free end providing another 180 degrees, making up 360
degrees or zero degrees for the wave out to the end and
back). So at 3 times that frequency, it holds about 3/2
wavelength (3/4 in each half for 6/4 propagation delay and
the reflection providing a half cycle phase shift for a
total out and back phase shift of 4/4 or back in phase with
the next wave from the feed line). Though its feed point
impedance and radiation pattern changes at this and higher
order resonances, in general, any odd number of half
wavelengths that fit on the element will produce a resonance.

> 2) Folded dipoles tend to be resonant on only the fundamental
> frequency & make poor multi-band antennas.

I don't think so. The two close coupled parallel elements
resonate essentially as a single element. Their currents
are essentially in phase with each other. (If their
currents traveled in opposite directions, they would not
radiate.)

The main difference with respect to a single line dipole is
the feed point impedance, since only a bit more than half of
the total standing wave current (passing through both
dipoles) passes through the feed line. Same voltage with
less current equals a higher feed point impedance. But the
standing wave resonance frequencies remain very similar to a
single element dipole, since the two dipoles share pretty

much the same space and fields.

> 3) Full wave loops are resonant on even harmonics, and make good
> multi-band antennas when fed from an ATU.

I'm not so sure about that.

> They also appear less
> affected by low heights than dipoles.

They have a completely different radiation pattern, since
they are not at all a one dimensional linear dipole, but a
two dimensional radiating object.

> Is not a full wave loop merely a folded dipole stretched out, in which
> case why do they behave so differently?

The resonance is simply based on the wave propagation around
a length of conductor (in both directions, simultaneously),
with no polarity reversing reflection at a free end, as with
the dipole. There is no strong coupling across the middle
of the loop as there is with the transmission line like
structure of the folded dipole.

> I have a 160 metre dipole for which I've just got an SGC auto tuner.
> It works OK, but I can only manage a height of 10 metres which is a
> tiny fraction of a wavelength. I've thought of joining the ends
> together to make an 80 metre loop, or even of adding another 80 metres
> wire to make a top band loop - I've got plenty of flat space, but not
> many supports!
>
> Any recommendations? Like David, I live in Scotland, in Lanarkshire.

I think the optimum orientation for a circular loop is not
parallel to the ground, but perpendicular to it. So I don't
think it helps with your low height limitations.

--
Regards,

John Popelish

5797. Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-06 21:37:39 UTC
From: John
Topic: 5793 Message: 5797

Thanks Jim,

your explanation of the folded dipole versus a loop makes sense - I'd never really thought of it like that, nor seen a clear explanation.

John

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
> At 06:10 PM 10/6/2008 +0000, you wrote:
>
>
> >Is not a full wave loop merely a folded dipole stretched out, in which
> >case why do they behave so differently?
>
> Definitely not ..... the close proximity of the wires in the folded dipole
> causes the antenna currents to flow 'AS ONE'. In a loop the antenna
> current at points opposite to each other flow in opposite directions ....
> the folded dipole the flow in the same direction .... as if they were 1
> wire. Breaking into only 1 wire at the feed point causes the antenna to
> function as a transmission line transformer, (4:1), transforming the feed
> point impedance from 50 ohm to 200 ohm (approx).
>
>
>
>
> Cu agn John, 73
>
> DE VE3CI (Jim)
>

5798. mfj 1026 in action (again)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-06 21:46:56 UTC
From: DAVID
Topic: 5798 Message: 5798

another short video of me nulling my local power house
http://www.youtube.com/watch?v=q2SP2Qi5J9M
david h

5799. Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-06 22:40:01 UTC
From: Paul V Birke PEng
Topic: 5799 Message: 5799

for those interested in design (or purchase for that matter)
there is a military loop available on ebay

http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&ssPageName=STRK:MEWAX:IT&item=310088687397#ebayphotohosting

very wide band

best
Paul

5800. Re: [loopantennas] Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 00:06:49 UTC
From: Chris Trask
Topic: 5799 Message: 5800

```
>
> for those interested in design (or purchase for that matter)
> there is a military loop available on ebay
>
>
http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&ssPageName=STRK:MEWAX:IT&item=3
10088687397#ebayphotohosting
>
> very wide band
>
```

Looks like a bidding war has already started.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5802. Re: [loopantennas] Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 01:09:02 UTC
From: sonicxcove@aol.com
Topic: 5799 Message: 5802

Looks like an Isotropic [grins] antenna to me.

Eric

In a message dated 10/6/2008 8:40:49 P.M. Eastern Daylight Time,
nonlinear@... writes:

oh my

what have I done LOL

I like the design

the parallel loops are reminding me of the Collins loop which I sent you
some time back

best
Paul

**********New MapQuest Local shows what's happening at your destination.
Dining, Movies, Events, News & more. Try it out!
(http://local.mapquest.com/?ncid=emlcntnew00000001)

[Non-text portions of this message have been removed]

5803. Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 10:58:28 UTC
From: Lee Moore (Gimbert)
Topic: 5793 Message: 5803

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
> At 06:10 PM 10/6/2008 +0000, you wrote:
>
> >Hello,
> >I've been lurking on the group for a few months & have a few
questions.
> >
> >I've been reading the literature on antennas and picked up the
> >following facts, which are slightly contradictory:
> >
> >1) In general, a doublet (dipole) is resonant on odd harmonics, but
> >can be multi-band if fed by twin feeder from an ATU.
>
> Hi,
>
> Yes, for example a 64' dipole is a resonant 1/2 wave on 40m, a
resonant 1
> wave on 20m and 2 resonant full waves on 10m. It is not a resonant
length
> on 15m .

It IS resonant on its third harmonic at 15m !!! 1 1/2 wavelength ...

Regards ...

Lee ... G6ZSG .

5804. Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 12:56:59 UTC
From: tenorman1952
Topic: 5793 Message: 5804

--- In loopantennas@yahoogroups.com, "John" <jxharper@...> wrote:
>
> Hello,
> I've been lurking on the group for a few months & have a few
questions.
>
> I've been reading the literature on antennas and picked up the
> following facts, which are slightly contradictory:
>
> 1) In general, a doublet (dipole) is resonant on odd harmonics, but
> can be multi-band if fed by twin feeder from an ATU.

Yes and no.

A dipole is resonant at all even and odd harmonics. The problem is, if the dipole is centerfed, for the even harmonics, the feedline joins where there is a "node".

Picture a guitar string vibrating at fundamental frequency. It is vibrating in the middle, but is stationary at each end where it is attached.

If you were to lightly touch the string in the very middle, the tone would suddenly jump up one octave, to double the frequency. If you were to look at that string vibrating with a strobe (I have done this), it is now vibrating at 2x fundamental, and there is a node in the middle, where the string is not vibrating, and antinodes (max vibration at the 25% and 75% points.

If you were to lightly touch the string, vibrating at fundamental frequency, 1/3 of the way along, the tone would jump up (in musical terms) an octave + 5th, the string now vibrating in three sections, with nodes on each end, where joined to the guitar, one node at 33.33% along the string, another node at 66.66%.

And antinodes between those nodes.

If the feedline is right in the middle, at 50%, of your dipole antenna, it is picking up directly on the antinode, where there is maximum energy at the fundamental. On the 3rd harmonic (3 x fundamental) there is again an antinode at the 50% point. Ditto with all other odd harmonics.

And there are nodes at the 50% point for all even harmonics.

So, it is not that the antenna is not resonant for even numbered harmonics. It most certainly IS resonant for even numbered

harmonics. The problem is that a center feedpoint is not located to pick up the even numbered harmonics.

This is why an "offset center fed" dipole is used when it is desirable to pick up the even harmonics. An offset point is choses that is a compromise, that will fall closer to the antinodes, and farther from the nodes, for the even harmonics.

You might find these helpful:

http://www.w8ji.com/windom_off_center_fed.htm

and

http://www.radioelectronicschool.net/files/downloads/ocfdipole.pdf

The second paper especially has diagrams that show the distribution of nodes and antinodes vs. feedpoint.

5805. Re: Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 14:21:07 UTC
From: RICH
Topic: 5799 Message: 5805

That particular antenna is part of a system and was used with the receiver section of the AN/TSC-99 Special Forces Burst Communications Base Station.

The antenna was made by Heremes in Canada and is now made by United States Antenna Products.

This URL will provide you with information on their Aperiodic Loop Antenna Arrays: <http://www.usantennaproducts.com/pdf/hermesloop.pdf>

RICH WA6KNW

5806. Re: [loopantennas] Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 15:22:20 UTC
From: Jim Dunstan
Topic: 5793 Message: 5806

At 12:56 PM 10/7/2008 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com,
>"John" <jxharper@...> wrote:
> >
> > Hello,
> > I've been lurking on the group for a few months & have a few
>questions.
> >
> > I've been reading the literature on antennas and picked up the
> > following facts, which are slightly contradictory:
> >
> > 1) In general, a doublet (dipole) is resonant on odd harmonics, but
> > can be multi-band if fed by twin feeder from an ATU.
>
>Yes and no.
>
>A dipole is resonant at all even and odd harmonics. The problem is,
>if the dipole is centerfed, for the even harmonics, the feedline
>joins where there is a "node".
>
>Picture a guitar string vibrating at fundamental frequency. It is
>vibrating in the middle, but is stationary at each end where it is
>attached.

Hi,

Excellent explanation of resonance, harmonics, and node locations on wire antennas. Now, when feeding a wire with open wire line, the antenna itself does not have to be resonant to radiate effectively. A balanced open wire feed line .... in conjunction with a tuner/coupler provides the overall resonance. However the feed line portion does not radiate (if properly installed) since the electromagnetic fields cancel out as they are close and parallel to each other.

Jim, VE3CI

[Non-text portions of this message have been removed]

5807. Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 17:49:42 UTC
From: John
Topic: 5793 Message: 5807

Many thanks to all of you for the very clear explanations of how a dipole resonates.

Since you've told me that a folded dipole is close coupled, with the currents in phase, then can I assume that the usual air gap is unnecessary? If a tuned length of substantial twin flex was fed at the centre of one conductor via a 4:1 balun, would it work just as well?

All this doesn't really help me with a decision about the most suitable antenna to use, but I'm tempted by the ARRL "Sky Loop" fed by an SGC 239 auto tuner since I can locate this some distance from the house & tune it remotely. I have a field beyond my garden, and as long as I don't disturb the sheep I can do what I like, as long as it is not permanent. ie, unlimited open space but nothing to hang things on. I've got an old Tennamast welded onto a trailer chassis (stabilised with guy ropes) which is one support - I'll try to get hold of another similar structure & support a horizontal (or sloping) delta loop.

The other option is a long wire or V beam, but I don't actually want a fixed directional antenna.

Thanks again,

John

5808. Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 18:07:13 UTC
From: Tracey Gardner
Topic: 5799 Message: 5808

They also look similar to the loops used in the antenna array produced by C&S Antennas Systems of Rochester in the UK.
I've put a picture of one of these loops in the Photo files.
I later converted this anenna this loop by changing the head unit to a Wellbrook one.

Tracey

5809. Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 19:01:08 UTC
From: Hiram
Topic: 5793 Message: 5809

Jim,
An antenna cut to resonate at 7Mhz (40 meters) will also resonate on 21 Mhz (15 meters) I've worked a lot of DX across the pond on a 40 meter dipole strung about 20 feet high between two houses.
The thing is this: a half wave is around 72 ohms at the center at resonance, one and a half waves are also around 72 ohms impedance; hence the 40 meter dipole works well on 15 meters.

Everything you said is correct, open wire feeders and a tuner will load up on just about any band. Each installation is unique, so you may run into some odd behavior on some frequencies, where theory says it should work, it may not.

An 80 meter dipole fed with open wire line (called a center fed Zepp) and hooked to a balanced tuner will also work on 40, 20, 15, and 10. If you short the feed together and tune it like a random wire, it should work on 160. A 160 meter dipole fed with open wire line should work well up to around 20 meters or so. It may act funky on 15 and 10, try it and see. If the feeders are resonant at some multiple of the base frequency, that could cause problems on the higher bands. You can also feed it from one end (an end fed Zepp) and it should work as well.

A good ground is necessary for any of this to work well. Keep the feeders outside the shack, keep the tuner as close to the feed point as possible (window or wall). Of course the above is relevant to a transmitting antenna more so than receiving, but the antenna efficiency will give you better results in receiving as well.

Pappy Hiram

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
....Yes, for example a 64' dipole is a resonant 1/2 wave on 40m, a resonant 1
wave on 20m and 2 resonant full waves on 10m. It is not a resonant length on 15m . However, if you feed the 64' dipole with 50 ohm coax it will only represent a workable load on 40m. The fact it is resonant on 20 and 10 m as well is simply an academic fact. However, if you feed the 64' dipole ... or in fact just about any length as long as it is at least close to 1/2
wave length on the lowest frequency of operation ... with open wire line and an appropriate tuner ... it can be workable and efficient on all bands .... (due to the low loss of the balanced feed line in the face of high SWR).....

5810. Re: [loopantennas] Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 19:39:24 UTC
From: Andrew Ikin
Topic: 5799 Message: 5810

Tracey,

There was a short article in the May 1970 Wireless World relating to a Canadian EMI loop array. The description and pictures look very similar to the Hermes system?

10 years ago I did try to emulate this array using 8 x ALA1530s strung out with a 4m loop spacing along a 28m transmission line of RG62. Unfortunately the velocity factor of the transmission line restricted the usable F/B to approx. 22MHz. However, there was a useable F/B of between 10-20dB from 6-22MHz. If I had the time I would re-engineered system and probably use delaylines and combiners to improve the performance.

73

Andrew.

[Non-text portions of this message have been removed]

5811. Re: [loopantennas] Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 21:33:29 UTC
From: Jim Dunstan
Topic: 5793 Message: 5811

At 07:01 PM 10/7/2008 +0000, you wrote:

>Jim,
>An antenna cut to resonate at 7Mhz (40 meters) will also resonate on
>21 Mhz (15 meters) I've worked a lot of DX across the pond on a 40
>meter dipole strung about 20 feet high between two houses.
>The thing is this: a half wave is around 72 ohms at the center at
>resonance, one and a half waves are also around 72 ohms impedance;
>hence the 40 meter dipole works well on 15 meters.

Yes, you are absolutely correct. I have done the same thing myself.

>Everything you said is correct, open wire feeders and a tuner will
>load up on just about any band. Each installation is unique, so you
>may run into some odd behavior on some frequencies, where theory says
>it should work, it may not.
>
>An 80 meter dipole fed with open wire line (called a center fed Zepp)
>and hooked to a balanced tuner will also work on 40, 20, 15, and 10.
>If you short the feed together and tune it like a random wire, it
>should work on 160. A 160 meter dipole fed with open wire line should
>work well up to around 20 meters or so. It may act funky on 15 and 10,
>try it and see. If the feeders are resonant at some multiple of the
>base frequency, that could cause problems on the higher bands. You can
>also feed it from one end (an end fed Zepp) and it should work as well.

Years ago (many) .... I had a 100' inverted vee strung from a 30' mast on the peak of the roof of a 2 story house. It was fed with 300 ohm twin lead. My shack was in the basement .... I did as you said, shorted the feed line and used it as a vertical with a 100' top hat on 160m. I used to join a round table of prairie farmers who got on every morning (before milking). I used a 100w AM transmitter (everyone was on AM). That was a great 160m antenna ... with the iron pipes of the heating system as the ground hi hi.

I also used a 100ft dipole on 20m as a double zepp hung up in the trees at about 60'. It was also a great antenna.

>A good ground is necessary for any of this to work well. Keep the
>feeders outside the shack, keep the tuner as close to the feed point
>as possible (window or wall). Of course the above is relevant to a
>transmitting antenna more so than receiving, but the antenna
>efficiency will give you better results in receiving as well.
>
>Pappy Hiram

Thanks for the comments.

Jim, VE3CI

5812. Re: [loopantennas] Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-07 23:40:24 UTC
From: Chris Trask
Topic: 5793 Message: 5812

You might want to look at this form of a multi-band longwire antenna:

http://www.radioelectronicschool.net/files/downloads/ocfdipole.pdf

It's an off-centre fed dipole. There's a very unique 6:1 balun
described in this which can only be realized with a pair of current baluns,
not the Guanella balun as described in the paper. I've seen too many
instances of people using the Guanella 4:1 transformer as a balun, and you
simply cannot do that. You can, however, use it to make a 16:1 voltage
balun.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5813. Re: Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-08 04:44:23 UTC
From: RICH
Topic: 5799 Message: 5813

If you look here you will see some familiar things related to C&S...
RICH WA6KNW

5814. Re: [loopantennas] Re: Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-08 07:20:16 UTC
From: Tracey Gardner
Topic: 5799 Message: 5814

Hello Rich

Did you forget a URL?

Tracey

----- Original Message -----
From: "RICH" <sgm460122@...>
To: <loopantennas@yahoogroups.com>
Sent: Wednesday, October 08, 2008 5:44 AM
Subject: [loopantennas] Re: Military Loop

> If you look here you will see some familiar things related to C&S...
> RICH WA6KNW
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

5815. Re: Question from loopy beginner

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-08 10:33:22 UTC
From: Lee Moore (Gimbert)
Topic: 5793 Message: 5815

You have just explained very technically that 7x3 = 21 !!!

Regards.

Lee ... G6ZSG ..

--- In loopantennas@yahoogroups.com, "tenorman1952"
<tenorman1952@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "John" <jxharper@> wrote:
> >
> > Hello,
> > I've been lurking on the group for a few months & have a few
> questions.
> >
> > I've been reading the literature on antennas and picked up the
> > following facts, which are slightly contradictory:
> >
> > 1) In general, a doublet (dipole) is resonant on odd harmonics,
but
> > can be multi-band if fed by twin feeder from an ATU.
>
> Yes and no.
>
> A dipole is resonant at all even and odd harmonics. The problem
is,
> if the dipole is centerfed, for the even harmonics, the feedline
> joins where there is a "node".
>
> Picture a guitar string vibrating at fundamental frequency. It is
> vibrating in the middle, but is stationary at each end where it is
> attached.
>
> If you were to lightly touch the string in the very middle, the
tone
> would suddenly jump up one octave, to double the frequency. If you
> were to look at that string vibrating with a strobe (I have done
> this), it is now vibrating at 2x fundamental, and there is a node
in
> the middle, where the string is not vibrating, and antinodes (max
> vibration at the 25% and 75% points.
>
> If you were to lightly touch the string, vibrating at fundamental
> frequency, 1/3 of the way along, the tone would jump up (in musical
> terms) an octave + 5th, the string now vibrating in three sections,
> with nodes on each end, where joined to the guitar, one node at

> 33.33% along the string, another node at 66.66%.
>
> And antinodes between those nodes.
>
> If the feedline is right in the middle, at 50%, of your dipole
> antenna, it is picking up directly on the antinode, where there is
> maximum energy at the fundamental. On the 3rd harmonic (3 x
> fundamental) there is again an antinode at the 50% point. Ditto
with
> all other odd harmonics.
>
> And there are nodes at the 50% point for all even harmonics.
>
> So, it is not that the antenna is not resonant for even numbered
> harmonics. It most certainly IS resonant for even numbered
> harmonics. The problem is that a center feedpoint is not located
to
> pick up the even numbered harmonics.
>
> This is why an "offset center fed" dipole is used when it is
> desirable to pick up the even harmonics. An offset point is choses
> that is a compromise, that will fall closer to the antinodes, and
> farther from the nodes, for the even harmonics.
>
> You might find these helpful:
>
> http://www.w8ji.com/windom_off_center_fed.htm
>
> and
>
> http://www.radioelectronicschool.net/files/downloads/ocfdipole.pdf
>
> The second paper especially has diagrams that show the distribution
> of nodes and antinodes vs. feedpoint.
>

5816. Re: Are DE31MS and TG34 the same antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-08 05:19:07 UTC
From: a_cato2002
Topic: 3220 Message: 5816

Yes, basically. Made in the same factory on the same lines.
Tao Qu on Ebay apparently has a deal with the factory to put his
TG34 label on it, and claims to ask the factory to do further quality
checks on his TG34 antennas before he receives them to sell on Ebay.
I bought one from him and then ordered a second.
Not as good in reception as the Sony folding loop, but then the
Sony costs three times as much as the TG34 and is a much larger package.

In my opinion, considering size and cost, the TG34 is a damn good
deal.
For the price of the Sony loop, I could get three TG34's and they
fold up into a smaller package for backpacking and travel then the
Sony does as well.
Well worth the price.

5817. Re: Military Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-08 15:59:32 UTC
From: RICH
Topic: 5799 Message: 5817

DUUUUHHHH!!!!!!!!!!!!!!!!!!!!

<http://groups.yahoo.com/group/loopantennas/files/Active%20Loop%
20Antennas/>

--- In loopantennas@yahoogroups.com, "Tracey Gardner"
<tracey.gardner@...> wrote:
>
> Hello Rich
>
> Did you forget a URL?
>
> Tracey
>

5818. slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-12 12:49:16 UTC
From: DAVID
Topic: 5818 Message: 5818

hi just thaught i would run this by a few of you guys first before i decide to keep it permanent or not. i have a single turn loop fed at one corner with a 48/11 turn balun and on opposite corner i have a variable resistor. the loop is in my attic and its about 6 feet high and 10 feet long and it receives usa etc on mw broadcast brilliant here in scotland. then i got a thinking how could i make the loop bigger. so i had 2 slinky toys (metal ones) and put 1 along the top of the rectangle and 1 at the bottom and it still has 2 vertical wires for the rectangle shape. with the slinkys on i "seem" to get a deeper null when tuning the resistor and the couple of irish stations in the direction the loop is beaming are up 1.5 - 2 s points. as for "dx" i wont know untill tonight/tommorow morning. any opinions on this ... thanks in advance david ... ayrshire scotland

5819. Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-12 02:52:28 UTC
From: Garry
Topic: 5787 Message: 5819

Neil.

I have used a piece of coax as a capacitor in the past. It is simple beyond belief and works quite well. You did not mention if you wanted to be able to transmit but if you use rg-213 or similar it will handle the output of your rig or always has for me anyway. The nice thing about a short piece of coax is that one can easily trim it to resonate where you want just by snipping the length till it comes in. Of course, with the variable capacitor you have a wider latitude for the length of the "gimmic" capacitor.

If you want the loop for receive only then the same thing can be done by just twisting a couple of wires together to make a quick and dirty capacitor.

I have been using maganetic loop antennas for the past 3-4 years, mostly for receiving but I also build mine to transmit on, however it was not until just yesterday that I finally managed to complete a most satisfactory method of remote tuning from within my shack. Now with the simple turn of a knob I can tune my main loop to cover any one of 3 of the ham bands. 40, 30 and 20 meters. The loop is located 20 meters from my radio room.

QRZ my call and there is a link to my web page with some photos albeit not quite up to date.

73

Garry

--- In loopantennas@yahoogroups.com, "Neil McGrath" <fast.electrics@...> wrote:
>
> I have just completed my first magnetic loop and the initial results
> look promising. It is a circular 4 ft diameter design made from heliax
> ,Farady loop fed and tuned using a 120pf air spaced capacitor. The
> design tuned well on 14Mhz showing an SWR close to 1:1 inside my
> garage with plenty of metal in close proximity. The variable cap still
> had too much capacitance on its minimum setting to operate the antenna
> on 21MHz and on 7Mhz I could hear the background noise start to rise
> but ran out of adjustment before I could get a decent SWR. I am
> thinking about making a capacitor to be connected across the variable
> for operation on 40m and have considered using a piece of double

sided
> PCB cut to a suitable size. Is there a better option using off the
> shelf components?
>
> Neil
>

5820. Re: [loopantennas] Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-12 18:47:07 UTC
From: Paul V Birke PEng
Topic: 5787 Message: 5820

Dear Gary

can you give us a hint how you are able to change the capacitance from the shack

nice photos

Paul in Guelph ON

----- Original Message ----
From: Garry <ve7ajj@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, October 11, 2008 10:52:28 PM
Subject: [loopantennas] Re: Heliax Loop

Neil.

I have used a piece of coax as a capacitor in the past. It is simple
beyond belief and works quite well. You did not mention if you
wanted to be able to transmit but if you use rg-213 or similar it
will handle the output of your rig or always has for me anyway. The
nice thing about a short piece of coax is that one can easily trim it
to resonate where you want just by snipping the length till it comes
in. Of course, with the variable capacitor you have a wider latitude
for the length of the "gimmic" capacitor.

If you want the loop for receive only then the same thing can be done
by just twisting a couple of wires together to make a quick and dirty
capacitor.

I have been using maganetic loop antennas for the past 3-4 years,
mostly for receiving but I also build mine to transmit on, however it
was not until just yesterday that I finally managed to complete a
most satisfactory method of remote tuning from within my shack. Now
with the simple turn of a knob I can tune my main loop to cover any
one of 3 of the ham bands. 40, 30 and 20 meters. The loop is located
20 meters from my radio room.

QRZ my call and there is a link to my web page with some photos
albeit not quite up to date.

73

Garry

--- In loopantennas@ yahoogroups. com, "Neil McGrath"
<fast.electrics@ ...> wrote:
>
> I have just completed my first magnetic loop and the initial results

> look promising. It is a circular 4 ft diameter design made from
heliax
> ,Farady loop fed and tuned using a 120pf air spaced capacitor. The
> design tuned well on 14Mhz showing an SWR close to 1:1 inside my
> garage with plenty of metal in close proximity. The variable cap
still
> had too much capacitance on its minimum setting to operate the
antenna
> on 21MHz and on 7Mhz I could hear the background noise start to rise
> but ran out of adjustment before I could get a decent SWR. I am
> thinking about making a capacitor to be connected across the
variable
> for operation on 40m and have considered using a piece of double
sided
> PCB cut to a suitable size. Is there a better option using off the
> shelf components?
>
> Neil
>

[Non-text portions of this message have been removed]

5821. Verdigris effect on loop Q

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-13 00:58:39 UTC
From: Jim Miller
Topic: 5821 Message: 5821

Has anyone seen any quantitative studies done on the impact of the buildup of verdigris on the Q of a copper loop?

I'm working on creating an experiment but won't spend the time on it if there is already published info.

73

jim ab3cv

[Non-text portions of this message have been removed]

5822. Re: [loopantennas] Verdigris effect on loop Q

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-13 01:26:12 UTC
From: toddroberts2001@aol.com
Topic: 5821 Message: 5822

In a message dated 10/12/2008 8:58:48 P.M. Eastern Daylight Time,
jim@... writes:

Has anyone seen any quantitative studies done on the impact of the buildup
of verdigris on the Q of a copper loop?

I'm working on creating an experiment but won't spend the time on it if
there is already published info.

73

jim ab3cv

Someone did do a study on the effect of corrosion on the Q of small
copper coils. He found very little change in Q but I don't know how that
would translate to a large single-turn copper loop. His report is here:

http://www.bnk.com/W0QE/inductor_Q_tests.html

It would be common sense to clean the corrosion off of copper used
for a transmitting loop. Most people recommend cleaning the
copper to a shine then coating it with a clear overcoat like
polyurethane.

73 Todd WD4NGG

**********New MapQuest Local shows what's happening at your destination.
Dining, Movies, Events, News & more. Try it out
(http://local.mapquest.com/?ncid=emlcntnew00000002)

5823. Re: [loopantennas] Verdigris effect on loop Q

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-13 14:28:42 UTC
From: Chris Trask
Topic: 5821 Message: 5823

>
> > In a message dated 10/12/2008 8:58:48 P.M. Eastern Daylight Time,
> > jim@... writes:
> >
> > Has anyone seen any quantitative studies done on the impact of the
buildup
> > of verdigris on the Q of a copper loop?
> >
> > I'm working on creating an experiment but won't spend the time on it if
> > there is already published info.
> >
>
> Someone did do a study on the effect of corrosion on the Q of small
> copper coils. He found very little change in Q but I don't know how that
> would translate to a large single-turn copper loop. His report is here:
>
> http://www.bnk.com/W0QE/inductor_Q_tests.html
>
>
> It would be common sense to clean the corrosion off of copper used
> for a transmitting loop. Most people recommend cleaning the
> copper to a shine then coating it with a clear overcoat like
> polyurethane.
>

Now that's a thorough study of the effects of corrosion on copper and
how it effects inductor Q. The link to the G3YNH site offers an even more
detailed discussion about inductors and skin effect, etc.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5824. Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-13 17:23:25 UTC
From: Garry
Topic: 5787 Message: 5824

Dear Garry

can you give us a hint how you are able to change the capacitance
from the shack

nice photos

Paul in Guelph ON

Hi Paul.

I can pass on my method. First things first. I am using a homebuilt air-variable capacitor that seems easily able to handle the 100 watt output from my radio. Over time I have learned that making a remote tuning device to work it is not so simple as one might think. The first thing I found out was that anything in the plane of the loop wanted to effect the SWR so I had to devise a method of circumventing that.

I finally settled on using a servo motor such as I use in my model airplanes. The requirement for one is not particularly stringent as the capacitor is very low friction (Butterfly type of capacitor) so any cheap servo motor seems to do the job. The servo motor is fixed directly to the capacitor shaft and the three wire cable to provide the signal is routed through the 3/4" pipe that forms the loop. Doing this takes it out of the plane of the loop and has no apparent effect on performance of the loop.

The following numbers are "item numbers" from Ebay auctions:
320309451655, 290266317566

Go to Ebay.ca or Ebay.com and enter the numbers in the search window and the specific listing will be brought up. (note: these numbers will only be good for a couple of months then they will expire from the Ebay system, -- An alternative would be to search for Servo Tester on Ebay)

These devices are servo testers that RC enthusiasts can use to adjust the servo motor settings on model cars/aircraft without having to connect them to a receiver. The less expensive one is rather simple (and small) but works just fine. The more elaborate one has a digital readout that displays the pulse width being generated and can be used as the loop tuning device with complete accuracy. Repeatability is excellent with this device.

I did find that I had to use a stable regulated power source in the shack as a DC wall wart did not work when under load as the circuit

became unstable and the servo motor chattered considerably. What I used (quickest for me) was a battery pack consisting of 6 NIMH rechargables. I have 75 feet of cable from the shack to the loop. Other than the fact that the tuning is very touchy, it works beautifully and I learned very quickly which numbers on the readout correspond with my most used frequencies.

One other thing that must be noted if one wishes to transmit, the power MUST be turned off to the servo motor or the RF will cause it to chatter violently thereby detuning the loop and affecting SWR

I mostly use my loop for receive but it seems to work just fine on transmit. Where it really shines is in eliminating the high level of local static that I often get on the 40 meter band in the mornings and evenings. The loop can knock an S-9 noise level down to a S-3 often rendering a previously unheard signal into a solid copy with 2 S-units over the noise.

73

Garry

5825. Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-13 17:36:04 UTC
From: Hiram
Topic: 5787 Message: 5825

Interesting! I never thought to run the wires inside the loop itself!
It doesn't let RF into the shack? I would think the cable would upset
the SWR or you would at least need to isolate it with chokes and
bypass caps.

Is that ABS pipe holding it all up? Nice looking loop, is it
rotatable? What are the dimensions? Thanks for posting,

Pappy Hiram

--- In loopantennas@yahoogroups.com, "Garry" <ve7ajj@...> wrote:
>
> Dear Garry
>
> can you give us a hint how you are able to change the capacitance
> from the shack
>
> nice photos
>
> Paul in Guelph ON
>
>
> Hi Paul.
>
> I can pass on my method. First things first. I am using a homebuilt
> air-variable capacitor that seems easily able to handle the 100 watt
> output from my radio. Over time I have learned that making a remote
> tuning device to work it is not so simple as one might think. The
> first thing I found out was that anything in the plane of the loop
> wanted to effect the SWR so I had to devise a method of circumventing
> that.
>
> I finally settled on using a servo motor such as I use in my model
> airplanes. The requirement for one is not particularly stringent as
> the capacitor is very low friction (Butterfly type of capacitor) so
> any cheap servo motor seems to do the job. The servo motor is fixed
> directly to the capacitor shaft and the three wire cable to provide
> the signal is routed through the 3/4" pipe that forms the loop.
> Doing this takes it out of the plane of the loop and has no apparent
> effect on performance of the loop.
>
> The following numbers are "item numbers" from Ebay auctions:
> 320309451655, 290266317566
>
> Go to Ebay.ca or Ebay.com and enter the numbers in the search window
> and the specific listing will be brought up. (note: these numbers

> will only be good for a couple of months then they will expire from
> the Ebay system, -- An alternative would be to search for Servo
> Tester on Ebay)
>
> These devices are servo testers that RC enthusiasts can use to adjust
> the servo motor settings on model cars/aircraft without having to
> connect them to a receiver. The less expensive one is rather simple
> (and small) but works just fine. The more elaborate one has a
> digital readout that displays the pulse width being generated and can
> be used as the loop tuning device with complete accuracy.
> Repeatability is excellent with this device.
>
> I did find that I had to use a stable regulated power source in the
> shack as a DC wall wart did not work when under load as the circuit
> became unstable and the servo motor chattered considerably. What I
> used (quickest for me) was a battery pack consisting of 6 NIMH
> rechargables. I have 75 feet of cable from the shack to the loop.
> Other than the fact that the tuning is very touchy, it works
> beautifully and I learned very quickly which numbers on the readout
> correspond with my most used frequencies.
>
> One other thing that must be noted if one wishes to transmit, the
> power MUST be turned off to the servo motor or the RF will cause it
> to chatter violently thereby detuning the loop and affecting SWR
>
> I mostly use my loop for receive but it seems to work just fine on
> transmit. Where it really shines is in eliminating the high level of
> local static that I often get on the 40 meter band in the mornings
> and evenings. The loop can knock an S-9 noise level down to a S-3
> often rendering a previously unheard signal into a solid copy with 2
> S-units over the noise.
>
> 73
>
> Garry
>

5826. Re: [loopantennas] Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-13 18:19:36 UTC
From: Paul V Birke PEng
Topic: 5787 Message: 5826

----- Original Message ----
From: Garry <ve7ajj@...>
To: loopantennas@yahoogroups.com
Sent: Monday, October 13, 2008 1:23:25 PM
Subject: [loopantennas] Re: Heliax Loop

Dear Garry

can you give us a hint how you are able to change the capacitance
from the shack

nice photos

Paul in Guelph ON

Hi Paul.

I can pass on my method. First things first. I am using a homebuilt
air-variable capacitor that seems easily able to handle the 100 watt
output from my radio. Over time I have learned that making a remote
tuning device to work it is not so simple as one might think. The
first thing I found out was that anything in the plane of the loop
wanted to effect the SWR so I had to devise a method of circumventing
that.

I finally settled on using a servo motor such as I use in my model
airplanes. The requirement for one is not particularly stringent as
the capacitor is very low friction (Butterfly type of capacitor) so
any cheap servo motor seems to do the job. The servo motor is fixed
directly to the capacitor shaft and the three wire cable to provide
the signal is routed through the 3/4" pipe that forms the loop.

Nice

as the other fellow indicated wha happens with this wire set "crosses" the rf current path,
something induced or not??

tDoing this takes it out of the planetf the loop and has no apparent
effect on performance of the loop.

very good

The following numbers are "item numbers" from Ebay auctions:
320309451655, 290266317566

Go to Ebay.ca or Ebay.com and enter the numbers in the search window
and the specific listing will be brought up. (note: these numbers
will only be good for a couple of months then they will expire from

the Ebay system, -- An alternative would be to search for Servo
Tester on Ebay)

These devices are servo testers that RC enthusiasts can use to adjust
the servo motor settings on model cars/aircraft without having to
connect them to a receiver. The less expensive one is rather simple
(and small) but works just fine. The more elaborate one has a
digital readout that displays the pulse width being generated and can
be used as the loop tuning device with complete accuracy.
Repeatability is excellent with this device.

nice adaption

I did find that I had to use a stable regulated power source in the
shack as a DC wall wart did not work when under load as the circuit
became unstable and the servo motor chattered considerably. What I
used (quickest for me) was a battery pack consisting of 6 NIMH
rechargables. I have 75 feet of cable from the shack to the loop.
Other than the fact that the tuning is very touchy, it works
beautifully and I learned very quickly which numbers on the readout
correspond with my most used frequencies.
any way to add a wormgear to further reduce turning ratio

One other thing that must be noted if one wishes to transmit, the
power MUST be turned off to the servo motor or the RF will cause it
to chatter violently thereby detuning the loop and affecting SWR

ok copy that

I mostly use my loop for receive but it seems to work just fine on
transmit. Where it really shines is in eliminating the high level of
local static that I often get on the 40 meter band in the mornings
and evenings. The loop can knock an S-9 noise level down to a S-3
often rendering a previously unheard signal into a solid copy with 2
S-units over the noise.

very well done

thanks

Paul

* s
* 1
New LinksVisit Your Group
Yahoo! Finance
It's Now Personal
Guides, news,
advice & more.
Dog Groups
on Yahoo! Groups
discuss everything
related to dogs.

Special K Group
on Yahoo! Groups
Join the challenge
and lose weight.
.

[Non-text portions of this message have been removed]

5827. Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-13 18:45:41 UTC
From: Garry
Topic: 5787 Message: 5827

--- In loopantennas@yahoogroups.com, "Hiram" <daveleb55@...> wrote:
>

I have added a couple more photos to my web page and will add some comments to my blog (accessible from the pictures page)

Pappy,

Yes that is ABS pipe holding it up but there is a planed down 2" x 2" inside of the pipe to add support. The ABS really wants to warp in the strong sun.

I found that running the power/pulse signal wires external to the loop messed up the SWR (badly). By running the wiring inside of the pipe and exiting at the bottom alongside of the coax, I can find no degradation or at any rate minimal degradation of SWR and performance would appear to be unaffected. I do not notice any RF in the shack. I did try to bypass with a couple of caps but ended up removing them with no noticable affect.

Remember that the current on the loop conductor will only be running on the outer skin. I deduced that there would be no effect on the loop if a wire was run internally and it would seem to be the case with this loop.

The loop is rotatable (by hand) however, other then for using it to null out a particularly annoying noise source I have not found any need to rotate it. I have it sitting East/West. This loop is about 62" in diameter (slightly under 2 meters for you metric folk) The loop works 20 meters, 30 and 40 with the present capacitor. The loop design program indicates app 50% efficiency on 40 meters and around 90% effeciency on 20 meters.

> Interesting! I never thought to run the wires inside the loop

itself!
> It doesn't let RF into the shack? I would think the cable would
upset
> the SWR or you would at least need to isolate it with chokes and
> bypass caps.
>
> Is that ABS pipe holding it all up? Nice looking loop, is it
> rotatable? What are the dimensions? Thanks for posting,
>
> Pappy Hiram
>
>

>
>
>
> --- In loopantennas@yahoogroups.com, "Garry" <ve7ajj@> wrote:
> >
> > Dear Garry
> >
> > can you give us a hint how you are able to change the capacitance
> > from the shack
> >
> > nice photos
> >
> > Paul in Guelph ON
> >
> >
> > Hi Paul.
> >
> > I can pass on my method. First things first. I am using a
homebuilt
> > air-variable capacitor that seems easily able to handle the 100
watt
> > output from my radio. Over time I have learned that making a
remote
> > tuning device to work it is not so simple as one might think.
The
> > first thing I found out was that anything in the plane of the
loop
> > wanted to effect the SWR so I had to devise a method of
circumventing
> > that.
> >
> > I finally settled on using a servo motor such as I use in my
model
> > airplanes. The requirement for one is not particularly stringent
as
> > the capacitor is very low friction (Butterfly type of capacitor)
so
> > any cheap servo motor seems to do the job. The servo motor is
fixed
> > directly to the capacitor shaft and the three wire cable to
provide
> > the signal is routed through the 3/4" pipe that forms the loop.
> > Doing this takes it out of the plane of the loop and has no
apparent
> > effect on performance of the loop.
> >
> > The following numbers are "item numbers" from Ebay auctions:
> > 320309451655, 290266317566
> >
> > Go to Ebay.ca or Ebay.com and enter the numbers in the search

window
> > and the specific listing will be brought up. (note: these numbers
> > will only be good for a couple of months then they will expire
from
> > the Ebay system, -- An alternative would be to search for Servo
> > Tester on Ebay)
> >
> > These devices are servo testers that RC enthusiasts can use to
adjust
> > the servo motor settings on model cars/aircraft without having to
> > connect them to a receiver. The less expensive one is rather
simple
> > (and small) but works just fine. The more elaborate one has a
> > digital readout that displays the pulse width being generated and
can
> > be used as the loop tuning device with complete accuracy.
> > Repeatability is excellent with this device.
> >
> > I did find that I had to use a stable regulated power source in
the
> > shack as a DC wall wart did not work when under load as the
circuit
> > became unstable and the servo motor chattered considerably. What
I
> > used (quickest for me) was a battery pack consisting of 6 NIMH
> > rechargables. I have 75 feet of cable from the shack to the
loop.
> > Other than the fact that the tuning is very touchy, it works
> > beautifully and I learned very quickly which numbers on the
readout
> > correspond with my most used frequencies.
> >
> > One other thing that must be noted if one wishes to transmit, the
> > power MUST be turned off to the servo motor or the RF will cause
it
> > to chatter violently thereby detuning the loop and affecting SWR
> >
> > I mostly use my loop for receive but it seems to work just fine
on
> > transmit. Where it really shines is in eliminating the high
level of
> > local static that I often get on the 40 meter band in the
mornings
> > and evenings. The loop can knock an S-9 noise level down to a
S-3
> > often rendering a previously unheard signal into a solid copy
with 2
> > S-units over the noise.
> >
> > 73

> >
> > Garry
> >
>

5828. Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-14 15:19:56 UTC
From: tenorman1952
Topic: 5787 Message: 5828

--- In loopantennas@yahoogroups.com, "Garry" <ve7ajj@...> wrote:
>
> Dear Garry
>
> can you give us a hint how you are able to change the capacitance
> from the shack
>
>
(trimmed)
>
> I finally settled on using a servo motor such as I use in my model
> airplanes. The requirement for one is not particularly stringent
as
> the capacitor is very low friction (Butterfly type of capacitor) so
> any cheap servo motor seems to do the job. The servo motor is
fixed
> directly to the capacitor shaft and the three wire cable to provide
> the signal is routed through

I had suggested this some time back, but was largely ignored. Thanks for confirming that this works.

Might I add a little here? I'm a very long time R/C'er.

A servo can be had for less than $10 USD. Even some of the store brand models, such as from Tower Hobbies, are excellent servos and better than what we had years ago.

The servos require 4.8 vdc (4 nicad cells) to 6.0 vdc (4 alkalines) to operate. I don't know what the upper limit is, as I've not had a reason to push them to higher voltages. A servo only requires about 10 ma idling current, and in operation averages about 100 ma. Stalled, it may take about 200 ma.

I have operated them from higher voltage supplies using an LM7805 (5v) or 7806 (6v) chip regulator. If a wall wart is causing the jitters in the servo it is because it is not supplying clean power. Using a higher voltage wall wart, and going through a 7806 with a capacitor on each side (input to ground, and output to ground) for filtering will work just fine.

Since long leads will be used, I would use 6v to power the servo.

There are three leads, black is common or -. Red is +. White (or sometimes another color, but usually white) is signal. The signal consists of a positive pulse in the 1.0-2.0 ms width range. The exact pulse width determines the position of the servo. Most radios

are made to center the servos at 1.5 ms. Futaba centers at 1.37 ms, but there is enough range that it does not matter. The frame rate (how often pulses are sent to the servo) is around 50-60 hz.

At one time I saw a little computer program and adapter from a serial port used to run a servo. Perhaps one of the Radio Shack robotics kits might be used.

Usually the amount of rotation is 90*. Landing gear servos rotate 180* and produce a lot more torque, way more than required for a tuning capacitor. and are very expensive. But a capacitor requires 180* of rotation. If the servo tester does not provide enough range, open the servo and find the feedback potentiometer. This is easy as it is directly below the output shaft, and is rotated by that shaft. The amount of rotation can be increased by adding a 1/8 watt resistor to each of the outer legs of the pot. Try 2.2k to 4.7k. Unsolder the wires (leave the center wire attached), and solder one resistor to each end terminal, solder the leads back to the resistors.

You can connect the servo to the tuning capacitor with a piece of vinyl tubing forced over the output shaft and the capacitor shaft.

The servo can be secured with double sided foam tape.

The resistors can be tucked in beside the feedback pot so they are not in the way and won't short on anything. There is not enough room to use heatshrink tubing.

Yes, the servo has more than enough torque to turn a tuning capacitor.

Paul C.

5829. Re: [loopantennas] Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-14 15:39:27 UTC
From: Jim Miller
Topic: 5787 Message: 5829

with the advent of 2.4ghz spread spectrum rc transmitter and receivers it might be feasible to make the tuning wireless. the 2.4ghz receivers are tiny have very small antenna requirements for flight and likely would work with even smaller antennas for this stationary short distance use.

since the receivers and servos work on battery power by design it might even be possible to have the whole tuner assy solar powered. ensuring that the torque necessary is minimal is just a matter of minimizing bearing friction to minimized battery drain.

that would mean that no wiring would be required at all in the plane of the loop or through the loop itself.

even if solar isn't used it should be possible rig the tuning assy up with rechargables suitably housed for easy access.

73

jim ab3cv

[Non-text portions of this message have been removed]

5830. Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-14 16:16:35 UTC
From: Garry
Topic: 5787 Message: 5830

Good information Paul. Thanks.

The only thing I would mention is that the butterfly capacitor (at least the one that I have) requires only 90 degrees of rotation as opposed to the standard capacitor at 180degrees. The butterfly is the best bet as there are no losses associated with sliding or rotating contacts such as you would have on the other style of capacitor. The capacitors can be hard to find but they are not that hard to build (I have made 2 of them for 2 different loops) A careful search of the Internet will find the plans for building one.

Another thing that may or may not be known is that you can nest a small loop inside of a larger loop with no apparent loss in performance providing that the loops are oriented at 90 degrees to each other. In that case each loop is in the plane of the null in the other loop which allows either loop to work.

To test this, we (I and VE6BEK) built 2 loops (The large loop covered 40 meters to 20 meters and the small loop covered 17 meters to 10 meters. The large loop was 62 inches in diameter and the other about 30 inches in diameter.) and tested them each separately then as an experiment we nested the small loop inside of the large loop and checked the SWR which had not changed significantly on either loop.

As for on the air tests -- well we all know what the bands have been like and there was no propagation on 10 meters but I did make a solid 5/7 contact on 15 meters into Pennsylvania with the loops sitting inside of my 2 car garage and the loop being used would have been about 5 feet off the floor to the center of the loop. We had no other antenna to compare the signal against so take that for what it's worth but we were quite ecstatic at the performance. Unfortunately 15 meters is seldom open to here lately so no more contacts were made and the radio we were using for test purposes was a TS-520 which did not have Warc band s so there was no possibility of our having tried 17 meters which often does have propagation.

The magnetic loop exhibits a very high degree of rejection to signals that are precisely at 90 degrees to the plane of the loop so that may be why it works. Ed, VE6BEK, went home to Alberta and built an extremely nice setup with one loop nested in the other and he made a rather intricate connection so that with a single steppir motor he could tune both of the loops. He used this on the balcony (4th floor) of the apartment he lived in but has since moved and has no antenna up currently. But he found the same thing as we had at my location, that the small loop inside of the large loop worked well.

His antenna gave him complete ham band coverage from 40 meters to 10 meters. And it occupied about 5 feet of floor space. For those hams with restrictions on antennas or limited space this is a very viable alternative and sure beats not being on the air at all.

I am very much an advocate of the magnetic loop. I currently have minimal restrictions on antennas and have a full sized Delta loop for 80 meters that outperforms my magnetic loop when band conditions are good (and I'm sure it does when transmitting at any time) but the magnetic loop really excells at reducing static and I would not be without it for receiving. Just this morning I was forced to copy signals on the magnetic loop because I just could not hear the other stations on my other antennas. I would then switch to the delta loop to transmit. Fortunately the static affects only the receive and not the transmit. HI

73

Garry

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Garry" <ve7ajj@> wrote:
> >
> > Dear Garry
> >
> > can you give us a hint how you are able to change the capacitance
> > from the shack
> >
> >
> (trimmed)
> >
> > I finally settled on using a servo motor such as I use in my model
> > airplanes. The requirement for one is not particularly stringent as
> > the capacitor is very low friction (Butterfly type of capacitor) so
> > any cheap servo motor seems to do the job. The servo motor is fixed
> > directly to the capacitor shaft and the three wire cable to provide
> > the signal is routed through
> >
> I had suggested this some time back, but was largely ignored. Thanks
> for confirming that this works.
>
> Might I add a little here? I'm a very long time R/C'er.
>

> A servo can be had for less than $10 USD. Even some of the store
> brand models, such as from Tower Hobbies, are excellent servos and
> better than what we had years ago.
>
> The servos require 4.8 vdc (4 nicad cells) to 6.0 vdc (4 alkalines)
> to operate. I don't know what the upper limit is, as I've not had
a
> reason to push them to higher voltages. A servo only requires about
> 10 ma idling current, and in operation averages about 100 ma.
> Stalled, it may take about 200 ma.
>
> I have operated them from higher voltage supplies using an LM7805
> (5v) or 7806 (6v) chip regulator. If a wall wart is causing the
> jitters in the servo it is because it is not supplying clean power.
> Using a higher voltage wall wart, and going through a 7806 with a
> capacitor on each side (input to ground, and output to ground) for
> filtering will work just fine.
>
> Since long leads will be used, I would use 6v to power the servo.
>
> There are three leads, black is common or -. Red is +. White (or
> sometimes another color, but usually white) is signal. The signal
> consists of a positive pulse in the 1.0-2.0 ms width range. The
> exact pulse width determines the position of the servo. Most
radios
> are made to center the servos at 1.5 ms. Futaba centers at 1.37
ms,
> but there is enough range that it does not matter. The frame rate
> (how often pulses are sent to the servo) is around 50-60 hz.
>
> At one time I saw a little computer program and adapter from a
serial
> port used to run a servo. Perhaps one of the Radio Shack robotics
> kits might be used.
>
> Usually the amount of rotation is 90*. Landing gear servos rotate
> 180* and produce a lot more torque, way more than required for a
> tuning capacitor. and are very expensive. But a capacitor requires
> 180* of rotation. If the servo tester does not provide enough
range,
> open the servo and find the feedback potentiometer. This is easy
as
> it is directly below the output shaft, and is rotated by that
shaft.
> The amount of rotation can be increased by adding a 1/8 watt
resistor
> to each of the outer legs of the pot. Try 2.2k to 4.7k. Unsolder
> the wires (leave the center wire attached), and solder one resistor
> to each end terminal, solder the leads back to the resistors.
>

> You can connect the servo to the tuning capacitor with a piece of
> vinyl tubing forced over the output shaft and the capacitor shaft.
>
> The servo can be secured with double sided foam tape.
>
> The resistors can be tucked in beside the feedback pot so they are
> not in the way and won't short on anything. There is not enough
room
> to use heatshrink tubing.
>
> Yes, the servo has more than enough torque to turn a tuning
capacitor.
>
> Paul C.
>

5831. Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-14 16:31:52 UTC
From: Garry
Topic: 5787 Message: 5831

I have thought of that Jim, even with using 72 mhz equipment but the cost of the servo tester and the 3 wire cable was much less so the cheap part of me won out HI.

I also have found that the servo motor has to be de-energised when transmitting or the high RF field causes it to chatter violently. That might eliminate the use of wireless control or in any event make it more complex.

I was thinking of replacing the off/on switch on my servo tester with a momentary push switch so that I would not have to concern myself with remembering to shut it off when I go to transmit. As a rule I leave it off anyway unless I am tuning.

73

Garry

--- In loopantennas@yahoogroups.com, "Jim Miller" <jim@...> wrote:
>
> with the advent of 2.4ghz spread spectrum rc transmitter and receivers it
> might be feasible to make the tuning wireless. the 2.4ghz receivers are tiny
> have very small antenna requirements for flight and likely would work with
> even smaller antennas for this stationary short distance use.
>
> since the receivers and servos work on battery power by design it might even
> be possible to have the whole tuner assy solar powered. ensuring that the
> torque necessary is minimal is just a matter of minimizing bearing friction
> to minimized battery drain.
>
> that would mean that no wiring would be required at all in the plane of the
> loop or through the loop itself.
>
> even if solar isn't used it should be possible rig the tuning assy up with
> rechargables suitably housed for easy access.
>
> 73
>

> jim ab3cv
>
>
> [Non-text portions of this message have been removed]
>

5832. Re: Heliax Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-15 13:17:58 UTC
From: tenorman1952
Topic: 5787 Message: 5832

--- In loopantennas@yahoogroups.com, "Garry" <ve7ajj@...> wrote:

> I also have found that the servo motor has to be de-energised when
> transmitting or the high RF field causes it to chatter violently.

Simply place a switch in the + lead going to the servo's red lead.
You don't need to turn the tester off.

Back to the robotics kits... the ones I had seen used standard R/C
servos, but everything was powered from a port from the computer.

Sometimes an optocoupler (to trigger an op amp, used as a buffer)
must be used with long leads on the signal wire, but I think that has
more to do with the R/C receiver acting up than the servo itself.
Without a receiver, no problem.

The Tower Hobbies TS-53 is well up to this task.

http://www.towerhobbies.com/products/towm4500.html

Price is $10.00 USD

If you look at the photo, the output arm assembly is easily removed
with the small phillips screw. The shaft is splined. Easy
connection with a piece of stiff rubber or vinyl tubing to the shaft
of a capacitor.

Paul C.

5833. Re: Loops,Brick and cinder block

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-15 18:52:03 UTC
From: Eric
Topic: 2664 Message: 5833

--- In loopantennas@yahoogroups.com, "Bob" <MAXXOUT2@...> wrote:
>
> Hi Gang,
> I'm up on the 4th floor.
> I was thinking of getting the MFJ 936-B
> My window is steel but insulated from the steel *I* beams.
> The wall is made up of cinder block 2 thick and a layer of brick on
top
> of that.
> Will a 4-5 foot loop or a wire loop draped around that steel window
> with 6" clearance be able to push RF through the cinder blocks and
> brick?
> That would make the loop a appx 6 foot high and close to 9 feet
wide.
> I have enough copper tubing to make the loop but not being at all
> familiar with the loop antenna, will the copper tube work with the
MFJ
> 936-B loop tuner?
> Sorry to start off with all the questions but a recent change in
> management here changed the antenna status and I miss my DX on 40
> meters at night so any info wound be much appreciated.
> Thanks
> BOB
> AF2Q
>

Bob, I know this post is old but I was wondering if you did get the
936B tuner and how do you like it?

5834. 2 Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-16 15:47:07 UTC
From: jefeickert
Topic: 5834 Message: 5834

Does Shortwave (incoming signals) go thru houses - walls?

2. What is going to happen to all frequencies after FEB.09
who would be using them?

JIM

5835. Re: [loopantennas] 2 Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-16 17:54:16 UTC
From: Andy
Topic: 5834 Message: 5835

> Does Shortwave (incoming signals) go thru houses - walls?

Yes, if they aren't metal.

Metal frame houses (metal where there used to be 2-by-4's) do tend to block or reduce signals whose wavelengths are larger than the openings between the frame pieces. Most "shortwave" HF signals are larger than the typical home stud spacing, so they might be blocked if that construction is used. Bricks and cynderblock may reduce signals somewhat, but not entirely.

> 2. What is going to happen to all frequencies after FEB.09
> who would be using them?

I, for one, am kind of confused about this, because it was my impression that TV stations were mainly changing over from one form of modulation to another, using the same 6 MHz spectrum space for either. In the interim (today) you do have many TV stations consuming two channels simultaneously, typically their original VHF (or perhaps UHF) one for NTSC (analog) and a temporary UHF one for digital, and they would be relinquishing the temporary one after the full changeover in Feb., going back to their original channel assignments exclusively.

Bit by bit, though, large chunks of the original UHF-TV band have been "sold" off from the public interest to private concerns over the last few decades, and I think that continues. Some of this space was sold for business use, some is used for public service (police/fire), etc. So the spectrum space gets divided up and sold to the highest bidder, whoever that may be.

There was a time when the FCC was in charge of enforcing the notion that the airwaves were a public resource and would be used for the public good.

Not sure what this has to do with loop antennas......

Andy

5836. is this better

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-16 23:05:40 UTC
From: jefeickert
Topic: 5836 Message: 5836

Last time sent this group I was told it had nothing to do with Loopantennas
so is this better.
had a idea of taking copper sleeves and putting PVC or wooden doll thru copper
rigs and
attach them to a wire. First would this work for an Antenna, If it did how many
copper rings would I need? how wide?.
any crazy respond is ok.
JIM

5837. Loop Antenna Preamplifer Circuit

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-16 21:57:24 UTC
From: Adam E.
Topic: 5837 Message: 5837

I have my old loop antenna just for the LW band, but stormwise had the nerve to take down the schematic diagram for the basic loop antenna preamp that just runs on 1 1.5 D cell battery. I am looking for a good well performing loop antenna preamp circuit, but easy to build. The reception in the apartment is bad because I don't have a ground rod or permission to plant one outside so I must use a loop antenna or an active antenna. The variable tuning capacitors are getting hard to get cause they are going up in price.

Adam E.

5838. Re: [loopantennas] Loop Antenna Preamplifer Circuit

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 01:47:19 UTC
From: Paul V Birke PEng
Topic: 5837 Message: 5838

The variable tuning capacitors are getting hard
to get cause they are going up in price.

****

Adam have a look at ebay from the Ukraine

some good ones pretty cheap

best
Paul

[Non-text portions of this message have been removed]

5839. Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 14:28:26 UTC
From: ka7nwq
Topic: 5839 Message: 5839

Hello to all. I had a few questions that I hope the group might be able to answer for me, or at least help me out.

I will have, here shortly, a lot of room to do antenna stuff. Basically, about 40 acres of farm land with the house / shack located on the front of it. I dont have a whole lot of trees around, and the ones that are there are maybe 20 to 30 feet high.

I would like to have 160 thru 6 coverage. My question is what type of antenna would you use if you had all the room in the world, without any high supports?

I would also like to play on 160 this winter since we are going back into the new solar cycle. Vertical vs loop vs low dipole? What type of receiving antennas would you use?

Thanks again to all who respond. Best to you and yours.

73's

scott

5840. Re: [loopantennas] Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 15:18:57 UTC
From: Chris Trask
Topic: 5839 Message: 5840

>
>Hello to all. I had a few questions that I hope the group might be
>able to answer for me, or at least help me out.
>
>I will have, here shortly, a lot of room to do antenna stuff.
>Basically, about 40 acres of farm land with the house / shack located
>on the front of it. I dont have a whole lot of trees around, and the
>ones that are there are maybe 20 to 30 feet high.
>
>I would like to have 160 thru 6 coverage. My question is what type
>of antenna would you use if you had all the room in the world,
>without any high supports?
>
>I would also like to play on 160 this winter since we are going back
>into the new solar cycle. Vertical vs loop vs low dipole? What type
>of receiving antennas would you use?
>

How about an inverted discone? There's a patent for this, though I have lost track of the number. The design was for army HF communications.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5841. Re: [loopantennas] is this better

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 15:39:56 UTC
From: Andy
Topic: 5836 Message: 5841

> had a idea of taking copper sleeves and putting PVC or wooden doll thru copper
> rigs and
> attach them to a wire. First would this work for an Antenna, If it did how many
> copper rings would I need? how wide?.

I'm having a bit of trouble understanding exactly what you mean.

In a nutshell, though, any piece of conducting material works as an antenna, though some are better than others.

The first rule of most good antennas is that the total size (length) is comparable to the wavelength of the signals being worked; which is why a half wavelength long dipole is a good starting point.

For HF frequencies, most antennas are based on using thin wires, partly because they are easier to analyze, and consume less metal. Thicker wires and pipes and such, in addition to being mechanically stronger, tend to have somewhat wider bandwidth, and lower losses, so they may be preferable in some cases.

The width dimension is a comparatively less important parameter, usually being a second-order effect, unless you are in the realm of very high losses. High losses are a problem with antennas that are electrically very small, which is why small HF transmitting loops are made out of pipe rather than wire, to keep the loss resistance down.

I don't quite follow the multiple rings idea I think you are suggesting; but I suspect one long pipe may be better than (or at least just as good as) several separate rings.

Andy

5842. Re: [loopantennas] Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 15:50:53 UTC
From: Andy
Topic: 5839 Message: 5842

Take a look at what Tom Rauch W8JI is using (www.w8ji.com). I'm not saying you should do what he does, but he also likes 160 and also has a lot of acreage to play with.

Andy

5843. Re: [loopantennas] Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 16:12:41 UTC
From: Paul V Birke PEng
Topic: 5839 Message: 5843

Chris says:

How about an inverted discone? There's a patent for this, though I have lost track of the number. The design was for army HF communications.
****
PVB says:

Recent USA patent 7,286,095
however there are a number of patent disclosures in Japan predating this
One shows an ballon shaped antenna top appearing out a hole in a ground plane which I now for some reason cannot now find that but here are all the others
2001-185942
2005-260395
2005-269626
2005-101995
2005-073176

The one with the dielectric medium is interesting
The problem with the discone inverted or not is the lack of gain
Its claim to fame is wide bandwidth upwards from a minimum operational frequency
best Paul

[Non-text portions of this message have been removed]

5844. Re: [loopantennas] Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 18:46:39 UTC
From: Chris Trask
Topic: 5839 Message: 5844

> Chris says:
>
> How about an inverted discone? There's a patent for this, though I have lost track of the number. The design was for army HF communications.
> **********
> PVB says:
>
> Recent USA patent 7,286,095
> however there are a number of patent disclosures in Japan predating this
> One shows an ballon shaped antenna top appearing out a hole in a ground plane which I now for some reason cannot now find that but here are all the others
> 2001-185942
> 2005-260395
> 2005-269626
> 2005-101995
> 2005-073176
>
> The one with the dielectric medium is interesting
> The problem with the discone inverted or not is the lack of gain
> Its claim to fame is wide bandwidth upwards from a minimum operational frequency
> best Paul
>

The one that I had in mind is US Patent #3701159, "Discone Antenna".
It's actually a Canadian design, and the patent expired back in 1989.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5845. Re: [loopantennas] Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 19:55:56 UTC
From: Paul V Birke PEng
Topic: 5839 Message: 5845

ok Chris
had not seen this earlier one

thanks

Paul

----- Original Message ----
From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com
Sent: Friday, October 17, 2008 2:46:39 PM
Subject: Re: [loopantennas] Antenna Farm

> Chris says:
>
> How about an inverted discone? There's a patent for this, though I have
lost track of the number. The design was for army HF communications.
> ************ ********
> PVB says:
>
> Recent USA patent 7,286,095
> however there are a number of patent disclosures in Japan predating this
> One shows an ballon shaped antenna top appearing out a hole in a ground
plane which I now for some reason cannot now find that but here are all the
others
> 2001-185942
> 2005-260395
> 2005-269626
> 2005-101995
> 2005-073176
>
> The one with the dielectric medium is interesting
> The problem with the discone inverted or not is the lack of gain
> Its claim to fame is wide bandwidth upwards from a minimum operational
frequency
> best Paul
>

The one that I had in mind is US Patent #3701159, "Discone Antenna".
It's actually a Canadian design, and the patent expired back in 1989.

Chris

,---------- --------- --. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,---- --------- -' Chris Trask / N7ZWY

_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlin k.net
| | | | \ '. http://www.home. earthlink. net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

5846. Re: [loopantennas] Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 22:02:04 UTC
From: Jim Dunstan
Topic: 5839 Message: 5846

At 02:28 PM 10/17/2008 +0000, you wrote:

>Hello to all. I had a few questions that I hope the group might be
>able to answer for me, or at least help me out.
>
>I will have, here shortly, a lot of room to do antenna stuff.
>Basically, about 40 acres of farm land with the house / shack located
>on the front of it. I dont have a whole lot of trees around, and the
>ones that are there are maybe 20 to 30 feet high.
>
>I would like to have 160 thru 6 coverage. My question is what type
>of antenna would you use if you had all the room in the world,
>without any high supports?

Hi Scott. Interesting (hypothetical) question; what is the best antenna on HF (all amateur bands) given all the room you need, but limited height. For the most part antennas are divided into 2 main categories ..... balanced such as dipoles and loops .... and unbalanced .... those antennas that work against some sort of ground, ground plane, etc...

I assume you want an antenna that will allow some DX which requires a reasonably low angle of radiation. I would choose an antenna that works against ground
since you say you have a lot of ground and no height to speak of. Dipoles and loops require some reasonable portion of a wavelength of height in order to provide a reasonable angle of radiation.

The key to good radiation from a vertical is a good RF ground .... eg up to 100 1/4 wavelength radials (at the lowest frequency) With such a ground system a 30' height vertical could be easily tuned at the base on all bands and put out a dynamite signal. The vertical could be designed a number of ways ... eg as a folded monopole, a top hat ... etc .... but performance ultimately depends on the ground system.

Most people don't have such a ground system because they don't have the space or they don't have the time or energy to bury all that wire hi hi.

In any event, that would be my best all band antenna given low height and lots of space.

Jim, VE3CI

5847. Re: [loopantennas] is this better

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 22:40:27 UTC
From: Andy
Topic: 5836 Message: 5847

I wrote:

> For HF frequencies, most antennas are based on using thin wires, partly
> because they are easier to analyze, and consume less metal.

Before someone misunderstands ... what I meant by "based on," is simply that most antenna designs are BASED on antenna theory as it applies to thin wire antennas ... NOT that most antennas actually use thin wires. Many antennas intentionally use thicker elements but often the assumption is that they behave like their thin wire equivalents, with certain known differences.

Back before the days of computers, it was moderately easy to calculate the effects of thin wire antennas, but extraordinarily difficult to do this for thicker elements. Even with computers, thicker elements can be tricky to analyze correctly.

Andy

5848. Re: [loopantennas] Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 22:43:48 UTC
From: Andy
Topic: 5839 Message: 5848

> How about an inverted discone?

Wow, a discone for 160 meters, I'd like to see that!

A properly designed and built discone can be a very wideband antenna, so it might readily cover the upper bands for you, perhaps supplemented by one or more other antennas for the lower HF bands. On the other hand, discones are not known for having particularly good antenna gain (they nominally have no gain).

Andy

5849. Re: [loopantennas] Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-17 22:56:29 UTC
From: Chris Trask
Topic: 5839 Message: 5849

>
> > How about an inverted discone?
>
> Wow, a discone for 160 meters, I'd like to see that!
>
> A properly designed and built discone can be a very wideband antenna, so
it
> might readily cover the upper bands for you, perhaps supplemented by one
or
> more other antennas for the lower HF bands. On the other hand, discones
are
> not known for having particularly good antenna gain (they nominally have
no
> gain).
>
> Andy
>

The discone I had in mind (US Patent #3701159) is an interesting configuration. In this one, the ground and ground radials form the disc and the cone wires are the radiating element. An advantage of the discone over a "conventional" vertical is that the launch angle is lower plus you have wideband operation without the need for an overly elaborate antenna matcher. It is, of course, an omnidirectional antenna.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5850. Re: Antenna Farm

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-18 10:40:18 UTC
From: tenorman1952
Topic: 5839 Message: 5850

--- In loopantennas@yahoogroups.com, "ka7nwq" <ka7nwq@...> wrote:

> I will have, here shortly, a lot of room to do antenna stuff.
> Basically, about 40 acres of farm land with the house / shack located
> on the front of it.

Scott, a ham friend goes to Washington Island every so often, a small island off Wisconsin.

http://www.greengate-wibb.com/?page_id=5

Antenna farm? I got your antenna farm right here!

http://greengate-wibb.com/?page_id=12

My friend goes and stays there in one of the cabins with family (who are all hams), a sort of bed & breakfast, and has a great time.

Paul C.

5851. Re: is this better

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 00:09:23 UTC
From: jefeickert
Topic: 5836 Message: 5851

-My first problem is the spelling dowel, nor doll
second is living in a condo.
What i was saying is wooden dowel let say 24"
then have copper rings place them over the dowel
how many I don't know and then attach wire to each ring then to my radio.

JIM

5852. trying to make a loop antenna to catch 10 khz signal

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 02:37:12 UTC
From: Subrat Nayak
Topic: 5852 Message: 5852

I have to make a 10khz signal receiver.. All might be knowing that an invisible dog fence works at very low frequencies compared to normally used radio frequencies.. SO, here we are there is a long wire transmitter carrying 10khz (9.8 to 10.2 khz) signal through it.. i got to make a receiver that senses the field and approximately tells the distance from the transmitter wire..

I figured out that for such loq frequncies, its not possible to make very very long whip antenna and hence loop antenna is a solution, but am not sure how to start off making one.. after that using the opamp band pass filer knowledge that i took from course work, i though a 10khz narrow band pass filter might suffice to pick the signal, then a some kind of peak detector might be able to tell me the signal strength. the signal strength (amplitude of the voltage on output) decreases with increase in distance from the transmitter. So i should be some way able to approx estimate the distance from the wire transmitter..

Now , correct me if i am wrong somewhere.. i have no idea about tuned circuits and not sure how they work and if i should use them or not. I mainly need help in designing the loop antenna for 10khz and then to make a tuned circuit for 10khz...

please respond..

--
Thanks and Regards,
Subrat Nayak

"Freedom is the right of all sentient beings." ---- Optimus Prime

[Non-text portions of this message have been removed]

5853. Re: [loopantennas] Re: is this better

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 03:20:59 UTC
From: Andy
Topic: 5836 Message: 5853

> -My first problem is the spelling dowel, nor doll

Yup, I figured that.

> What i was saying is wooden dowel let say 24"
> then have copper rings place them over the dowel
> how many I don't know and then attach wire to each ring then to my radio.

The dowel just holds it together, it doesn't do anything electrically.

As I think I said before, I don't know what having the antenna broken up into several short rings does; presumably each one is a lot shorter than a wavelength. But I'd think it would work better with one long continuous piece. Then the current doesn't need to zig or transition back and forth between rings and wires.

If you meant using a separate wire from each ring back to a common feedpoint and then to the radio, that seems kind of bizarre and I don't know what it would do.

Andy

5854. Re: [loopantennas] trying to make a loop antenna to catch 10 khz signal

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 15:20:54 UTC
From: Jim Dunstan
Topic: 5852 Message: 5854

At 10:37 PM 10/18/2008 -0400, you wrote:

>I have to make a 10khz signal receiver.. All might be knowing that an
>invisible dog fence works at very low frequencies compared to normally used
>radio frequencies.. SO, here we are there is a long wire transmitter
>carrying 10khz (9.8 to 10.2 khz) signal through it.. i got to make a
>receiver that senses the field and approximately tells the distance from the
>transmitter wire..
>
>I figured out that for such loq frequncies, its not possible to make very
>very long whip antenna and hence loop antenna is a solution, but am not sure
>how to start off making one.. after that using the opamp band pass filer
>knowledge that i took from course work, i though a 10khz narrow band pass
>filter might suffice to pick the signal, then a some kind of peak detector
>might be able to tell me the signal strength. the signal strength (amplitude
>of the voltage on output) decreases with increase in distance from the
>transmitter. So i should be some way able to approx estimate the distance
>from the wire transmitter..
>
>Now , correct me if i am wrong somewhere.. i have no idea about tuned
>circuits and not sure how they work and if i should use them or not. I
>mainly need help in designing the loop antenna for 10khz and then to make a
>tuned circuit for 10khz...
>
>please respond..
>
>--
>Thanks and Regards,
>Subrat Nayak

Hi Subrat,

I will encapsulate what I think you are trying to do .... if I am wrong
please correct me. You wish to design a RF detector that is sensitive at
10kc and has a signal strength indicator. I also assume it should be
'hand-held' and portable, since I can't imagine wanting to sit at home and
listen to dog fences hi hi. Similar RF detectors exist for other purposes
.... for testing microwave ovens ... or as a 'field strength meter' for
testing VHF antennas, etc..

In these cases the antenna is very small ... in fact they are often called
a 'RF probe' rather than an antenna. I would suggest the receiver would be
a simple TRF ... Tuned Frequency amplifier and detector ..... the input
would be high impedance with a small probe like antenna. I don't think the
probe need be a loop. The indicator could be a small meter or several LED
indicators. The tuning would be rather broad and would certainly work

across say 8 to 12 kc. Such a receiver would indicate a 10kc source as you approached it (dog fence) .... and the indicator would show and increase in level as you came closer. When you moved away it would go down ... and to zero once you were say a 100' ft away .... a matter of design.

Jim, VE3CI

5855. Re: [loopantennas] trying to make a loop antenna to catch 10 khz signal

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 16:09:08 UTC
From: Subrat Nayak
Topic: 5852 Message: 5855

Hello jim,
glad to hear form you.. i appreciate your time and interest into this.

thats sound perfect.. i want some thing like this.. it will go on a robot which will be like a dog.. the ones that we get on dog collars are fixed.. I need some thing that i can tune to exact 10khz of the transmitter. I got to design my own, so am wondering how to go ahead..

i don't have the luxury to buy a dog collar and break to see whats inside it..

Can you give me some kind of head way.. aim is to make it as small as possible.. It should give a analog voltage output inversely proportional to the distance from the fence(transmitter)

regards,
subrat nayak

On Sun, Oct 19, 2008 at 11:20 AM, Jim Dunstan <jimdunstan@...> wrote:

> At 10:37 PM 10/18/2008 -0400, you wrote:
>
> >I have to make a 10khz signal receiver.. All might be knowing that an
> >invisible dog fence works at very low frequencies compared to normally
> used
> >radio frequencies.. SO, here we are there is a long wire transmitter
> >carrying 10khz (9.8 to 10.2 khz) signal through it.. i got to make a
> >receiver that senses the field and approximately tells the distance from
> the
> >transmitter wire..
> >
> >I figured out that for such loq frequncies, its not possible to make very
> >very long whip antenna and hence loop antenna is a solution, but am not
> sure
> >how to start off making one.. after that using the opamp band pass filer
> >knowledge that i took from course work, i though a 10khz narrow band pass
> >filter might suffice to pick the signal, then a some kind of peak detector
> >might be able to tell me the signal strength. the signal strength
> (amplitude
> >of the voltage on output) decreases with increase in distance from the
> >transmitter. So i should be some way able to approx estimate the distance
> >from the wire transmitter..
> >
> >Now , correct me if i am wrong somewhere.. i have no idea about tuned
> >circuits and not sure how they work and if i should use them or not. I
> >mainly need help in designing the loop antenna for 10khz and then to make

> a
> >tuned circuit for 10khz...
> >
> >please respond..
> >
> >--
> >Thanks and Regards,
> >Subrat Nayak
>
> Hi Subrat,
>
> I will encapsulate what I think you are trying to do .... if I am wrong
> please correct me. You wish to design a RF detector that is sensitive at
> 10kc and has a signal strength indicator. I also assume it should be
> 'hand-held' and portable, since I can't imagine wanting to sit at home and
> listen to dog fences hi hi. Similar RF detectors exist for other purposes
> .... for testing microwave ovens ... or as a 'field strength meter' for
> testing VHF antennas, etc..
>
> In these cases the antenna is very small ... in fact they are often called
> a 'RF probe' rather than an antenna. I would suggest the receiver would be
> a simple TRF ... Tuned Frequency amplifier and detector ..... the input
> would be high impedance with a small probe like antenna. I don't think the
> probe need be a loop. The indicator could be a small meter or several LED
> indicators. The tuning would be rather broad and would certainly work
> across say 8 to 12 kc. Such a receiver would indicate a 10kc source as you
> approached it (dog fence) .... and the indicator would show and increase in
>
> level as you came closer. When you moved away it would go down ... and to
> zero once you were say a 100' ft away .... a matter of design.
>
> Jim, VE3CI
>
>
>

--
Thanks and Regards,
Subrat Nayak

"Freedom is the right of all sentient beings." ---- Optimus Prime

[Non-text portions of this message have been removed]

5856. Re: [loopantennas] trying to make a loop antenna to catch 10 khz signal

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 16:50:41 UTC
From: Andy
Topic: 5852 Message: 5856

There's a group of people who routinely "listen to" signals down in these low frequencies and below. One Yahoogroup where some of them meet is http://groups.yahoo.com/group/ulfelf/ . Those folks look at seismic events, the earth's resonant frequencies, etc., as well as Russian and other ELF communications down there around 10-25 kHz.

You can use either a short e-field (wire) antenna or a coil antenna. The ELF folks seem to prefer the coil variety (for noise reasons, I think), although NASA had a 0.3-20 kHz receiver for a 2-meter-long wire antenna. Those coil antennas can be compact, using ferrite cores.

Be aware that some of those guys are looking for extremely weak signals from around the world so their antennas might be more complex than you need ("Black Hole" antennas, "Negative Resistance" antennas).

A simple "loopstick" (coil on a ferrite core) might be all you need, tuned to resonance with some capacitance. I'm guessing that's what the dog collars use.

Andy

5857. Re: [loopantennas] trying to make a loop antenna to catch 10 khz signal

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 17:12:26 UTC
From: Subrat Nayak
Topic: 5852 Message: 5857

Thanks Andy,
Sounds good.. am going to wind some hundreds of turns of wires on a ferrite core and see if i can get a capacitor connected in parallel to pick up 10khz.. I need a simple one so that i can sense the dog fence from 3-4 feet and get a signal inversely proportional to distance.

Hope i dont catch a NASA signal or some signal from outer space (kidding!!!) thanks again..

regards,
subrat nayak

On Sun, Oct 19, 2008 at 12:50 PM, Andy <Andy.groups@...> wrote:

> There's a group of people who routinely "listen to" signals down in
> these
> low frequencies and below. One Yahoogroup where some of them meet is
> http://groups.yahoo.com/group/ulfelf/ . Those folks look at seismic
> events,
> the earth's resonant frequencies, etc., as well as Russian and other ELF
> communications down there around 10-25 kHz.
>
> You can use either a short e-field (wire) antenna or a coil antenna. The
> ELF folks seem to prefer the coil variety (for noise reasons, I think),
> although NASA had a 0.3-20 kHz receiver for a 2-meter-long wire antenna.
> Those coil antennas can be compact, using ferrite cores.
>
> Be aware that some of those guys are looking for extremely weak signals
> from
> around the world so their antennas might be more complex than you need
> ("Black Hole" antennas, "Negative Resistance" antennas).
>
> A simple "loopstick" (coil on a ferrite core) might be all you need, tuned
> to resonance with some capacitance. I'm guessing that's what the dog
> collars use.
>
> Andy
>
>
>

--
Thanks and Regards,
Subrat Nayak

"Freedom is the right of all sentient beings." ---- Optimus Prime

[Non-text portions of this message have been removed]

5858. Re: [loopantennas] trying to make a loop antenna to catch 10 khz signal

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 18:23:20 UTC
From: Andy
Topic: 5852 Message: 5858

I don't know if the signal versus distance is that predictable. For one thing the transmitting antenna is a much larger loop, and you are well within its "near field." Would be interesting to see what you find out.

I may have erred somewhat by referring to a "ferrite core." What I really meant was "ferrite rod," which is a bit more specific, and means you shouldn't use a toroid core or other circular core, which tend to support self-contained magnetic fields rather than external ones. You can get loopstick antennas (wound on ferrite rods) from discarded AM radios.

The NASA VLF-2 and VLF-3 receivers were designed as instructional tools, for ordinary citizens to listen to various natural atmospherics such as "whistlers," "morning chorus," etc. Doesn't have anything to do with space or anything NASA was sending into it. It was part of plain old science, which is something NASA used to support before G.W. Bush secretly rewrote their charter.

Andy

5859. Re: is this better

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-19 19:15:07 UTC
From: Hiram
Topic: 5836 Message: 5859

I'm guessing the copper rings are also 24" diameter, and the dowel is
a support for them? Otherwise, I'm not seeing it. A quickie sketch
posted to the files section would help us to visualize it.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> -My first problem is the spelling dowel, nor doll
> second is living in a condo.
> What i was saying is wooden dowel let say 24"
> then have copper rings place them over the dowel
> how many I don't know and then attach wire to each ring then to my
radio.
>
> JIM
>

5860. Why Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-24 16:42:05 UTC
From: Matt B.
Topic: 5860 Message: 5860

I can't seem to find simple or easy to find answers to this.

I want to build a loop with the tuner located at my home stereo where I do my listening.

it will be AM loop, perhaps using the great designs of Chris Trask and one other here in the Files section where the gentleman used a motor on the variable cap mounted outside on the antenna.

I understand that adding extra capacitance will greatly affect the tuning and so many loops have the capacitor mounted on the antenna or its base.

However, commercial pre-selectors/tuners, are REMOTE.
The unit is connected by the feeder line from the antenna into your home where the tuning unit sits.

I'm thinking along the lines of a MFJ 956 type unit with main tuning capacitor and 4 or 5 inductance loops to create more narrow and selectable bandwidths.

Why can't we just build the same type of units and hook them up to outside loops for AM BCB?

Thanks
Matt Bourdeau
Ontario, Canada

5861. Re: [loopantennas] Why Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-24 19:11:25 UTC
From: Chris Trask
Topic: 5860 Message: 5861

>
> I can't seem to find simple or easy to find answers to this.
>
> I want to build a loop with the tuner located at my home stereo where
> I do my listening.
>

<<SNIP>>

>
> Why can't we just build the same type of units and hook them up to
> outside loops for AM BCB?
>

I wouldn't recommend that remotely tuned loop for receiving as it was intended for 100W transmitting applications and tunes a single band, in that case the 40M radio amateur band, and it's a bit expensive and complicated to make for just receiving purposes. For receiving, I have another design available that is far less expensive, uses varactors for tuning, and which tunes from 5.5MHz to over 12MHz:

http://www.home.earthlink.net/~christrask/Paper011.html

For AM BCB reception, you would only need to increase the diameter, use multiple turns, or both. A 1.5m diameter loop having three turns with the turns spaced at least five diameters apart would probably work, as would a 2m diameter loop having two turns.

The reason for using remote tuning in loop antennas is that the antenna impedance is primarily an inductive reactance, and connecting an antenna such as that to an antenna tuner through a long length of coaxial cable (or other feedline) will result in substantial losses, which will reduce the signal strength at the receiver and increase the noise figure.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \

'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5862. Re: [loopantennas] Why Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-24 21:55:36 UTC
From: Jim Dunstan
Topic: 5860 Message: 5862

At 04:42 PM 10/24/2008 +0000, you wrote:

>I can't seem to find simple or easy to find answers to this.
>
>I want to build a loop with the tuner located at my home stereo where
>I do my listening.
>
>it will be AM loop, perhaps using the great designs of Chris Trask
>and one other here in the Files section where the gentleman used a
>motor on the variable cap mounted outside on the antenna.
>
>I understand that adding extra capacitance will greatly affect the
>tuning and so many loops have the capacitor mounted on the antenna or
>its base.
>
>However, commercial pre-selectors/tuners, are REMOTE.
>The unit is connected by the feeder line from the antenna into your
>home where the tuning unit sits.
>
>I'm thinking along the lines of a MFJ 956 type unit with main tuning
>capacitor and 4 or 5 inductance loops to create more narrow and
>selectable bandwidths.
>
>Why can't we just build the same type of units and hook them up to
>outside loops for AM BCB?
>
>Thanks
>Matt Bourdeau
>Ontario, Canada

Hi Matt,

There are very different limitations and restrictions on loop manufacture between those used for transmitting and those used for reception only. When using a small loop it is very desirable to resonate/tune the loop as it results in a narrower pass band and increased signal voltage. If the loop is remote and is intended for xmission then the tuning should also be remote (at the antenna). However if the loop is used for reception it is very possible to connect the loop by a feed line to a tuning unit at the operating position.

The possible distance between the loop and the tuning unit depends on the frequency of operation and the type of feed line used. Coax can be used but is limiting due high capacitance. I also prefer balanced feed line for this reason and it is generally less susceptible to local RFI. If the loop is for HF then the distance possible is only 10' to 15'. However, for

MW the distance can be much greater. I would use 300 ohm TV twinlead feeding into a home brew balanced tuner. The tuning range would be reduced since the 300 ohm twinlead feed line will introduce a substantial fixed capacitance.

I have used this system for both HF and MW. It is not commonly used ... at least I have not seen it mentioned in loop discussions. I have not seen a commercial balanced antenna tuner for MW either, although it is not hard to build one .... it would look a little bit like a crystal set ... without a detector hi hi.

Jim

5863. Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-25 07:54:55 UTC
From: brian russell
Topic: 5863 Message: 5863

Jim,
Your comments come at a most appropriate time as I am constructing a square MW loop with 4ft sides to sit on a rotator in my loft.
I would like to be able to tune the loop at my operating position which is in the room below
the loft.
This would mean a feedline of some 10ft long to the point where the rotator control box is situated.
I would appreciate any comments / suggestions you might care to make either via
the list or direct.
Many thanks,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Friday, October 24, 2008 10:55 PM
Subject: Re: [loopantennas] Why Remote Tuning?

[Non-text portions of this message have been removed]

5864. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-25 17:47:09 UTC
From: aimo ruoho
Topic: 5863 Message: 5864

I'm a little puzzled now!

If a transformer unit will be used on the Loop, why should it be "tuned"?
If you have a Preselector, active with an Amplifier or passive without one, where will the "remote tuning" come in? If the Loop will only be used for receiving, is further manipulation of impedance any more so important?

It is another case to turn the Loop with a rotator. Then it will not be too important, if you have a rather long cable with three lines to electrify the rotator and send commands to turn the Loop and stop the movement. I have one on my house on the lower roof. I am using an extra coaxial cable to feed the radio signals into my receiver from my small Flag-Loop. My cables are about 15 to 25 meters long.

It is different with my Datong AD-370 miniature Active Dipole. With it is used only a coaxial both for sending electricity into the main unit and RF signal back to the receiver. I could have used the Datong with my rotor, but because its two rods were broken during my move to Spain, it would be a little difficult. I am using it with wires of about 2.5 meters each. The original 2 steel rods were 1.5 m long each. Perhaps later I will test the datong with the rotor using a different construction (?). Maybe using 2 telescope-antennas of 1.5 m. Depending on the place, where you live, Datong is a quite good mini-active-dipole... For years ago Finnish DXers reported a lot of Latin-American stations using it in suburbs and even towns over high houses.

Nice testing & 73 de Ami

From: brian russell <brian-nsl@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, October 25, 2008 9:54:55 AM
Subject: [loopantennas] Remote Tuning?

Jim,
Your comments come at a most appropriate time as I am constructing a square MW loop with 4ft sides to sit on a rotator in my loft.
I would like to be able to tune the loop at my operating position which is in the room below
the loft.
This would mean a feedline of some 10ft long to the point where the rotator control box is situated.
I would appreciate any comments / suggestions you might care to make either via the list or direct.
Many thanks,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Jim Dunstan
To: loopantennas@ yahoogroups. com

Sent: Friday, October 24, 2008 10:55 PM
Subject: Re: [loopantennas] Why Remote Tuning?

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5865. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-25 19:25:24 UTC
From: aimo ruoho
Topic: 5863 Message: 5865

More questions:

How much "gain" will be lost by using a "non-resonant" wide-band (all-bands) antenna instead of a one-band "resonant" antenna? I never saw any figures anywhere... It seems to me, that many theories are used mainly for the benefit of the "professionals". I am interested to see real measured figures, not just mathematic calculations.

Professor Mike Underhill, G3LHZ, has shown, that "Formulas" and "Simulations" have made people believe in half-truths, wrong theoretical opinions about Loops.

In the book, International Antenna Collection, pp. 229 to 246, he states, that "The Truth About Loops" is in practice very different, than the former widely accepted "truths".

"...the simulations and ancient formulas can be as much as 20 to 30dB in error as compared with the 'truth' of the real measured results."

"There is also a lower absolute limit of about 50 cm, or 25 cm, respectively, for single-turn transmit and receive loops."

"Square, hexagonal and octagonal loops behave almost exactly the same as ech other if the perimeters are the same."

"The unidirectional loop has a greater directivity than a half-wave dipole by 2.62dB. This means that the loop only need be 77% efficient in order to have the same gain in the favoured direction as a half-wave dipole at the same height and in same position!"

""No aerial is better than the envirenment in which it is placed.""

I agree with the professor:"There is still a lot more to be learned."
Test, test, test and test more to see, if things work in use, not only in peoples' imagination.

73 deAmi

From: aimo ruoho <aimounto@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, October 25, 2008 7:47:09 PM
Subject: Re: [loopantennas] Remote Tuning?

I'm a little puzzled now!

If a transformer unit will be used on the Loop, why should it be "tuned"?
If you have a Preselector, active with an Amplifier or passive without one, where will the "remote tuning" come in? If the Loop will only be used for receiving, is further manipulation of impedance any more so important?

It is another case to turn the Loop with a rotator. Then it will not be too important, if you have a rather long cable with three lines to electrify the rotator and send commands to turn the Loop and stop the movement. I have one on my house on the lower roof. I am using an extra coaxial cable to feed the radio signals into my receiver from my small Flag-Loop. My cables are about 15 to 25 meters long.

It is different with my Datong AD-370 miniature Active Dipole. With it is used only a coaxial both for sending electricity into the main unit and RF signal back to the receiver. I could have used the Datong with my rotor, but because its two rods were broken during my move to Spain, it would be a little difficult. I am using it with wires of about 2.5 meters each. The original 2 steel rods were 1.5 m long each. Perhaps later I will test the datong with the rotor using a different construction (?). Maybe using 2 telescope-antennas of 1.5 m. Depending on the place, where you live, Datong is a quite good mini-active- dipole... For years ago Finnish DXers reported a lot of Latin-American stations using it in suburbs and even towns over high houses.

Nice testing & 73 de Ami

---------- --------- --------- --
From: brian russell <brian-nsl@freenet. co.uk>
To: loopantennas@ yahoogroups. com
Sent: Saturday, October 25, 2008 9:54:55 AM
Subject: [loopantennas] Remote Tuning?

Jim,
Your comments come at a most appropriate time as I am constructing a square MW loop with 4ft sides to sit on a rotator in my loft.
I would like to be able to tune the loop at my operating position which is in the room below
the loft.
This would mean a feedline of some 10ft long to the point where the rotator control box is situated.
I would appreciate any comments / suggestions you might care to make either via
the list or direct.
Many thanks,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Jim Dunstan
To: loopantennas@ yahoogroups. com
Sent: Friday, October 24, 2008 10:55 PM
Subject: Re: [loopantennas] Why Remote Tuning?

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5866. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-25 21:29:33 UTC
From: Jim Dunstan
Topic: 5863 Message: 5866

At 08:54 AM 10/25/2008 +0100, you wrote:

>Jim,
>Your comments come at a most appropriate time as I am constructing a
>square MW loop
>with 4ft sides to sit on a rotator in my loft.
>I would like to be able to tune the loop at my operating position which is
>in the room below
>the loft.
>This would mean a feedline of some 10ft long to the point where the
>rotator control box is
>situated.
>I would appreciate any comments / suggestions you might care to make
>either via
>the list or direct.
>Many thanks,
>72, Brian, G0NSL-QRP.
>----- Original Message -----
>From: Jim Dunstan
>To: <mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com
>Sent: Friday, October 24, 2008 10:55 PM
>Subject: Re: [loopantennas] Why Remote Tuning?

Hi Brian,

With the 4' MW loop directly above you, approximately 10' away from your operating position there should be no difficulty in simply connecting the loop to the tuning capacitor at the end of the balanced feed line. I recommend 300 ohm twin lead for its convenience and ease of installation .... 450 ohm ladder line will also work and it will introduce less feed line capacitance but it is more awkward to use. This arrangement simply tunes the loop (5 or 6 turns ??) to the MW frequency of choice.

You will also need to consider how you will couple the loop to your receiver. I will simply assume your receiver has a low impedance unbalanced input (designed for coax). The customary method of coupling is to include a second coupling loop (1 or 2 turns) inside the tuned loop and connect this 'pick-up' loop to the radio with thin coax. This is the easiest and most straight forward method .... however you have 2 lines coming to the tuning position (3 lines if you include the rotor cable).

It is possible to by-pass the pickup loop all together and couple the loop directly at the point where the feed line comes to the operating position. Instead of simply connecting the tuning capacitor use a 'tuning unit' along the lines of the z-match to do dual duty .... both tune the loop and couple it to the radio. This is what I do on HF ... remotely tune

and couple the radio to the loop with a z-match.

There are plenty of on-line sites demonstrating the construction of z-match tuners (at hf). there is no reason this can't be applied to mw. In the meantime you could simply use the 'pick-up loop' solution.

Jim

[Non-text portions of this message have been removed]

5867. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-25 21:54:06 UTC
From: Jim Dunstan
Topic: 5863 Message: 5867

At 10:47 AM 10/25/2008 -0700, you wrote:

>I'm a little puzzled now!
>
>If a transformer unit will be used on the Loop, why should it be "tuned"?
>If you have a Preselector, active with an Amplifier or passive without
>one, where will the "remote tuning" come in? If the Loop will only be used
>for receiving, is further manipulation of impedance any more so important?
>
>It is another case to turn the Loop with a rotator. Then it will not be
>too important, if you have a rather long cable with three lines to
>electrify the rotator and send commands to turn the Loop and stop the
>movement. I have one on my house on the lower roof. I am using an extra
>coaxial cable to feed the radio signals into my receiver from my small
>Flag-Loop. My cables are about 15 to 25 meters long.

Not to be confused hi hi

The question was, I believe, can I tune a small receiving loop remotely? I said yes, the hard way (usually required if you are transmitting some power) by using a remote motor of some sort to tune it at location or the easy way by bringing the loop feed point to the operating position with feed line and tune it there. the second way is possible given the limitations of distance due to introduced capacitance in the feed line.

You mentioned feed line .... it is possible to both tune the loop and couple to the loop using the same feed line. This requires terminating the feed line at an antenna tuner/coupler rather than simply a tuning capacitor thus eliminating an additional cable. I suggested the circuit in the well know z-match can accommodate this function.

Such a circuit (z-match) is I suppose a 'transformer' in that it converts balanced feed to unbalanced feed and high impedance to low impedance (50 ohm for the receiver) while at the same time tuning the loop to resonance.

The loop is a small loop tuned to resonance ... eg I believe he said 4' square and in the Mw band. The loop you mention ... the flag-loop is another kettle of fish ... and is i believe a kind of terminated antenna along the lines of the k9ay loop.

Jim

5868. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-26 00:23:07 UTC
From: Chris Trask
Topic: 5863 Message: 5868

```
>
> The question was, I believe, can I tune a small receiving loop remotely?
I
> said yes, the hard way (usually required if you are transmitting some
> power) by using a remote motor of some sort to tune it at location or the
> easy way by bringing the loop feed point to the operating position with
> feed line and tune it there. the second way is possible given the
> limitations of distance due to introduced capacitance in the feed line.
>
```

That is 100% absurd, not to mention grossly misleading. I only just made mention of a varactor-tuned receiving loop design of my own on this list, and you're now misleading this fellow by claiming that you can only tune remotely with a motorized variable capacitor?

Did you just join this list, or do you have a reading comprehension problem?

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5869. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-26 00:58:02 UTC
From: Jim Dunstan
Topic: 5863 Message: 5869

At 05:23 PM 10/25/2008 -0700, you wrote:

> >
> > The question was, I believe, can I tune a small receiving loop remotely?
>I
> > said yes, the hard way (usually required if you are transmitting some
> > power) by using a remote motor of some sort to tune it at location or the
> > easy way by bringing the loop feed point to the operating position with
> > feed line and tune it there. the second way is possible given the
> > limitations of distance due to introduced capacitance in the feed line.
> >
>
>That is 100% absurd, not to mention grossly misleading. I only just
>made mention of a varactor-tuned receiving loop design of my own on this
>list, and you're now misleading this fellow by claiming that you can only
>tune remotely with a motorized variable capacitor?
>
>Did you just join this list, or do you have a reading comprehension
>problem?
>
>Chris

Mr. Trask

I don't know if comes naturally or you work at it ... but you are a rude s.o.b. .... don't send me any posts again. I have never sent you one and I certainly won't. I'm sure you don't speak like that to people to their faces. I think the moderator should speak to you. If you have a complaint about what I post ... do it to the moderator. I do not accept that tone from anyone.

I formally complain to the moderator about your post.

Jim, VE3CI

5870. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-26 01:05:40 UTC
From: Chris Trask
Topic: 5863 Message: 5870

```
>
> > >
> > > The question was, I believe, can I tune a small receiving loop
remotely?
> >I
> > > said yes, the hard way (usually required if you are transmitting some
> > > power) by using a remote motor of some sort to tune it at location or
the
> > > easy way by bringing the loop feed point to the operating position
with
> > > feed line and tune it there. the second way is possible given the
> > > limitations of distance due to introduced capacitance in the feed
line.
> > >
> >
> >That is 100% absurd, not to mention grossly misleading. I only just
> >made mention of a varactor-tuned receiving loop design of my own on this
> >list, and you're now misleading this fellow by claiming that you can only
> >tune remotely with a motorized variable capacitor?
> >
> >Did you just join this list, or do you have a reading comprehension
> >problem?
> >
> >Chris
>
> Mr. Trask
>
> I don't know if comes naturally or you work at it ... but you are a rude
> s.o.b. .... don't send me any posts again. I have never sent you one and
I
> certainly won't. I'm sure you don't speak like that to people to their
> faces. I think the moderator should speak to you. If you have a
complaint
> about what I post ... do it to the moderator. I do not accept that tone
> from anyone.
>
> I formally complain to the moderator about your post.
>

You can complain all that you want, but you are still making grossly
misleading and extremely inaccurate remarks concerning the remote tuning of
antennas, and it's not difficult to see here that you are avoiding the
comment about using varactors for remote tuning.
```

Why are you stating that you can only use a motorized capacitor?
Perhaps you should take the opportunity to explain this to all of us.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

5871. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-26 01:28:24 UTC
From: Jim Dunstan
Topic: 5863 Message: 5871

At 08:54 AM 10/25/2008 +0100, you wrote:

>Jim,
>Your comments come at a most appropriate time as I am constructing a
>square MW loop
>with 4ft sides to sit on a rotator in my loft.
>I would like to be able to tune the loop at my operating position which is
>in the room below
>the loft.
>This would mean a feedline of some 10ft long to the point where the
>rotator control box is
>situated.
>I would appreciate any comments / suggestions you might care to make
>either via
>the list or direct.
>Many thanks,
>72, Brian, G0NSL-QRP.__

Brian,

I apologize for the furor my comments caused. You might let me know how
you make out with your remote loop. I think we should let the tantrum
settle out or you could contact me direct ... hi hi

73
Jim, VE3CI

5872. Re: Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-26 02:00:10 UTC
From: Steve
Topic: 5863 Message: 5872

I have read and re-read this thread and can't figure out what set this off.

I think everyone involved needs to take a few deep breaths and let this go.

Steve Greenfield
your friendly neighborhood moderator

5873. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-26 02:06:35 UTC
From: Chris Trask
Topic: 5863 Message: 5873

Brian,

>
> Your comments come at a most appropriate time as I am constructing
a square
> MW loop with 4ft sides to sit on a rotator in my loft. I would like to be
able to
> tune the loop at my operating position which is in the room below the
loft. This
> would mean a feedline of some 10ft long to the point where the rotator
control box
> is situated.
> I would appreciate any comments / suggestions you might care to make
either via
> the list or direct.
>

We need to clear up the misinformation that you have been given on this subject.

First of all, the impedance of a loop antenna is best represented by a small resistance in series with a rather large inductance. For a 1.5m diameter loop made with 1/4" diameter copper tubing, this equates to a resistance of about 3 ohms and an inductance in the order of 2.7uH. If you were to connect this to a 50-ohm receiver (or coax feedline), you would experience a signal loss of around 24dB. Using a higher impedance feedline only makes the problem worse.

In the design that I posted to this list recently, I used a pair of varactors to remotely tune the antenna, using a bias tee to provide the tuning voltage through the coaxial cable. With a series of matching transformers, the antenna impedance is brought up to the desired resistance of 50 ohms and the signal loss is less than 1dB.

You should ignore any comments about needing to use a motorized capacitor for tuning receiving antennas, as that is thoroughly false and misleading. You only need to use that approach if you are using the loop for transmitting, as I and many others have shown in a variety of designs. The way that I designed the remote tuner with balanced tuning for a receivng loop results in far less distortion than the usual single-sided approaches, such as the one I described in my 2-part series on remotely tune receiving loops in QEX a few years ago.

The paper describing the varactor-tuned loop antenna is at:

http://www.home.earthlink.net/~christrask/Paper011.html

and my approach to the transmitting loop with a motor-driven capacitor for tuning is at:

http://www.home.earthlink.net/~christrask/Paper012.html

The only difference from what I did with the varactor-tuned loop and what you have for MW reception is that the resistance and inductance of your antenna will be much larger, which means that you will need a lower ratio in the transformers to match the real part to the feedline and you will need to use two varactors in parallel in place of the single varactors that I used so as to get the tuning into the MW band.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "brian russell" <brian-nsl@...>
To: <loopantennas@yahoogroups.com>
Sent: Saturday, October 25, 2008 12:54 AM
Subject: [loopantennas] Remote Tuning?

Many thanks,
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: Jim Dunstan
> To: loopantennas@yahoogroups.com
> Sent: Friday, October 24, 2008 10:55 PM
> Subject: Re: [loopantennas] Why Remote Tuning?
>
>
>
> [Non-text portions of this message have been removed]
>
>

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.549 / Virus Database: 270.8.2/1740 - Release Date: 10/22/08
7:24 PM

5875. Re: [loopantennas] Remote Tuning?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-26 17:21:58 UTC
From: brian russell
Topic: 5863 Message: 5875

Hi,
Many thanks for the input on the ' remote ' tuning of my proposed MW receiving loop antenna.
It would seem that the tuning is not a problem, it is the extraction of the signal via the two turn inductive winding as any additional length i.e. feedline, between the loop and the Rx
will upset the balance.
Obviously I need to investigate further.
Adding the required feeder length to my free standing loop which is on a camera tripod in the shack should simulate the loft conditions and give me some idea as to what happens.
Regards,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Chris Trask
To: loopantennas@yahoogroups.com
Sent: Sunday, October 26, 2008 2:06 AM
Subject: Re: [loopantennas] Remote Tuning?

[Non-text portions of this message have been removed]

5885. which is it?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-28 10:30:26 UTC
From: jefeickert
Topic: 5885 Message: 5885

Subject: Re: SHORTWAVE
From: steve##hi.com (Steve Byan)

I heard that the signals can thru houses than this comes along

I have a 1992 Radio Shack DX440 Shortwave radio. It was the best when I bought it. However, I need to find a relatively simple was to make a powerful antenna that will allow me to pick up stations.

Get an "RCA phono plug" from Radio Shack. Attach 50' of stranded hookup wire (#18 to #22 guage wire is best from a mechanical standpoint - makes no electrical difference) to the center pin of the phono plug.

You may need to have someone solder this connection for you - I don't know if Radio Shack has a solderless RCS phono plug.

Insert the phono plug into the external antenna phono jack located on the back of the DX440. Move the antenna selector switch located next to the phono jack from "internal" to "external" (my memory may be failing me here - I think the DX440 has an internal/external switch. If it doesn't, then don't worry about it.)

Run the wire as high and as long as possible. Preferably get it outside, as shortwaves don't
penetrate houses very well. An sort-of upside-down "L" shape like th

5886. ?? about 160 delta loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-28 10:55:17 UTC
From: lane zeitler
Topic: 5886 Message: 5886

I have a 60 ft guyed Rohn 25G tower that I would like to use to support one end of a 160 meter full wave delta loop. The other two ends will not be very high, around 30 ft off of the ground. I have a heavy duty 15 ft pipe attached to the very top of the tower so this corner will actually be about 75 ft off of the ground and this will be the feed point. I am wondering if anyone else is using a 160 meter full wave loop not just on 160 but on other bands as well. I have the loop cut for 560 feet from using the old formual 1005/f in mhz = length in feet, I rounded it up to 560.

I have the old B & W 450 ohm "open wire" feedline that I will be using. Just wondering what the comments are on how this operates on 160 (I know it will be very low) and on the other bands as well.

The main xmit and rcv ant right now is a half-sloper around 130 feet long, fed at the very top of the tower (at the 60 ft point). It actually works very very well but I am just curious to see how the loop with do against the sloper, which is my reference ant for 160.

Please "reply to all" since I can not access my Yahoo account from work during my lunch break time, thanks!

Lane Ku7i San Diego

[Non-text portions of this message have been removed]

5887. please cc my military email also

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-28 10:59:16 UTC
From: lane zeitler
Topic: 5886 Message: 5887

Please cc replies my military email address at lane.zeitler@..., thank you.

Lane
Ku7i
San Diego

--- On Tue, 10/28/08, lane zeitler <lanenavyrn@...> wrote:

From: lane zeitler <lanenavyrn@...>
Subject: [loopantennas] ?? about 160 delta loop
To: loopantennas@yahoogroups.com
Cc: lane.zeitler@...
Date: Tuesday, October 28, 2008, 3:55 AM

I have a 60 ft guyed Rohn 25G tower that I would like to use to support one end of a 160 meter full wave delta loop. The other two ends will not be very high, around 30 ft off of the ground. I have a heavy duty 15 ft pipe attached to the very top of the tower so this corner will actually be about 75 ft off of the ground and this will be the feed point. I am wondering if anyone else is using a 160 meter full wave loop not just on 160 but on other bands as well. I have the loop cut for 560 feet from using the old formual 1005/f in mhz = length in feet, I rounded it up to 560.

I have the old B & W 450 ohm "open wire" feedline that I will be using. Just wondering what the comments are on how this operates on 160 (I know it will be very low) and on the other bands as well.

The main xmit and rcv ant right now is a half-sloper around 130 feet long, fed at the very top of the tower (at the 60 ft point). It actually works very very well but I am just curious to see how the loop with do against the sloper, which is my reference ant for 160.

Please "reply to all" since I can not access my Yahoo account from work during my lunch break time, thanks!

Lane Ku7i San Diego

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5889. Re: [loopantennas] ?? about 160 delta loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-28 16:06:15 UTC
From: Jeff
Topic: 5886 Message: 5889

For DX work U want the loop legs as vertical as possible.

Also, the most effective feed point is a 1/4 wave down
from the apex or at the corner leg and baseline.
I use a 1/4 wave matching stub of 75 ohm coax to my
50 ohm coax to the shack. (easier to feed)

The apex can be just a few feet off the side of the tower.

The closer the baseline is to the ground (not less than 6')
the better SWR U can achieve.

The antenna will slightly favor signals broadside.

I use a full wave loop on 80 with great results.
(also use it as a listening antenna on 160 sometimes)

Have U ever considered linear loading your tower
for 160 ?? I have a tower and this works very well.
This will be a little noisier but a better radiator
for transmitting. Your sloper is going to probably
be better for transmitting due to the vertical element.

Hope this helps,

Jeff - NE0DX

lane zeitler wrote:

>
>
> I have a 60 ft guyed Rohn 25G tower that I would like to use to support
> one end of a 160 meter full wave delta loop. The other two ends will not
> be very high, around 30 ft off of the ground. I have a heavy duty 15 ft
> pipe attached to the very top of the tower so this corner will actually
> be about 75 ft off of the ground and this will be the feed point. I am
> wondering if anyone else is using a 160 meter full wave loop not just on
> 160 but on other bands as well. I have the loop cut for 560 feet from
> using the old formual 1005/f in mhz = length in feet, I rounded it up to
> 560.
>
> I have the old B & W 450 ohm "open wire" feedline that I will be using.
> Just wondering what the comments are on how this operates on 160 (I know
> it will be very low) and on the other bands as well.
>
> The main xmit and rcv ant right now is a half-sloper around 130 feet
> long, fed at the very top of the tower (at the 60 ft point). It actually

> works very very well but I am just curious to see how the loop with do
> against the sloper, which is my reference ant for 160.
>
> Please "reply to all" since I can not access my Yahoo account from work
> during my lunch break time, thanks!
>
> Lane Ku7i San Diego
>
> [Non-text portions of this message have been removed]
>
>
>
>
> ---
>
>
> No virus found in this incoming message.
> Checked by AVG - http://www.avg.com
> Version: 8.0.175 / Virus Database: 270.8.4/1751 - Release Date: 10/27/2008 10:44 PM
>

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.175 / Virus Database: 270.8.4/1752 - Release Date: 10/28/2008 10:04 AM

[Non-text portions of this message have been removed]

5890. 160 delta loop - will be horizonal mounted

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-29 10:40:59 UTC
From: lane zeitler
Topic: 5886 Message: 5890

Jeff, thank you for the info. This ant will be a horizonal loop, delta shape, highest corner fed at around 70 feet, other two corners at around 30 ft, not very high at all. I expect to have it up this saturday. Wire is already cut to length (560 ft), open wire feed is attached. Just need the time now. Thanks again.

--- On Tue, 10/28/08, Jeff <jrnet@...> wrote:

From: Jeff <jrnet@...>
Subject: Re: [loopantennas] ?? about 160 delta loop
To: loopantennas@yahoogroups.com
Cc: lane.zeitler@...
Date: Tuesday, October 28, 2008, 9:06 AM

For DX work U want the loop legs as vertical as possible.

Also, the most effective feed point is a 1/4 wave down
from the apex or at the corner leg and baseline.
I use a 1/4 wave matching stub of 75 ohm coax to my
50 ohm coax to the shack. (easier to feed)

The apex can be just a few feet off the side of the tower.

The closer the baseline is to the ground (not less than 6')
the better SWR U can achieve.

The antenna will slightly favor signals broadside.

I use a full wave loop on 80 with great results.
(also use it as a listening antenna on 160 sometimes)

Have U ever considered linear loading your tower
for 160 ?? I have a tower and this works very well.
This will be a little noisier but a better radiator
for transmitting. Your sloper is going to probably
be better for transmitting due to the vertical element.

Hope this helps,

Jeff - NE0DX

lane zeitler wrote:

>
>
> I have a 60 ft guyed Rohn 25G tower that I would like to use to support
> one end of a 160 meter full wave delta loop. The other two ends will not
> be very high, around 30 ft off of the ground. I have a heavy duty 15 ft
> pipe attached to the very top of the tower so this corner will actually

> be about 75 ft off of the ground and this will be the feed point. I am
> wondering if anyone else is using a 160 meter full wave loop not just on
> 160 but on other bands as well. I have the loop cut for 560 feet from
> using the old formual 1005/f in mhz = length in feet, I rounded it up to
> 560.
>
> I have the old B & W 450 ohm "open wire" feedline that I will be using.
> Just wondering what the comments are on how this operates on 160 (I know
> it will be very low) and on the other bands as well.
>
> The main xmit and rcv ant right now is a half-sloper around 130 feet
> long, fed at the very top of the tower (at the 60 ft point). It actually
> works very very well but I am just curious to see how the loop with do
> against the sloper, which is my reference ant for 160.
>
> Please "reply to all" since I can not access my Yahoo account from work
> during my lunch break time, thanks!
>
> Lane Ku7i San Diego
>
> [Non-text portions of this message have been removed]
>
>
>
>
> ------------ --------- --------- --------- --------- --------- -
>
>
> No virus found in this incoming message.
> Checked by AVG - http://www.avg. com
> Version: 8.0.175 / Virus Database: 270.8.4/1751 - Release Date: 10/27/2008 10:44 PM
>

No virus found in this outgoing message.
Checked by AVG - http://www.avg. com
Version: 8.0.175 / Virus Database: 270.8.4/1752 - Release Date: 10/28/2008 10:04 AM

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5891. single turn loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-29 16:37:30 UTC
From: DAVID
Topic: 5891 Message: 5891

hi i use a single turn loop 6 feet high 10 feet long fed in one corner with a 48/11 turn balun and in other corner a variable resistor. it works amazing from 500 khz to 1600 khz but from 1600 - 1700 khz it just stops dead then it picks up again on the 160m ham band. i have 2 loops same dimensions and both are the same. there is some usa etc stations i would like to receive from 1600 - 1700 so any ideas whats happening ???? thanks david h .... ayrshire scotland

5892. 160 horizonal delta loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-30 10:27:08 UTC
From: lane zeitler
Topic: 5892 Message: 5892

I am just about ready to climb the tower and hang the 160 mtr delta loop. It is 560 feet long overall and will be a horizonal loop, triangle shape, fed in one corner with ladder line. The feed point corner will be at 70 feet, the other two corners will be at 20 feet and 30 feet. I am not expecting this to outperform a very good working half-sloper with the feedpoint at 70 ft but expect the receive noise and receive performance to beat the half-sloper. I would also expect a large, horizonal loop like this to offer very good overall performance on the 20 to 10 meter bands. Anyone else using a 160 mtr full wave horizonal loop on the upper bands? Lane Ku7i

Please cc my military email address above, thank you.

[Non-text portions of this message have been removed]

5893. Re: 160 horizonal delta loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-30 15:21:14 UTC
From: Rob - W1AEX
Topic: 5892 Message: 5893

I used a very similar antenna, with roughly 510 feet of wire, horizontally arrayed, with the feed point at 65 feet and the two other supports at roughly 40 feet. It was a high angle cloud burner on 160 and 75 meters, making it an ideal antenna for close-in work in the New England area. It was a very quiet receive antenna on those bands. For medium range work a simple dipole outperformed the loop by a considerable margin. On the higher bands, I had nothing to compare it to at the time, but the pattern was very complex and unpredictable. Again, a simple dipole would have probably outperformed it on any of the upper bands.

I'd love to hear how it works out for you.

Rob W1AEX

--- In loopantennas@yahoogroups.com, lane zeitler <lanenavyrn@...> wrote:
>
> I am just about ready to climb the tower and hang the 160 mtr delta loop. It is 560 feet long overall and will be a horizonal loop, triangle shape, fed in one corner with ladder line. The feed point corner will be at 70 feet, the other two corners will be at 20 feet and 30 feet. I am not expecting this to outperform a very good working half-sloper with the feedpoint at 70 ft but expect the receive noise and receive performance to beat the half-sloper. I would also expect a large, horizonal loop like this to offer very good overall performance on the 20 to 10 meter bands. Anyone else using a 160 mtr full wave horizonal loop on the upper bands? Lane Ku7i
>
> Please cc my military email address above, thank you.
>
>
>
>
> [Non-text portions of this message have been removed]
>

5894. Wire and Cable for Sale - Must Go due to selling of home

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-30 17:26:31 UTC
From: denisnh
Topic: 5894 Message: 5894

Hi All. Due to a series of personal setbacks, I am forced to sell my home. I am currently moving all my stuff out and am selling off as much as I can.

I have several rolls of new, unused wire. Some of it is industrial surplus, but it is all in new condition. I did NOT get this stuff free, so I'll sell it for the lowest prices I can. The price per foot is still much lower than anything surplus or otherwise you'll find anywhere. If you do find the following items for less money, please let me know. I have just posted this wire on Craig's List under the links below.

Right now I have two types of wire for sale:

1) 12 ga. PVC jacketed copper stranded, ideal for just about any type of wire antenna.
http://boston.craigslist.org/nwb/mat/893796223.html

2) Military spec RG-58/U, 50 ohm coaxial cable also in new condition, never used.
http://boston.craigslist.org/nwb/mat/897230310.html

Shipping is available for those who don't live in the area, or it can be picked up in Billerica, MA.

Thanks,
Denis

5895. single turn loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-10-30 22:35:20 UTC
From: www-clorofila-up-to
Topic: 5891 Message: 5895

Hi David !

My name is Milton, and i constructed the same antenna in paralel with an 460pf variable capacitor and i´d
added a couple loop in middle of your antenna but i´ve got a very low signal because i don´t have a preamplifier.

Would be possible to obtain a best signal with this antenna in passive mode ?

May you have a photo of the balun you used ?

Milton
Curitiba city
Brasil

***

single turn loop

Posted by: "DAVID" [22]dhamilton1@... [23]tvdxrools

Wed Oct 29, 2008 9:37 am (PDT)

hi i use a single turn loop 6 feet high 10 feet long fed in one
corner
with a 48/11 turn balun and in other corner a variable
resistor. it
works amazing from 500 khz to 1600 khz but from 1600 - 1700 khz
it
just stops dead then it picks up again on the 160m ham band. i
have 2
loops same dimensions and both are the same. there is some usa
etc
stations i would like to receive from 1600 - 1700 so any ideas
whats
happening ???? thanks david h .... ayrshire scotland

[Non-text portions of this message have been removed]

5896. Simple non technical description? Don't just delete this

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-01 09:48:59 UTC
From: Mike
Topic: 5896 Message: 5896

Dear group

The latest video offering from UKQRM is now on-line

http://www.youtube.com/watch?v=tKhl-1CRkkU

In this video we provide a simple non technical description of the huge problem of Power Line Transmission interference to Shortwave Radio.

Are you affected by this? Do you live in the UK?
If you can answer yes to these questions we need to hear from you!
Only by coming together can we stand a chance of preserving shortwave radio for the future.

Don't leave it to someone else, they are probably leaving it to you!

Check out the UKQRM web site for more details and how to join the UKQRM Yahoo group.

Regards

Mike

www.ukqrm.org

The end of world broadcasting?

5897. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-01 22:41:53 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 5897

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

5898. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-01 22:41:53 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 5898

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

5899. H Double Bay Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-02 13:27:58 UTC
From: lane zeitler
Topic: 5899 Message: 5899

Paul Carr N4PC did a great article in CQ sometime in 1995. The antenna he designed and built was called the H Double Bay antenna. Other articles have called it the Skeleton Slot antenna. It is essentially two full wave lengths side by side but share one common side.

Has anyone tried these? I am wondering if instead of being mounted in the vertical plane such as the article suggests if it could be rotated 90 degrees and put up horizonal?

The website link to his article is here:

http://www.wz4c.com/Hdoublebay1.htm

the bottom of the page will take you to page two, bottom of page two takes you to page three.

Lane
Ku7i
San Diego

[Non-text portions of this message have been removed]

5900. Re: Wire and Cable for Sale - Must Go due to selling of home

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-02 14:50:19 UTC
From: denisnh
Topic: 5894 Message: 5900

Re: Wire and Cable for Sale - Selling Home and it all must go.

The RG58 Coax is sold out. I'm going through my various storage
locations in hope I have more and will update this thread if I do.

Thanks to all who ordered or just had kind words of encouragement.
The amateur radio community consists of the nicest folks on the planet
and I'm proud to be a member.

Thanks,
Denis

--- In loopantennas@yahoogroups.com, "denisnh" <denisnh@...> wrote:
>
> Hi All. Due to a series of personal setbacks, I am forced to sell my
> home. I am currently moving all my stuff out and am selling off as
> much as I can.
>
> I have several rolls of new, unused wire. Some of it is industrial
> surplus, but it is all in new condition. I did NOT get this stuff
> free, so I'll sell it for the lowest prices I can. The price per foot
> is still much lower than anything surplus or otherwise you'll find
> anywhere. If you do find the following items for less money, please
> let me know. I have just posted this wire on Craig's List under the
> links below.
>
> Right now I have two types of wire for sale:
>
> 1) 12 ga. PVC jacketed copper stranded, ideal for just about any
> type of wire antenna.
> http://boston.craigslist.org/nwb/mat/893796223.html
>
> 2) Military spec RG-58/U, 50 ohm coaxial cable also in new
> condition, never used.
> http://boston.craigslist.org/nwb/mat/897230310.html
>
> Shipping is available for those who don't live in the area, or it can
> be picked up in Billerica, MA.
>
> Thanks,
> Denis
>

5901. New pics, 12X15 picture frame tuned loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-02 22:16:20 UTC
From: geo
Topic: 5901 Message: 5901

Since getting my ham license, I'm trying to work up a 1920s/30s shortwave receiver. I think this will make a good basic foundation to start with (my thoughts run along the lines of the battery-operated Super Wasp).

The inductance of the loop (2 turns of number 26) yields 7.09uH. The varicap mounted yields 12 to 365pF. I'm hoping to cover something from around 3 to 8 MHz with this loop. Later I'll be adding a tuned RF preamp, a regen detector and at least one stage of audio, all with late 20s/early 30s British tubes I used to have as a teenager.

Afterwards I have to work on building my transmitter.

5902. Re: [loopantennas] New pics, 12X15 picture frame tuned loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-02 23:52:20 UTC
From: Hanner Montanner
Topic: 5901 Message: 5902

I built SW stuff in the 30's. I would be inclined to build the receiver first.

--- On Sun, 11/2/08, geo <yaktur@...> wrote:

From: geo <yaktur@...>
Subject: [loopantennas] New pics, 12X15 picture frame tuned loop.
To: loopantennas@yahoogroups.com
Date: Sunday, November 2, 2008, 2:16 PM

Since getting my ham license, I'm trying to work up a 1920s/30s
shortwave receiver. I think this will make a good basic foundation to
start with (my thoughts run along the lines of the battery-operated
Super Wasp).

The inductance of the loop (2 turns of number 26) yields 7.09uH. The
varicap mounted yields 12 to 365pF. I'm hoping to cover something from
around 3 to 8 MHz with this loop. Later I'll be adding a tuned RF
preamp, a regen detector and at least one stage of audio, all with
late 20s/early 30s British tubes I used to have as a teenager.

Afterwards I have to work on building my transmitter.

[Non-text portions of this message have been removed]

5903. Re: Remote Tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-03 00:44:07 UTC
From: Matt B.
Topic: 5903 Message: 5903

Thank you to all for your info. I have a much clearer understanding of this subject now.

Matt B

5904. Re: New pics, 12X15 picture frame tuned loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-04 03:12:28 UTC
From: geo
Topic: 5901 Message: 5904

This tuned loop will be the input to the first stage. I have the tubes on order for this project, they should arrive in about 3 or 4 weeks. The circuit is based on the battery operated Super Wasp design and this loop will feed the RF stage (Tetrode) directly.

I mounted the vari-cap near the loop so I wouldn't have lead length influencing the inductance of the loop.

This evening I added copper plate (just unetched PC boards) to the top surface so I can not only mount and solder components to it, I can also erect other pieces of copper vertically for interstage shielding.

--- In loopantennas@yahoogroups.com, Hanner Montanner <vasaloj@...> wrote:
>
> I built SW stuff in the 30's. I would be inclined to build the receiver first.

5905. Small Loop Info Wanted

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-04 02:26:02 UTC
From: kb8uum
Topic: 5905 Message: 5905

Group,

I am looking to build a small magnetic loop to cover 40/30-10m at my new apartment QTH and was wondering if anyone in the group has done so or might point me in the direction of some good websites. Plan on operating QRP, nothing much. Look forward to your responses.

Geoff

5906. M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-05 19:18:01 UTC
From: brian russell
Topic: 5906 Message: 5906

Hi All,
Can anyone tell me whether the performance of a MW receiving loop is seriously affected if the symmetry of the shape is not maintained, i.e. rectangular against square ?????
Thank you,
72, Brian.

5907. Re: [loopantennas] M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-06 00:36:52 UTC
From: Sudipta Ghose
Topic: 5906 Message: 5907

There is no effect as the the reception depends mainly on vertical elements.
Regards
de SG

On Thu, Nov 6, 2008 at 12:48 AM, brian russell <brian-nsl@...> wrote:
> Hi All,
> Can anyone tell me whether the performance of a MW receiving loop is seriously affected
> if the symmetry of the shape is not maintained, i.e. rectangular against square ?????
> Thank you,
> 72, Brian.
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

--
One of those ... ...

5908. Re: [loopantennas] M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-06 01:40:55 UTC
From: Mike Heppe
Topic: 5906 Message: 5908

I have always wondered about that! even wondered about delta loops!
----- Original Message -----
From: "brian russell" <brian-nsl@...>
To: <loopantennas@yahoogroups.com>
Cc: <mwc@...>
Sent: Wednesday, November 05, 2008 1:18 PM
Subject: [loopantennas] M W receiving loops !!!!!

> Hi All,
> Can anyone tell me whether the performance of a MW receiving loop
is seriously affected
> if the symmetry of the shape is not maintained, i.e. rectangular against
square ?????
> Thank you,
> 72, Brian.
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

5909. Re: [loopantennas] M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-06 02:34:53 UTC
From: Jim Dunstan
Topic: 5906 Message: 5909

At 07:18 PM 11/5/2008 +0000, you wrote:
>Hi All,
> Can anyone tell me whether the performance of a MW receiving
> loop is seriously affected
>if the symmetry of the shape is not maintained, i.e. rectangular against
>square ?????
> Thank you,
> 72, Brian.

Hi Brian,

I assume a small tuned loop ... e.g. less than 1/10 wavelength in circumference. In the case of a tuned loop for MW I have built them circular, square, and rectangular and have not noticed a great deal of difference in performance .... eg sharpness of the null. The rectangular version I have built is not very far from square ... e.g. 14" x 12". I mounted this loop with the long dimension vertically. I have seen the tuned loop in an old radio with approx the same approx ratio of dimensions but mounted with the short dimension vertically.

Although I have built them in different shapes I have not experimented by doing comparisons. Generally speaking I have noticed the biggest difference in performance relates to size and quality of construction. A loop with 2' on a side compared to a loop with 1' on a side has 4 times the capture ratio. Also the kind of wire and tuning capacitor used makes a difference. That is it produces a higher circuit Q.

The null is perpendicular to the loop and I find that the null can also be improved by moving the plane of the loop angle as well as azimuth.

Having said all that all the best tuned loops seem to be symetrical but very good performance is possible with loops that are slightly off of perfect symmetry. The reason for being off is usually due to some building consideration like material at hand hi hi. By the way, I just found a piece of plastic pipe about 15" in diameter and I have been thinking about how I can turn it into a nice tuned MW loop hi hi. Building a good loop is as much a mechanical as an electrical challenge.

Jim,

VE3CI

5910. Re: M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-06 14:54:37 UTC
From: F C
Topic: 5906 Message: 5910

Theoretically yes, but practically, it really doesn't matter. I have seen loops from circular to square and everything inbetween including a spider web design and they seem not to matter.

Do you think spiders might be secretly DXing?

[Non-text portions of this message have been removed]

5911. Re: [loopantennas] M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-06 19:01:54 UTC
From: brian russell
Topic: 5906 Message: 5911

Jim,
Thank you for the comments on my MW loop query.
I had in mind a ' diamond ' shaped loop with a sharp point at the base
and spiral wound, in this mode non of the sides would be truly vertical.
Ok on the plastic ' tubing ', strangely, I have several offcuts from ventilation ducting,
1/8 in wall and from 12 - 24 in dia !!!!!
As you comment the biggest fun is the building hi!
72, Brian.
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Thursday, November 06, 2008 2:34 AM
Subject: Re: [loopantennas] M W receiving loops !!!!!

[Non-text portions of this message have been removed]

5912. Re: [loopantennas] Re: M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-06 19:30:26 UTC
From: brian russell
Topic: 5906 Message: 5912

Hi,
I do favour the ' cobweb 'wound version, without the spiders hi!
There used to be a consensus that UK favoured the ' box ' loop
whereas Europeans favoured the ' spiral ' one ????
72, Brian.
----- Original Message -----
From: F C
To: loopantennas@yahoogroups.com
Sent: Thursday, November 06, 2008 2:54 PM
Subject: [loopantennas] Re: M W receiving loops !!!!!

[Non-text portions of this message have been removed]

5913. Re: [loopantennas] Re: M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-06 22:09:01 UTC
From: Jim Dunstan
Topic: 5906 Message: 5913

At 07:30 PM 11/6/2008 +0000, you wrote:

>Hi,
>I do favour the ' cobweb 'wound version, without the spiders hi!
>There used to be a consensus that UK favoured the ' box ' loop
>whereas Europeans favoured the ' spiral ' one ????
>72, Brian.

Hi,

Most of the tuned loops I have built have been 'box' loops although I have built many 'inductors' for xtal sets that are spiral wound on circular forms with radiating slots. I weave the windings in and out of the slots. I often couple these inductors by mutual induction so it is advantageous to have them flat. However large inductors approach being a 'loop' and small loops start looking like 'inductors' hi hi.

Jim

>

5914. Re: [loopantennas] M W receiving loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-07 07:09:20 UTC
From: Mike WE0H
Topic: 5906 Message: 5914

Loop tunes ~250kc to ~650kc

http://www.we0h.us/505kc/RX-Loop/Portable-RX-Loop-small.jpg

http://www.we0h.us/505kc/Simple-RX-Loop-Antenna/Simple-RX-Loop-505kc-WA1ZMS.html

Preamp layout ect...

http://www.we0h.us/505kc/Simple-RX-Loop-Antenna/

I use it for NDB's and our 600 meter Experimental band.

73
Mike
WE0H
WD2XSH/16 on 600m

brian russell wrote:
> Jim,
> Thank you for the comments on my MW loop query.
> I had in mind a ' diamond ' shaped loop with a sharp point at the base
> and spiral wound, in this mode non of the sides would be truly vertical.
> Ok on the plastic ' tubing ', strangely, I have several offcuts from ventilation ducting,
1/8 in wall and from 12 - 24 in dia !!!!!
> As you comment the biggest fun is the building hi!
> 72, Brian.
>

5915. Loop Antenna spotted on NZ auction site.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-08 23:36:08 UTC
From: Chris Harris
Topic: 5915 Message: 5915

Hi Loopers

I saw this Loop Antenna on the local NZ auction site:

http://www.trademe.co.nz/Electronics-photography/Radio-equipment/Amateur-radio/auction-186478025.htm

Cheers, Chris

5916. Re: [loopantennas] Loop Antenna spotted on NZ auction site.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-09 14:20:04 UTC
From: Chris Trask
Topic: 5915 Message: 5916

```
>
>Hi Loopers
>
>I saw this Loop Antenna on the local NZ auction site:
>
>http://www.trademe.co.nz/Electronics-photography/Radio-equipment/Amateur
>-radio/auction-186478025.htm
>
```

Boy, would I ever like to own one of those!

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

5917. Loop Tuning Display

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-13 20:56:44 UTC
From: roodyjs
Topic: 5917 Message: 5917

I just completed a 40/30/20 meter copper pipe transmitting loop, and it works fine. I'm using the "trombone" type capacitor tuning (U-shaped coaxial copper pipes with dielectric covering the inner, sliding pipe).
My remote tuning involves a small DC motor turning a long brass screw assembly that then moves the slider in or out of the larger pipe. Works well, and I am using a kit built variable speed motor controller to control the tuning speed.

What I haven't been able to figure out yet is how to monitor the slider position remotely. Although, I can view the SWR on my rig, the Q of the antenna is high enough that unless the capacitor is already pretty close to frequency, it's very difficult to tell which way to tune the motor (up freq or down freq).

Right now, the only way to determine this is to run the motor all the way in one direction until the SWR comes within a readable range or until a limit switch gets activated. Then reverse the direction of the motor until the SWR gets into range.Full travel in either direction takes a couple of minutes.

Is anyone using a more accurate way to remotely show the capacitor position so the operator can easily determine which way to tune?

Thanks for any help you can offer.

Jim
KC3SN

5918. Re: Small Loop Info Wanted

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-13 23:58:38 UTC
From: Garry
Topic: 5905 Message: 5918

I didn't see any answer to your question however you can find all the information you want/need by simply doing a search (google?) for magnetic loop antennas and if you are looking for other than a mag loop just refine the search. I could search for you but no doubt you have already come to that solution by now. 8>)

73

Garry

--- In loopantennas@yahoogroups.com, "kb8uum" <kb8uum@...> wrote:
>
> Group,
>
> I am looking to build a small magnetic loop to cover 40/30-10m at my
> new apartment QTH and was wondering if anyone in the group has done
so
> or might point me in the direction of some good websites. Plan on
> operating QRP, nothing much. Look forward to your responses.
>
> Geoff
>

5919. Re: Loop Tuning Display

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-14 00:12:22 UTC
From: Garry
Topic: 5917 Message: 5919

Jim.

You have found what the biggest disapointment with the trombone type of capacitor may be. I can only suggest that you might consider a motor that provides a higher tuning rate as well as a slow one for fine tuning or switch to a butterfly capacitor and use a servo motor or similar device.

My magnetic loop can be tuned from one end of its range to the other in a second. That capability also comes with a downside as well because the noise peak and resonance peak is very sharp and tuning for final, minimal SWR can be a bit of a pain, an issue that you won't have with the trombone I'm sure.

I wonder if one could use some of those magnetic reed switches (I think they were called) and space them along the length of the trombone. Then a magnet attached to the capacitor could be used to switch the reed switch and fire a led (in the shack ?) to give some indication of where the loop tuning capacitor is.

Then again when I think of it, wouldn't you be able to determine where the loop is peaked by listening on your receiver? (sure can tell with my loop) Then, let's face it, it won't take you long to learn which way you have to go to get to the band you are planning to use. 9>)

73

Garry

--- In loopantennas@yahoogroups.com, "roodyjs" <roodyj@...> wrote:
>
> I just completed a 40/30/20 meter copper pipe transmitting loop, and
> it works fine. I'm using the "trombone" type capacitor tuning
> (U-shaped coaxial copper pipes with dielectric covering the inner,
> sliding pipe).
> My remote tuning involves a small DC motor turning a long brass
screw
> assembly that then moves the slider in or out of the larger pipe.
> Works well, and I am using a kit built variable speed motor
controller
> to control the tuning speed.
>
> What I haven't been able to figure out yet is how to monitor the
> slider position remotely. Although, I can view the SWR on my rig,
the
> Q of the antenna is high enough that unless the capacitor is already

> pretty close to frequency, it's very difficult to tell which way to
> tune the motor (up freq or down freq).
>
> Right now, the only way to determine this is to run the motor all
the
> way in one direction until the SWR comes within a readable range or
> until a limit switch gets activated. Then reverse the direction of
> the motor until the SWR gets into range.Full travel in either
> direction takes a couple of minutes.
>
> Is anyone using a more accurate way to remotely show the capacitor
> position so the operator can easily determine which way to tune?
>
> Thanks for any help you can offer.
>
> Jim
> KC3SN
>

5920. Re: [loopantennas] Re: Loop Tuning Display

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-14 00:48:20 UTC
From: toddroberts2001@aol.com
Topic: 5917 Message: 5920

In a message dated 11/13/2008 7:13:17 P.M. Eastern Standard Time,
ve7ajj@... writes:

Is anyone using a more accurate way to remotely show the capacitor
position so the operator can easily determine which way to tune?

Thanks for any help you can offer.

Jim
KC3SN

Hi Jim,

Myself and others have found the MFJ-259B Antenna Analyzer a
great piece of test equipment to use with a transmitting loop.
To start with it is very handy to use for setting up the coupling loop
or gamma match for best SWR.

You can quickly sweep the HF range to pinpoint exactly where
the loop is tuned, then tell which way to turn the remote tuning motor.
I keep my MFJ-259B ready to use to switch in-line with coax switches to
quickly tell where
the loop is tuned then to verify when the loop is exactly on the
desired frequency, then switch out the analyzer to transmit.

You will find lots of other good uses for the MFJ-259B but it is
dandy to use with a transmitting loop.

73 - Todd WD4NGG

**********Get the Moviefone Toolbar. Showtimes, theaters, movie news &
more!(http://pr.atwola.com/promoclk/100000075x1212774565x1200812037/aol?redir=htt
p://toolbar.aol.com/moviefone/download.html?ncid=emlcntusdown00000001)

5921. Re: Loop Tuning Display

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-14 01:45:59 UTC
From: roodyjs
Topic: 5917 Message: 5921

Todd,

I have the MFJ antenna analyzer and that's what I used to do testing
of my antenna. Never thought of just having it connected full time for
tuning. Makes me think of a way I can switch out my dummy load and
switch in the MFJ when I want to change bands.

Thanks for the idea.

Jim
--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:
>
> In a message dated 11/13/2008 7:13:17 P.M. Eastern Standard Time,
> ve7ajj@... writes:
>
> Is anyone using a more accurate way to remotely show the capacitor
> position so the operator can easily determine which way to tune?
>
> Thanks for any help you can offer.
>
> Jim
> KC3SN
> ----------
>
> Hi Jim,
>
> Myself and others have found the MFJ-259B Antenna Analyzer a
> great piece of test equipment to use with a transmitting loop.
> To start with it is very handy to use for setting up the coupling loop
> or gamma match for best SWR.
>
> You can quickly sweep the HF range to pinpoint exactly where
> the loop is tuned, then tell which way to turn the remote tuning motor.
> I keep my MFJ-259B ready to use to switch in-line with coax
switches to
> quickly tell where
> the loop is tuned then to verify when the loop is exactly on the
> desired frequency, then switch out the analyzer to transmit.
>
> You will find lots of other good uses for the MFJ-259B but it is
> dandy to use with a transmitting loop.
>
> 73 - Todd WD4NGG
>
> **********Get the Moviefone Toolbar. Showtimes, theaters, movie
news &

>
more!(http://pr.atwola.com/promoclk/100000075x1212774565x1200812037/aol?redir=htt
> p://toolbar.aol.com/moviefone/download.html?ncid=emlcntusdown00000001)
>

5922. Re: Loop Tuning Display

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-14 01:43:13 UTC
From: roodyjs
Topic: 5917 Message: 5922

Garry,
I too have thought of using small reed switches with a 'traveling' magnet to indicate position. Since my connection to the capacitor tuning motor uses 3 wires, I may replace what I have with Cat5 cable (8 wires). This gives me an additional 5 wires to use for reed contacts - 40 meters, 30 meters, 20 meters, ground, and one extra for any other band or freq I want.

That way I won't have to search too far to know where the trombone is.

I looked into several pulse counter apps to keep track of motor turns, but nothing satisfactory yet.

Thanks for the note.

Jim
--- In loopantennas@yahoogroups.com, "Garry" <ve7ajj@...> wrote:
>
> Jim.
>
> You have found what the biggest disapointment with the trombone type
> of capacitor may be. I can only suggest that you might consider a
> motor that provides a higher tuning rate as well as a slow one for
> fine tuning or switch to a butterfly capacitor and use a servo motor
> or similar device.
>
> My magnetic loop can be tuned from one end of its range to the other
> in a second. That capability also comes with a downside as well
> because the noise peak and resonance peak is very sharp and tuning
> for final, minimal SWR can be a bit of a pain, an issue that you
> won't have with the trombone I'm sure.
>
>
> I wonder if one could use some of those magnetic reed switches (I
> think they were called) and space them along the length of the
> trombone. Then a magnet attached to the capacitor could be used to
> switch the reed switch and fire a led (in the shack ?) to give some
> indication of where the loop tuning capacitor is.
>
> Then again when I think of it, wouldn't you be able to determine
> where the loop is peaked by listening on your receiver? (sure can
> tell with my loop) Then, let's face it, it won't take you long to
> learn which way you have to go to get to the band you are planning to
> use. 9>)
>
> 73

>
> Garry
>
>
> --- In loopantennas@yahoogroups.com, "roodyjs" <roodyj@> wrote:
> >
> > I just completed a 40/30/20 meter copper pipe transmitting loop, and
> > it works fine. I'm using the "trombone" type capacitor tuning
> > (U-shaped coaxial copper pipes with dielectric covering the inner,
> > sliding pipe).
> > My remote tuning involves a small DC motor turning a long brass
> screw
> > assembly that then moves the slider in or out of the larger pipe.
> > Works well, and I am using a kit built variable speed motor
> controller
> > to control the tuning speed.
> >
> > What I haven't been able to figure out yet is how to monitor the
> > slider position remotely. Although, I can view the SWR on my rig,
> the
> > Q of the antenna is high enough that unless the capacitor is already
> > pretty close to frequency, it's very difficult to tell which way to
> > tune the motor (up freq or down freq).
> >
> > Right now, the only way to determine this is to run the motor all
> the
> > way in one direction until the SWR comes within a readable range or
> > until a limit switch gets activated. Then reverse the direction of
> > the motor until the SWR gets into range.Full travel in either
> > direction takes a couple of minutes.
> >
> > Is anyone using a more accurate way to remotely show the capacitor
> > position so the operator can easily determine which way to tune?
> >
> > Thanks for any help you can offer.
> >
> > Jim
> > KC3SN
> >
>

5923. Re:Loop Tuning Display

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-14 15:46:05 UTC
From: Steve Baker
Topic: 5917 Message: 5923

How about a linear travel potentiometer on the trombone or a 20 turn pot on the back of the motor shaft.

5924. Oil filled capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-16 13:25:09 UTC
From: Neil McGrath
Topic: 5924 Message: 5924

I have read that it is possible to significantly increase the voltage rating and capacitance of an air spaced variable capacitor by immersing it in mineral oil. Would this approach work on a loop antenna capacitor?

Neil G7AQK

5925. Re: [loopantennas] Oil filled capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-16 14:35:54 UTC
From: toddroberts2001@aol.com
Topic: 5924 Message: 5925

In a message dated 11/16/2008 8:25:46 A.M. Eastern Standard Time,
fast.electrics@... writes:

I have read that it is possible to significantly increase the voltage
rating and capacitance of an air spaced variable capacitor by
immersing it in mineral oil. Would this approach work on a loop
antenna capacitor?

Neil G7AQK

I think it would work but don't know how well. It will be
extremely messy unless you have the capacitor well-sealed
inside a leakproof container. Also I believe the capacitance
would not be as stable as an air-variable because the
mineral oil expands and contracts with heat and cold.
Someone will just have to try it and let us know if it
works!

73 - Todd WD4NGG

**********Get the Moviefone Toolbar. Showtimes, theaters, movie news &
more!(http://pr.atwola.com/promoclk/100000075x1212774565x1200812037/aol?redir=htt
p://toolbar.aol.com/moviefone/download.html?ncid=emlcntusdown00000001)

5926. Re: [loopantennas] Oil filled capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-16 14:46:33 UTC
From: Jim Miller
Topic: 5924 Message: 5926

If possible check the Q of the antenna before and after doing the
immersion to see if the mineral oil causes additional dielectric loss.

The dielectric constant of mineral oil is 2.1 so your capacitance should double.

73

jim ab3cv

5927. Re: [loopantennas] Oil filled capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-16 17:01:25 UTC
From: Jim Dunstan
Topic: 5924 Message: 5927

At 09:35 AM 11/16/2008 -0500, you wrote:

>In a message dated 11/16/2008 8:25:46 A.M. Eastern Standard Time,
><mailto:fast.electrics%40ntlworld.com>fast.electrics@... writes:
>
>I have read that it is possible to significantly increase the voltage
>rating and capacitance of an air spaced variable capacitor by
>immersing it in mineral oil. Would this approach work on a loop
>antenna capacitor?
>
>Neil G7AQK

Hi Neil

I guess it depends on the kind of oil used .... e.g. not the infamous PCB type hi hi. I am no expert on the subject ... but many years ago we used oil-immersed high voltage power switches (in the Arctic) for switching high line power sources. They of course shielded the contacts from wx and limited contact sparking and burn. They worked down to -40 deg C without difficulty. I am not sure whether they increased voltage rating ... however they seem to seal the switches from wx corrosion and burning (in the presence of oxygen).

Jim, VE3CI

[Non-text portions of this message have been removed]

5928. FW: [rfamplifiers] Re: Variable Capacitor modifications - Slightly off topic

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-16 19:15:04 UTC
From: Chris Harris
Topic: 5928 Message: 5928

I while back there was a discussion on the RFAmps list on this topic. Various factors conspired to prevent me forwarding it at the time, but here now are two of the posts which captured most of the essential details.

Cheers, Chris

-----Original Message-----
From: rfamplifiers@yahoogroups.com [mailto:rfamplifiers@yahoogroups.com] On Behalf Of Steve Friis
Sent: Thursday, 9 October 2008 7:41 a.m.
To: rfamplifiers@yahoogroups.com
Subject: Re: [rfamplifiers] Re: Variable Capacitor modifications - Slightly off topic

Steve Friis wrote:
> w8nf wrote:
>
>> Excellent point!
>>
>> About 20 years ago, one of my work projects was a resonant-mode
>> switching power supply, 6kV at 1Amp average, to run a radar
>> transmitter triode. Our resonating capacitor was made by "the Plastic
>> Capacitor Company" and was oil-filled. It was specifically rated for
>> exceptionally high ripple currents (we were feeding 30 or so amps
>> through it at 50kHz, and I don't recall for how much more it was
>> rated). As I recall, it was a 0.1uF capacitor. I'm wondering what
>> kind of oil that was.
>>
>> If I had more time (the wish that most of us have!), it'd be
>> interesting to dunk a variable cap in some transformer oil and do Q
>> measurements.
>>
>> Dave W8NF
>>
>>
>>
>>
>>
> I have some mineral oil. Maybe I will check that out this weekend. The

> only capacitor I have that I am willing to put in oil is a 5-50 ~ 250v

> panel mount type. I will test the following, Minimum and maximum
> Capacitance, Q and breakdown volts before and after.

>
>
Best viewed with fixed width font.

I did the test last night. Here are the results;

Value Before W/Oil
Low PF 7.3 PF 21.2 PF
Hi PF 175.1 PF 490.8 PF
Q Lo PF @ 1MC 759 803
Q Hi PF @ 1MC 890 890
Hipot DC 230 VDC 550 VDC
Hipot AC @60 CPS 159 RMS 389 RMS
Hipot AC 1KC 150 RMS 369.5 RMS

And yes, the test equipment I use is old, surplus stuff I've had for years, but still does the job.

I used an empty pickle jar and screw on lid with a hole mounted in the center to hold the panel mounted cap. I made other holes for connecting the leads (2) to make the measurements. The Hipot tester showed the test

set-up had a breakdown of better than 5KV, the max for my Hipot tester. The stray capacitance is measured at .5 lead to lead, and .7 pF lead to cap.

The oil is Walgreen's finest used for medicinal purposes, so I assume (Ass you me) it is pure. ;-)

Would I do this to use outside on an antenna? Yea, why not. Would I use this setup on an amplifier? No. I would get a vacuum variable. Did I have fun? Yup. Nothing better to do as there was nothing on the bands I was interested in, including the cable bands. 8-)

--
Steve Friis
Amateur Call WM5Z
APRS WM5Z-1 Las Cruces Igate | APRS WM5Z-2 Home | APRS WM5Z-3 RV | APRS WM5Z-15 Weather

These are the humble rantings of an El Viejo Pedoro (old fart) and in no way should they influence the actions of any intelligent and sane person.

-----Original Message-----
From: rfamplifiers@yahoogroups.com [mailto:rfamplifiers@yahoogroups.com]
On Behalf Of skipp025
Sent: Tuesday, 7 October 2008 11:00 a.m.
To: rfamplifiers@yahoogroups.com
Subject: [rfamplifiers] Re: Variable Capacitor modifications - Slightly off topic

I have inserted both Teflon and Mica Sheets into variable capacitors with some measure of luck. I first saw this done in very small size large value variables used in broadcast radio receivers and it worked well.

cheers,
s.

5929. Re: Oil filled capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-16 19:17:41 UTC
From: gplynas
Topic: 5924 Message: 5929

Hi Neil,
Oil filled capacitors do work very well for high voltage. I work with these every day, with some up to about 40,000 volts. The major reason it does work is the elimination of corona in the air between the plates. So the first thing to do is removal of all air. For large plate spacings, this can be done by vibrating the capacitor to let the bubbles go to the top. For close spacing, putting a vacuum on the capacitor and then filling while under vacuum is necessary. The oil needs to be clean and pure, and moisture free. We use special transformer oil, which you might be able to get from your local utility. Multiply the capacitance of the air gap capacitor by about 2.2 when you add the oil. Breakdown in air is about 3000 volts per mil. In mineral oil, such as Shell Diala Oil B, it can be as high as 80,000 volts breakdown in 0.1 inches. At high frequencies breakdown characteristics get a bit more complex. Another consideration with loop antennas would be the dielectric losses in the oil, which will be greater than in air, so the Q of your loop might go down, reducing the sensitivity.
Regards,
Paul
WA5LFY

--- In loopantennas@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
> At 09:35 AM 11/16/2008 -0500, you wrote:
>
> >In a message dated 11/16/2008 8:25:46 A.M. Eastern Standard Time,
> ><mailto:fast.electrics%40ntlworld.com>fast.electrics@... writes:
> >
> >I have read that it is possible to significantly increase the voltage
> >rating and capacitance of an air spaced variable capacitor by
> >immersing it in mineral oil. Would this approach work on a loop
> >antenna capacitor?
> >
> >Neil G7AQK
>
> Hi Neil
>
> I guess it depends on the kind of oil used .... e.g. not the infamous PCB
> type hi hi. I am no expert on the subject ... but many years ago we used
> oil-immersed high voltage power switches (in the Arctic) for switching high
> line power sources. They of course shielded the contacts from wx and

> limited contact sparking and burn. They worked down to -40 deg C
without
> difficulty. I am not sure whether they increased voltage rating ...
> however they seem to seal the switches from wx corrosion and burning
(in
> the presence of oxygen).
>
> Jim, VE3CI
>
> [Non-text portions of this message have been removed]
>

5930. Re: [loopantennas] Re: Oil filled capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-16 23:23:55 UTC
From: Andy
Topic: 5924 Message: 5930

The oil filled capacitors I've seen were used for HV supply filtering, where dielectric losses don't matter.

Are they also commonly used in other applications? With either pulses or RF power where dielectric losses are important?

Andy

5931. Re: [loopantennas] Oil filled capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-17 01:12:31 UTC
From: Bob Warren
Topic: 5924 Message: 5931

Hi Neil
Wouldn't it be simpler to use a vacuum variable capacitor?
They are reasonable easy to obtain.

Bob VK7KRW

2008/11/16 Neil McGrath <fast.electrics@...>

> I have read that it is possible to significantly increase the voltage
> rating and capacitance of an air spaced variable capacitor by
> immersing it in mineral oil. Would this approach work on a loop
> antenna capacitor?
>
> Neil G7AQK
>
>
>

[Non-text portions of this message have been removed]

5932. Vacuum variable experience?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-17 01:39:56 UTC
From: Jim Miller
Topic: 5932 Message: 5932

Anyone have any experience with vacuum variables?

From the pictures I've seen the leads to those devices seem quite small.

Folks go a lot of work to use large diameter copper tubing and
minimize solder joint losses.

What sort of Q do these VVCs have at HF?

73

jim ab3cv

5933. Re: [loopantennas] Vacuum variable experience?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-17 01:57:23 UTC
From: toddroberts2001@aol.com
Topic: 5932 Message: 5933

In a message dated 11/16/2008 8:40:14 P.M. Eastern Standard Time,
jim@... writes:

Anyone have any experience with vacuum variables?

From the pictures I've seen the leads to those devices seem quite small.

Folks go a lot of work to use large diameter copper tubing and
minimize solder joint losses.

What sort of Q do these VVCs have at HF?

73

jim ab3cv

Hi Jim,
I have had some experience using a vacuum variable with a transmitting
loop and I would not recommend using one unless you could solder or
braze the leads to the capacitor. Clamp-on or bolt-on joints are to
be avoided in a transmitting loop as they are unreliable.

That seems to be one point all the articles leave out when promoting
the use of a vacuum variable for a transmitting loop. Rule number one
for a transmitting loop is that all joints or connections should be
soldered, brazed or even welded. So why would anyone recommend
using a vacuum variable if the only way you can connect to one is to
use a clamp-on or bolt-on connection?

My experience with a vacuum variable is that after only about a week
outdoors the clamp-on connection would begin to deteriorate no
matter how tight the connection or how weatherproof it looked.

No one seems to know if you can solder or braze a copper strap
onto a vacuum variable without destroying the seal or possibly
cracking the glass envelope due to having to use high heat.

I recommend building a trombone-style piston capacitor using
Teflon sheet for insulation. I have tested a home made piston
capacitor with Teflon insulation on a Hewlett-Packard Q-meter
and it had higher Q than a vacuum variable! So no need to
spend big bucks on a vacuum variable that won't work well
in a transmitting loop due to having to use an unreliable
clamp-on connection.

73 - Todd WD4NGG

**********Get the Moviefone Toolbar. Showtimes, theaters, movie news & more!(http://pr.atwola.com/promoclk/100000075x1212774565x1200812037/aol?redir=http://toolbar.aol.com/moviefone/download.html?ncid=emlcntusdown00000001)

5934. Re: [loopantennas] Vacuum variable experience?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-17 02:19:44 UTC
From: Jim Miller
Topic: 5932 Message: 5934

Todd

That's pretty much what I was worried about. I'm for now just doing a single band antenna so my capacitance variation is only a couple of pf around 20pf nominal.

I'm just doing an "overlap cap" where the ends of my 2" copper strap will have U shaped intermeshed ends forming a 4 plate cap. Makes for a small physical area which should be easy to package. Details tbd.

No solder joints anywhere so this should represent max Q for comparison to any other configs I try.

73

jim ab3cv

5935. Re: Oil filled capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-17 04:22:01 UTC
From: gplynas
Topic: 5924 Message: 5935

Hi Andy,
We do use the oil filled capacitors in RF applications for very high power transmitters (up to 2 MW), although the frequencies are generally under about 200 kHz. In this application, dielectric heating has not been a problem. We also use oil filled capacitors and transformers in high voltage pulse applications.
Best regards,
Paul
WA5LFY

--- In loopantennas@yahoogroups.com, Andy <Andy.groups@...> wrote:
>
> The oil filled capacitors I've seen were used for HV supply filtering, where
> dielectric losses don't matter.
>
> Are they also commonly used in other applications? With either pulses or RF
> power where dielectric losses are important?
>
> Andy
>

5936. Re: Vacuum variable experience?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-17 13:34:46 UTC
From: gplynas
Topic: 5932 Message: 5936

Hi Jim,
Do not apply any heat to the vacuum capacitor. Brazing is not an option. The connections must be made with clamping bands or threaded screws if the cap is drilled and tapped for bolted connections. Heat can destroy the capacitor by breaking the vacuum seals or destroying the delicate copper connections within the cap. I work with these every day. For exterior use, keep it in a protected environment, and on the connections, apply a very light coating of something like WD40 to the connecting surfaces before tightening the connections. The pressure will displace the film.
Regards,
Paul
WA5LFY

--- In loopantennas@yahoogroups.com, "Jim Miller" <jim@...> wrote:
>
> Anyone have any experience with vacuum variables?
>
> From the pictures I've seen the leads to those devices seem quite small.
>
> Folks go a lot of work to use large diameter copper tubing and
> minimize solder joint losses.
>
> What sort of Q do these VVCs have at HF?
>
> 73
>
> jim ab3cv
>

5937. Re: Vacuum variable experience?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-18 14:02:01 UTC
From: tenorman1952
Topic: 5932 Message: 5937

--- In loopantennas@yahoogroups.com, "gplynas" <gplynas@...> wrote:
>
> Hi Jim,
> Do not apply any heat to the vacuum capacitor. Brazing is not an
> option. The connections must be made with clamping bands or
threaded
> screws if the cap is drilled and tapped for bolted connections.
Heat
> can destroy the capacitor by breaking the vacuum seals or destroying
> the delicate copper connections within the cap. I work with these
> every day. For exterior use, keep it in a protected environment,
and
> on the connections, apply a very light coating of something like
WD40
> to the connecting surfaces before tightening the connections. The
> pressure will displace the film.
> Regards,
> Paul
> WA5LFY

Rather than WD-40, let me suggest Corrosion-X. Google will find vendors for this product. We use it on electronics offshore in saltwater environments. It works just like it says, and very well. We spritz all over switches, transformers, cards, connectors, everything.

Corrosion-X is used extensively on aircraft, too.

Paul
AE5JU

5938. SWR-Meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-18 21:51:49 UTC
From: aimo ruoho
Topic: 5938 Message: 5938

Hello!

Is it possible to use a SWR-Power Meter, possibly with some modification(s) for receiving-only purposes?

I happened to buy one for years ago at a flee-market, but didn't realize, that it was made for Radio Amateur use only... How stupid from my part!

Now I would like to try to benefit from this SILTRONIX Model FS-113B, which has 3 analog meters on its front panel, one for Modulation, one for SWR and one for POWER.
I received this meter in package with Instruction Manual and in Mint condition, probably very little or totally non-used. It seems to use only two potentiometers, probably in connection of some (6 total) diodes? No other mechanics than three toggle switches.
Frequency: 26-28 MHz. Meters 100uA F.S.D. Dimensions 200x100x140mm.

Surely I could cannibalize this nice box, take the front panel with meters away and put on a new panel with for example innards of a home brew preselector and switchable in/out connections for many antennas and many receivers... But what about trying to build a simple recieving antenna analizer with analog display or even a digital display? I just saw one kit sold by Norcal, which seems to be very cheap, as it is very simple, too.

With these thoughts I remain waiting for your advice and suggestions or experiences of similar or different handlings.

73,
Ami

[Non-text portions of this message have been removed]

5939. Re: [loopantennas] SWR-Meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-18 22:03:18 UTC
From: Bob Warren
Topic: 5938 Message: 5939

Hi Ami
It is not possible to use that instrument for receive purposes.
You would be better off to sell it and recoup your money then invest in an antenna analyzer. Good ones are not cheap but well worth the money. Check out MFJ for details and prices - you might find a second hand one.

Bob VK7KRW

2008/11/18 aimo ruoho <aimounto@...>

> Hello!
>
> Is it possible to use a SWR-Power Meter, possibly with some modification(s)
> for receiving-only purposes?
>
> I happened to buy one for years ago at a flee-market, but didn't realize,
> that it was made for Radio Amateur use only... How stupid from my part!
>
> Now I would like to try to benefit from this SILTRONIX Model FS-113B, which
> has 3 analog meters on its front panel, one for Modulation, one for SWR and
> one for POWER.
> I received this meter in package with Instruction Manual and in Mint
> condition, probably very little or totally non-used. It seems to use only
> two potentiometers, probably in connection of some (6 total) diodes? No
> other mechanics than three toggle switches. Frequency: 26-28 MHz. Meters
> 100uA F.S.D. Dimensions 200x100x140mm.
>
> Surely I could cannibalize this nice box, take the front panel with meters
> away and put on a new panel with for example innards of a home brew
> preselector and switchable in/out connections for many antennas and many
> receivers... But what about trying to build a simple recieving antenna
> analizer with analog display or even a digital display? I just saw one kit
> sold by Norcal, which seems to be very cheap, as it is very simple, too.
>
> With these thoughts I remain waiting for your advice and suggestions or
> experiences of similar or different handlings.
>
> 73,
> Ami
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

5940. Re: [loopantennas] SWR-Meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-18 22:07:49 UTC
From: Don
Topic: 5938 Message: 5940

Google is probably your friend here. If your receiver does not have a
built in signal meter - you may find a circuit to help you to connect
one of those meters to your AGC line.

Don
Upland, CA

aimo ruoho wrote:
> Hello!
>
> Is it possible to use a SWR-Power Meter, possibly with some modification(s) for
receiving-only purposes?
>
> I happened to buy one for years ago at a flee-market, but didn't realize, that it was
made for Radio Amateur use only... How stupid from my part!
>
> Now I would like to try to benefit from this SILTRONIX Model FS-113B, which has 3 analog
meters on its front panel, one for Modulation, one for SWR and one for POWER.
> I received this meter in package with Instruction Manual and in Mint condition, probably
very little or totally non-used. It seems to use only two potentiometers, probably in
connection of some (6 total) diodes? No other mechanics than three toggle switches.
Frequency: 26-28 MHz. Meters 100uA F.S.D. Dimensions 200x100x140mm.
>
> Surely I could cannibalize this nice box, take the front panel with meters away and put
on a new panel with for example innards of a home brew preselector and switchable in/out
connections for many antennas and many receivers... But what about trying to build a simple
recieving antenna analizer with analog display or even a digital display? I just saw one
kit sold by Norcal, which seems to be very cheap, as it is very simple, too.
>
> With these thoughts I remain waiting for your advice and suggestions or experiences of
similar or different handlings.
>
> 73,
> Ami
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links

>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG - http://www.avg.com
> Version: 8.0.175 / Virus Database: 270.9.6/1797 - Release Date: 11/18/2008 11:23 AM
>
>

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.175 / Virus Database: 270.9.6/1797 - Release Date: 11/18/2008 11:23 AM

[Non-text portions of this message have been removed]

5941. Re: [loopantennas] SWR-Meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-19 14:08:02 UTC
From: aimo ruoho
Topic: 5938 Message: 5941

Thanks, Bob

Ami

De: Bob Warren <vk7krw@...>
Para: loopantennas@yahoogroups.com
Enviado: martes, 18 de noviembre, 2008 23:03:18
Asunto: Re: [loopantennas] SWR-Meter

Hi Ami
It is not possible to use that instrument for receive purposes.
You would be better off to sell it and recoup your money then invest in an antenna analyzer. Good ones are not cheap but well worth the money. Check out MFJ for details and prices - you might find a second hand one.

Bob VK7KRW

2008/11/18 aimo ruoho <aimounto@yahoo. com>

> Hello!
>
> Is it possible to use a SWR-Power Meter, possibly with some modification(s)
> for receiving-only purposes?
>
> I happened to buy one for years ago at a flee-market, but didn't realize,
> that it was made for Radio Amateur use only... How stupid from my part!
>
> Now I would like to try to benefit from this SILTRONIX Model FS-113B, which
> has 3 analog meters on its front panel, one for Modulation, one for SWR and
> one for POWER.
> I received this meter in package with Instruction Manual and in Mint
> condition, probably very little or totally non-used. It seems to use only
> two potentiometers, probably in connection of some (6 total) diodes? No
> other mechanics than three toggle switches. Frequency: 26-28 MHz. Meters
> 100uA F.S.D. Dimensions 200x100x140mm.
>
> Surely I could cannibalize this nice box, take the front panel with meters
> away and put on a new panel with for example innards of a home brew
> preselector and switchable in/out connections for many antennas and many
> receivers... But what about trying to build a simple recieving antenna
> analizer with analog display or even a digital display? I just saw one kit
> sold by Norcal, which seems to be very cheap, as it is very simple, too.
>
> With these thoughts I remain waiting for your advice and suggestions or
> experiences of similar or different handlings.

>
> 73,
> Ami
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5942. Re: [loopantennas] SWR-Meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-19 14:09:01 UTC
From: aimo ruoho
Topic: 5938 Message: 5942

Thanks, Don!
Ami

De: Don <stb55@verizon.net>
Para: loopantennas@yahoogroups.com
Enviado: martes, 18 de noviembre, 2008 23:07:49
Asunto: Re: [loopantennas] SWR-Meter

Google is probably your friend here. If your receiver does not have a
built in signal meter - you may find a circuit to help you to connect
one of those meters to your AGC line.

Don
Upland, CA

aimo ruoho wrote:
> Hello!
>
> Is it possible to use a SWR-Power Meter, possibly with some modification(s) for
receiving-only purposes?
>
> I happened to buy one for years ago at a flee-market, but didn't realize, that it was
made for Radio Amateur use only... How stupid from my part!
>
> Now I would like to try to benefit from this SILTRONIX Model FS-113B, which has 3 analog
meters on its front panel, one for Modulation, one for SWR and one for POWER.
> I received this meter in package with Instruction Manual and in Mint condition, probably
very little or totally non-used. It seems to use only two potentiometers, probably in
connection of some (6 total) diodes? No other mechanics than three toggle switches.
Frequency: 26-28 MHz. Meters 100uA F.S.D. Dimensions 200x100x140mm.
>
> Surely I could cannibalize this nice box, take the front panel with meters away and put
on a new panel with for example innards of a home brew preselector and switchable in/out
connections for many antennas and many receivers... But what about trying to build a simple
recieving antenna analizer with analog display or even a digital display? I just saw one
kit sold by Norcal, which seems to be very cheap, as it is very simple, too.
>
> With these thoughts I remain waiting for your advice and suggestions or experiences of
similar or different handlings.
>
> 73,
> Ami
>
>
>

>
> [Non-text portions of this message have been removed]
>
>
> ------------ --------- --------- ------
>
> If you've got links, post them in the Links section!
> http://groups. yahoo.com/ group/loopantenn as/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups. yahoo.com/ group/loopantenn as/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups. yahoo.com/ group/loopantenn as/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> ------------ --------- --------- --------- --------- --------- -
>
>
> No virus found in this incoming message.
> Checked by AVG - http://www.avg. com
> Version: 8.0.175 / Virus Database: 270.9.6/1797 - Release Date: 11/18/2008 11:23 AM
>
>

No virus found in this outgoing message.
Checked by AVG - http://www.avg. com
Version: 8.0.175 / Virus Database: 270.9.6/1797 - Release Date: 11/18/2008 11:23 AM

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

5943. Re: [loopantennas] SWR-Meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-19 19:33:23 UTC
From: Jim Dunstan
Topic: 5938 Message: 5943

At 09:51 PM 11/18/2008 +0000, you wrote:

>Hello!
>
>Is it possible to use a SWR-Power Meter, possibly with some
>modification(s) for receiving-only purposes?

Hi,

Yes, it could easily be converted for receive purposes ... but then it would be for a unique purpose. To measure relative signal strength of local transmitters. A useful device if u were going to test the radiation pattern of a transmitting antenna you might be building or adjusting. These signal strength meters were common in radio shops that repaired mobile radios. They would be about the size of your meter. It would have a plug-in whip antenna (1m in length approx.). The whip would terminate via an inductor of some type. A simple diode detector is used to rectify the RF across this load and the resultant DC current would deflect the meter movement.

It would be categorized as a piece of test equipment rather than a receiver of receiver aid.

Jim, VE3CI

5944. Re: [loopantennas] SWR-Meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-19 20:46:11 UTC
From: aimo ruoho
Topic: 5938 Message: 5944

Thanks, Jim!
I have to delay this project, until I get better understanding about, what is best to do...

Best Regards from Ami

De: Jim Dunstan <dunstan@...>
Para: loopantennas@yahoogroups.com
Enviado: miércoles, 19 de noviembre, 2008 20:33:23
Asunto: Re: [loopantennas] SWR-Meter

At 09:51 PM 11/18/2008 +0000, you wrote:

>Hello!
>
>Is it possible to use a SWR-Power Meter, possibly with some
>modification(s) for receiving-only purposes?

Hi,

Yes, it could easily be converted for receive purposes ... but then it would be for a unique purpose. To measure relative signal strength of local transmitters. A useful device if u were going to test the radiation pattern of a transmitting antenna you might be building or adjusting. These signal strength meters were common in radio shops that repaired mobile radios. They would be about the size of your meter. It would have a plug-in whip antenna (1m in length approx.). The whip would terminate via an inductor of some type. A simple diode detector is used to rectify the RF across this load and the resultant DC current would deflect the meter movement.

It would be categorized as a piece of test equipment rather than a receiver of receiver aid.

Jim, VE3CI

[Non-text portions of this message have been removed]

5945. Re: Vacuum variable experience?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-21 04:00:12 UTC
From: Steve
Topic: 5932 Message: 5945

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...>
wrote:
>
> --- In loopantennas@yahoogroups.com, "gplynas" <gplynas@> wrote:
> >
> > ... For exterior use, keep it in a protected environment,
> and
> > on the connections, apply a very light coating of something like
> WD40
> > to the connecting surfaces before tightening the connections. The
> > pressure will displace the film.
> > Regards,
> > Paul
> > WA5LFY
>
> Rather than WD-40, let me suggest Corrosion-X. Google will find
> vendors for this product. We use it on electronics offshore in
> saltwater environments. It works just like it says, and very well.
> We spritz all over switches, transformers, cards, connectors,
> everything.
>
> Corrosion-X is used extensively on aircraft, too.

I second that. WD-40 is not an oil. It will evaporate in a short time
after washing any oils or waxes away and make it worse than before. I
hate the stuff.

I always hated it when a piece of equipment would come in with the
stink of WD-40 on it.

Steve Greenfield

5946. What is going on?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-21 11:16:02 UTC
From: jefeickert
Topic: 5946 Message: 5946

I keep finding difference sources that say BBC is dropping the Americans
Also Netherlands is too.
If you don't any other languages other than English your screwed.
so what is there to listen to?
JIM

5947. Re: [loopantennas] What is going on?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-21 13:58:41 UTC
From: Don
Topic: 5946 Message: 5947

OT: The BBC dropped the USA years ago. "They" have determined that most everybody is listening to them on the internet so why spend those big bucks transmitting by SW?

Don
Upland, CA

jefeickert wrote:
> I keep finding difference sources that say BBC is dropping the Americans
> Also Netherlands is too.
> If you don't any other languages other than English your screwed.
> so what is there to listen to?
> JIM
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG - http://www.avg.com
> Version: 8.0.175 / Virus Database: 270.9.9/1802 - Release Date: 11/20/2008 7:28 PM
>
>

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com

Version: 8.0.175 / Virus Database: 270.9.9/1802 - Release Date: 11/20/2008 7:28 PM

[Non-text portions of this message have been removed]

5948. Re:What is going on?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-21 19:21:56 UTC
From: gmcjetpilot@yahoo.com
Topic: 5946 Message: 5948

BBC has been dropped. Why?

Well because of:

Internet simulcast
internet podcast
satellite radio
local broadcasters carry their programs.

In my area I can get BBC on broadcast TV and Radio through PBS (public broadcasting).

I get BBC America TV which has news and entertainment 24/7 on digital cable TV. I like the news when I get a chance (interesting to hear a forigen report of America)

My favorite BBC America program is TOP GEAR, an hour car show with lots of humor. The production values are very good. They often go all out exotic street sports cars on their track. My cable provider even has "on-demnad" BBC and its a freebie (old episodes of the original Brit version of The Office.)

Bottom line BBC SW stopped in North America about a year ago. In Africa and South America they still transmit so some times you can get those.

Really the internet is the reason for the demise of SW. You don't need a radio to listen to radio if you have the internet.

One example was Radio New Zealand which is over 8,000 miles from the east coast of USA, my location. Late one night I heard a faint station in english. WIth my "guide" I guessed at what the station was. Getting on the internet I confirmed the broadcast with their internet simulcast. It's hard to get a 100% ID on stations some times, even with a guide.

Any way that is the night I realized I did not need the radio. Still I was pleased with the ability to get a S-5 with good intelligibility on a station so far a way. That still fascinates like it did when I was a kid 30 years ago. I use that station as a good measure of current conditions. Most of the time I am down in the S-2 but audible. It's not something you can really enjoy. They play very interesting music, old like Frank Sinatra and snips of old (30's, 40's. 50's) Brit radio dramas. The news is also interesting. I find it fascinating to hear what they listen to and actually enjoy it. But if I want to listen to relax I would go to the computer before the radio.

SW will never die but if your REALLY have to hear a show (not all scratchy) the internet is awesome. You can also down load programing onto you iPod and listen to it any time walking, working, driving..... Of course not every one has access to high speed internet.

Satellite radio is limited and also cost a monthly fee.....that will take more time to catch on and the satellites I think are only over North America.

DRM is pretty good and I get Canada 800 miles away and the quality is like local FM. Not sure its great for super high fidelity music but for voice and some music it is great. That

might save SW but than you need a DRM radio or a radio, 'I-F' converter and computer to run DRM decoder.

[Non-text portions of this message have been removed]

5949. Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-22 02:38:26 UTC
From: dean_0_way
Topic: 5949 Message: 5949

On a lark ? i hooked my rain gutter (center of a 45 foot run)to my portable radio last night and ran a wire to earth ground.

Not a big help but got some gain ,mostly noise ,and big overload on my local :) then i began thinking that earth ground may be giving the noise so i pulled that, which left only one wire attached to the set , seemed to be much better but during the day the radio was dead , so experiment # 2 ?

Put a solid (not stranded) single wire around a double window and hooked both wires to am clips on set, no earth ground. Fed by a piece of shielded microphone wire ,not much gain but very quiet. Daytime will test further .

Now the question is , would i benefit from a tuning cap on this single wire loop? it's about 6 wide by 4 feet tall . Iv'e been looking all over online, and cant seem to make up my mind if it's worth the trouble ? Or would more turns give more gain?

Thanks in advance !

Dean_0

5950. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-22 13:34:14 UTC
From: tenorman1952
Topic: 5949 Message: 5950

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...>
wrote:
>> Put a solid (not stranded) single wire around a double window and
> hooked both wires to am clips on set, no earth ground. Fed by a piece
> of shielded microphone wire ,not much gain but very quiet. Daytime
> will test further .

Even though you may have less signal strength indicated with a loop
antenna, you will also have much less noise, so that signal-to-noise is
increased.

> Now the question is , would i benefit from a tuning cap on this
> single wire loop? it's about 6 wide by 4 feet tall . Iv'e been
> looking all over online, and cant seem to make up my mind if it's
> worth the trouble ? Or would more turns give more gain?

Yes. A single turn loop will get you up into the SW bands. Varying
the size of the loop and/or capacitor will affect exactly where in the
SW bands. Use a standard 9.6-365 pf (or 380 pf) capacitor. There are
a number of sources. MTM Scientific, Crystal Radio Supply, others.

http://www.mtmscientific.com/

http://www.crystalradiosupply.com/

http://www.midnightscience.com/catalog5.html

Here's a calculator that works well:

http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

With a 9.6-365 pf cap, and 15 turns around a square 17" x 17" form (24"
diagonal) 1/8" spacing, you will tune the AM/MW broadcast band.

With one turn approximately 30" x 30", you can tune from the 60 meters
band up to about 15 meters.

Paul C.
AE5JU

5951. Source for 400pf variable capacitors for 160m loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-22 18:03:36 UTC
From: Zack
Topic: 5951 Message: 5951

Can anyone tell me where I could buy two 400pf variable capacitors to
make a 160 meter loop like this one?
http://www.qsl.net/kc2tx/loopschematic.htm
http://www.qsl.net/kc2tx/

Thanks
Zack
N8FNR

5952. Re: [loopantennas] Source for 400pf variable capacitors for 160m loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-22 18:44:00 UTC
From: Steve Ratzlaff
Topic: 5951 Message: 5952

A polyvaricon dual 266pf cap with mating shaft and knob can be found at
http://www.angelfire.com/electronic2/index1/index.html That would give you
520pF.
It's unlikely you'll find an exact 400pF cap; 365pF was the standard for
radios. Lots of places sell those; some sell the dual-365pF version
too--that would work too but would be overkill. Probably the loop will tune
properly with a standard 365pF cap.
This is one place that sells the old-style 365pF caps.
http://www.midnightscience.com/
73,
Steve

----- Original Message -----
From: "Zack" <vtnn43e@...>
To: <loopantennas@yahoogroups.com>
Sent: Saturday, November 22, 2008 10:03 AM
Subject: [loopantennas] Source for 400pf variable capacitors for 160m loop?

> Can anyone tell me where I could buy two 400pf variable capacitors to
> make a 160 meter loop like this one?
> http://www.qsl.net/kc2tx/loopschematic.htm
> http://www.qsl.net/kc2tx/
>
> Thanks
> Zack
> N8FNR
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

>

5953. Re: [loopantennas] Source for 400pf variable capacitors for 160m loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-22 19:32:48 UTC
From: John Popelish
Topic: 5951 Message: 5953

Zack wrote:
> Can anyone tell me where I could buy two 400pf variable capacitors to
> make a 160 meter loop like this one?
> http://www.qsl.net/kc2tx/loopschematic.htm
> http://www.qsl.net/kc2tx/

Have you seen the choices at Surplus Sales of Nebraska?
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

--
Regards,

John Popelish

5954. Re: [loopantennas] Source for 400pf variable capacitors for 160m loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-22 19:09:17 UTC
From: dcreece@bellsouth.net
Topic: 5951 Message: 5954

Try Ocean Electronics.
73 David KI4DFS
---------- Original message from "Zack" <vtnn43e@...>: ----------

Can anyone tell me where I could buy two 400pf variable capacitors to
make a 160 meter loop like this one?
http://www.qsl.net/kc2tx/loopschematic.htm
http://www.qsl.net/kc2tx/

Thanks
Zack
N8FNR

[Non-text portions of this message have been removed]

5955. Re: [loopantennas] Source for 400pf variable capacitors for 160m loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-22 22:12:17 UTC
From: Paul V Birke PEng
Topic: 5951 Message: 5955

http://cgi.ebay.ca/VINTAGE-VARIABLE-TUNING-CAPACITORS-CONDENSORS_W0QQitemZ180307652291QQcmdZViewItemQQptZLH_DefaultDomain_0?hash=item180307652291&_trksid=p3286.c0.m14&_trkparms=72%3A1215|66%3A2|65%3A12|39%3A1|240%3A1318#ebayphotohosting

[Non-text portions of this message have been removed]

5956. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-22 23:17:36 UTC
From: dean_0_way
Topic: 5949 Message: 5956

THANK You Paul ;

So here is what the handy calculator says?

A loop of 4 windings
75 ''wide ,63 ''high
spaced 0.25 ''
with 365-9.6 cap
tunes from .7477 to 4.610 Mhz.
Almost the middle of AM ,up to 5 meters?

Now i thought ,what if i use a double cap of 365-9.6 and add a
ceramic cap of about 50 pF in series we get ;
780 max 69.2 min cap
That get's .511 to 1.717 Mhz ? much closer to the AM band ,Oh !
did i forget to mention this is for just AM ? , i'll build a
Shortwave project later .

What i need to ask ?,am i on the right track Here?

Can we just addd capacitance this way or does that defy logic?

Thanks
Dean_0

5957. Re: SW being vacated

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 00:08:25 UTC
From: Hue Miller
Topic: 5957 Message: 5957

At least in the USA, BBC radio is carried at night on many
Public Radio, FM stations. SW broadcasting and indeed
SW use in general has been in steady decline for many
years. It amuses me to see the short-lived campaigns to
complain and try to reverse such decisions, after the latest
broadcaster drops HF. There really is little point in running
an expensive HF broadcast operation for the sake of a
small audience, and that mostly hobbyists, and hobbyists
being of a mostly certain age range and gender.
I sometimes wonder why some stations are still on the air,
and who exactly the target audience is. For example, the
high power Brasil station on 11770 or thereabout. (Altho
i love to hear the Vallenato or Llanera music from that area.)
I think maybe the HF broadcast spectrum may eventually
be repopulated to some degree with smaller, private
broadcasters more like "hobby broadcasters" than the
classic big national operations. Perhaps that would look more
like the early days of HF broadcasting, in the mid-1930s.
-Hue Miller

5958. Re: [loopantennas] Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 02:33:13 UTC
From: Ray Phillips
Topic: 5949 Message: 5958

Dean-o,

Yep, you can alter the resonant frequency of a tuned loop by adding or subtracting capacitance. Eventually, however, you fall victim to the law of diminishing returns.

Large value variable capacitors are rare and expensive.

You can switch in fixed capacitors but, as the total capacitance is C(variable) + C(fixed), your capacitance ratio changes. A 10-100pf variable on its own has a capacitance ratio of 10:1. If you parallel up a (say) 100pf fixed, the combination now has a variable of 110-200 pf which is less than 2:1. This means that although the bottom tunable frequency is now lower, the range of frequencies which can be tuned has reduced. The mathematics of the tuned frequency has a frequency change relative to the square root of the capacitance values. A ten to one capacitance change will produce a frequency change of (SQRT 10) or 3.3. A two to one capacitance change will produce a frequency change of about 1.4.

That's not all that will bite you. The wavelength of the signals to be tuned also comes into play. The gain (or receivability) of the loop varies with the relative physical size of the loop and the wavelength of the tuned frequency. The larger the loop is relative to the wavelength of the signal, the more native gain the loop will have and so the bigger IS better rule applies. When you tune a loop down by adding capacitance, the size of the loop does not change and the loop "appears" smaller to the new bottom frequency and so loop relative gain drops.

The best solution to lowering a tuned band is to increase the size of the loop. If you can't physically make the loop any bigger, increase the number of turns. However, once you start increasing turns, the gain of the loop starts going down relative to a bigger loop.

In your case where you are not altering the bottom frequency too much adding variable and series capacitance to set your band limits would not affect the gain too much.

Your logic is up to the mark:- It is common practice in tuners to align the tuning capacitors by the addition of "padder" and/or "trimmer" capacitors. If you look at the plastic encapsulated tuning capacitors of small transistor radios, you may see openings with a screwdriver slot beneath: these are built-in alignment capacitors. Anyone thinking of improving the performance of their radio by fiddling with these settings - DON'T. They are factory set and need an educated hand and test equipment.

I have a problem with your maths however. Two 365-9.6pf variable capacitors in parallel produce a 730-19.2pf capacitor. If you add a series 50pf - values go to 46.8-13.9pf. I think you meant to add your 50pf in parallel. This will give 780-69.2.

Dean-o, you are obviously a thinker - go for your Ham licence; you will learn a lot.

Ray
vk5ugs

> THANK You Paul ;
>
> So here is what the handy calculator says?
>
> A loop of 4 windings
> 75 ''wide ,63 ''high
> spaced 0.25 ''
> with 365-9.6 cap
> tunes from .7477 to 4.610 Mhz.
> Almost the middle of AM ,up to 5 meters?
>
> Now i thought ,what if i use a double cap of 365-9.6 and add a
> ceramic cap of about 50 pF in series we get ;
> 780 max 69.2 min cap
> That get's .511 to 1.717 Mhz ? much closer to the AM band ,Oh !
> did i forget to mention this is for just AM ? , i'll build a
> Shortwave project later .
>
> What i need to ask ?,am i on the right track Here?
>
> Can we just addd capacitance this way or does that defy logic?
>
> Thanks
> Dean_0
>
>
>

All the best,
Ray

5959. Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 04:14:12 UTC
From: Lee Moore (Gimbert)
Topic: 5959 Message: 5959

Where could I obtain (purchase,Steal,beg) a vacuum varicap
from?? ;o)

They seem to be rocking horse droppings!! as I`ve googled
and searched and the only one i can find is on fleabay
but I am a bit doubtfull of a company I don`t know!!

Lee ... G6ZSG ...

5961. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 04:35:28 UTC
From: dean_0_way
Topic: 5949 Message: 5961

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...>
wrote:
>
> --- In loopantennas@yahoogroups.com, "Ray Phillips" <ray@> wrote:
> >> Dean-o, you are obviously a thinker - go for your Ham licence;
you
> will
> > learn a lot.
> >
> >
> > Ray
> > vk5ugs
>
>
> Thanks a lot for your kind words !
> Yes you are right parellel is the right way to do it. my mistake?
>
> As for the ham thing ....i sure will at some point ! maybe when i
get a
> different place to live ? (not enough room for an antenna here.)
> Although ? as soon as i get some free time i should start the
process ?
> LOL I wonder how many transistor radio's Iv'e ruined by messing
with those trimmers ? (a little knowledge is a dangerous thing !)
He Heh ?

> Thanks for the info Ray
>
> Dean_0
>

5962. RE: [loopantennas] Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 04:45:30 UTC
From: John Bruckner
Topic: 5959 Message: 5962

Try www.surplussales.com

John
WØHII

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Lee Moore (Gimbert)
Sent: Saturday, November 22, 2008 10:14 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Vacuum Variable Capacitor

Where could I obtain (purchase,Steal,beg) a vacuum varicap from?? ;o)

They seem to be rocking horse droppings!! as I`ve googled and searched and the only one i can find is on fleabay but I am a bit doubtfull of a company I don`t know!!

Lee ... G6ZSG ...

[Non-text portions of this message have been removed]

5963. Re: Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 08:41:00 UTC
From: Lee Moore (Gimbert)
Topic: 5959 Message: 5963

Thanks John but when ~$1000 purchase bill arrives in the UK it seems to cost £1000 having experienced purchasing ferrites from Amidon corp - $25 cost £27 inc post!!

Lovely gear but so-o-o expensive for surplus, I will shop euro.

Thanks

Lee ... G6ZSG ...

--- In loopantennas@...m, "John Bruckner" <jbruckner@...> wrote:
>
> Try www.surplussales.com
>
> John
> WØHII
>
> _____
>
> From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
> Behalf Of Lee Moore (Gimbert)
> Sent: Saturday, November 22, 2008 10:14 PM
> To: loopantennas@yahoogroups.com
> Subject: [loopantennas] Vacuum Variable Capacitor
>
>
>
> Where could I obtain (purchase,Steal,beg) a vacuum varicap
> from?? ;o)
>
> They seem to be rocking horse droppings!! as I`ve googled
> and searched and the only one i can find is on fleabay
> but I am a bit doubtfull of a company I don`t know!!
>
> Lee ... G6ZSG ...
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

5964. Re: [loopantennas] Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 12:26:24 UTC
From: Jim Miller
Topic: 5959 Message: 5964

http://www.mgs4u.com/index.html#microwave

73

jim ab3cv

5965. Re: [loopantennas] Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 13:00:30 UTC
From: dcreece@bellsouth.net
Topic: 5959 Message: 5965

Try:

http://www.mgs4u.com/index.html

73 David KI4DFS

--- Original message from "Lee Moore (Gimbert)" <leemoore500@...>: ---

Where could I obtain (purchase,Steal,beg) a vacuum varicap
from?? ;o)

They seem to be rocking horse droppings!! as I`ve googled
and searched and the only one i can find is on fleabay
but I am a bit doubtfull of a company I don`t know!!

Lee ... G6ZSG ...

[Non-text portions of this message have been removed]

5966. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 13:47:09 UTC
From: tenorman1952
Topic: 5949 Message: 5966

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...>
wrote:
>
> THANK You Paul ;
>
> So here is what the handy calculator says?
>
> A loop of 4 windings
> 75 ''wide ,63 ''high
> spaced 0.25 ''
> with 365-9.6 cap
> tunes from .7477 to 4.610 Mhz.
> Almost the middle of AM ,up to 5 meters?
>
> Now i thought ,what if i use a double cap of 365-9.6 and add a
> ceramic cap of about 50 pF in series we get ;
> 780 max 69.2 min cap
> That get's .511 to 1.717 Mhz ? much closer to the AM band ,Oh !
> did i forget to mention this is for just AM ? , i'll build a
> Shortwave project later .
>
> What i need to ask ?,am i on the right track Here?
>
> Can we just addd capacitance this way or does that defy logic?
>
> Thanks
> Dean_0

Deano, actual experience would say that 511 khz - 1717 khz is cutting it far too close. Up on the top end the frequencies are very close together with 850 khz being in about the middle of the capacitor range.

And there is just no need for a loop that large.

Another consideration, loops are highly directional, which is good for pulling that weak signal out of the ether, or better, nulling that noise souce, whether a strong station or noise producer in your home.

The very large loop you want to make, around the window, will not be easily rotated. Also, there seems to be diminishing return with increased size, that is, a 4' box loop does not give much better performance than a 2' loop.

Using that same 9.6-365 pf capacitor, winding 15 turns of 22 ga wire, with 1/8" spacing between windings around a 17" x 17" form gives good range from just below the AM Broadcast Band to just above. It will be easy to rotate. I place the loop on an old "Lazy Susan" with the radio (Grundig S350DL) next to it, and it picks up by mutual coupling. I can orient the radio and antenna for good coupling, and then rotate them together. This is for radios with built in ferrite loopsticks.

But for radios with no internal antenna, such as my Icom R75, you will need a coupling loop of some sort. This can be done two ways.

You can add an extra turn of wire to the loop form, not connected to the main windings (which attach to the capacitor). This extra turn is a "sense winding" or "pickup loop", and the two ends connect to your radio's Antenna and Ground terminals.

I have also formed a small loop from RG-58 coax, by trimming back and exposing the center conductor on the end, forming the end of the coax into a one turn loop about 1' diameterand soldering that center conductor back to the shield. Then I put a PL-259 on the other end of the coax and screwed that to my R75 receiver.

This pickup loop is attached to the side of the tuned loop. And this works very well, too.

You can buy the plans and tuning capacitor from MTM Scientific. There are photos here in the Photo section in a folder called Loop Kits. Also MTM's links are posted in the Links section. If you go to MTM's AM loop link you will find photos of an added pickup loop, and a link to my antenna.

Paul

5967. Re: Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 15:10:53 UTC
From: Lee Moore (Gimbert)
Topic: 5959 Message: 5967

--- In loopantennas@yahoogroups.com, "Jim Miller" <jim@...> wrote:
>
> http://www.mgs4u.com/index.html#microwave
>
> 73
>
> jim ab3cv
>
Very good Jim, Thanks ...

Very reasonable prices - just wondering how much $195 is worth by
the time the cap reaches the UK ;O)

Regards..

Lee ... G6ZSG ...

5968. Re: Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 15:14:15 UTC
From: Lee Moore (Gimbert)
Topic: 5959 Message: 5968

--- In loopantennas@yahoogroups.com, dcreece@... wrote:
>
> Try:
>
> http://www.mgs4u.com/index.html
>
> 73 David KI4DFS
> -----------
> --- Original message from "Lee Moore (Gimbert)" <leemoore500@...>: ---
----
>
Just did David, Thanks.

Lee ...G6ZSG ...

5969. Re: [loopantennas] Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 17:56:10 UTC
From: Jim Dunstan
Topic: 5949 Message: 5969

At 01:47 PM 11/23/2008 +0000, you wrote:

>Deano, actual experience would say that 511 khz - 1717 khz is cutting
>it far too close. Up on the top end the frequencies are very close
>together with 850 khz being in about the middle of the capacitor
>range.

This is correct ... as far as i am concerned being able to tune the whole frequency range with one set of values for the loop and the capacitor is only academic. I recommend keeping the tuning range to the first half of the capacitor rotation. Adjust the loop inductance so the bottom of the desired range coincides with maximum capacitance. I generally divide the mw band I construct loop for 300 to 600khz or 540 to 1000khz. I don't do a lot of dxing beyond 1000khz.

>And there is just no need for a loop that large.

I agree with this statement. Once you get beyond a 2' dimensioned loop performance meets a rapidly diminishing return in performance. Again we are talking about a tuned loop for MW reception. The signals on the mw band are generally strong enough and do not require added loop 'capture area' .... unless you are a purist using a crystal set receiver. What you want is a very HiQ antenna with sharp nulls that can deal with the main problem of a multitude of stations ... many on the same frequency!

>Another consideration, loops are highly directional, which is good
>for pulling that weak signal out of the ether, or better, nulling
>that noise souce, whether a strong station or noise producer in your
>home.

Yes and no. I find the reception nodes of the pattern are quite broad ... however the null portion of the pattern is quite sharp. In other words, one of the main benefits of the HiQ tuned loop is its sharp null. Rotating angle and azimuth can be used to separate stations on the same frequency by nulling out one or the other.

>The very large loop you want to make, around the window, will not be
>easily rotated. Also, there seems to be diminishing return with
>increased size, that is, a 4' box loop does not give much better
>performance than a 2' loop.

As mentioned above, one of the main benefits of a mw tuned loop is the ability to physically manipulate it. there is little if any benefit from a large fixed tuned loop. A well constructed 2' to 3' tuned loop is about the maximum practical size. A 1' circular tuned loop can produce amazing performance. Building a good mw tuned loop is as much a matter of good physical construction as electrical. Even the electrical part depends on

the physical qualities of the components. Performance (maximum) will depend on the kind of wire and method of winding .... as well as the quality of the capacitors used for tuning. Capacitors (maximum performance) will have very low dielectric loss and have smooth movement.

There is argument about winding technique as well ... some like the spider technique and others like the more traditional frame type winding. I personally find the standard solenoid form superior as far as Q and narrowness of the null. A lot of the construction is aesthetically driven hihi

Jim

5970. Re: Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 12:20:22 UTC
From: Des
Topic: 5959 Message: 5970

Hi Lee,

I just put the title of this posting into the eBay search box and it
came up with quite a few hits.

If your like me you may prefer to restrict your search to "UK only" to
avoid all those possible complications with import duty etc.

Try cut-n-pasting the following link into your browser (Without the
enclosing brakets) if the link fails then try putting "Vacuum Variable
Capacitor" into the eBay search box and then refine your search to "UK
only" if you prefer.

(http://shop.ebay.co.uk/items/__Vacuum-Variable-Capacitor_W0QQLHQ5fPrefLocZ1QQ_dmptZUKQ5fC
onsumerElectronicsQ5fSpecialistRadioEquipmentQ5fSMQQ_flnZ1QQ_trksidZp3286Q2ec0Q2em283)

The prices looked pretty good, not as cheap as bring-and-buy rally
prices a few years ago but very mmuch in-line with what you might
expect to pay.

I hope this helps.

73,s

Des (M0AYF)

--- In loopantennas@yahoogroups.com, "Lee Moore (Gimbert)"
<leemoore500@...> wrote:
>
> Where could I obtain (purchase,Steal,beg) a vacuum varicap
> from?? ;o)
>
> They seem to be rocking horse droppings!! as I`ve googled
> and searched and the only one i can find is on fleabay
> but I am a bit doubtfull of a company I don`t know!!
>
> Lee ... G6ZSG ...
>

5971. Re: Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 15:12:03 UTC
From: Des
Topic: 5959 Message: 5971

Hi Lee,

I just put "Vacuum Variable Capacitor" in the eBay search box and it
came up with 12 hits 10 of which are UK sellers. Various values of
capacitance/working Voltage and at prices that seem quite reasonable
for new components.

Hope this helps.

73

Des (M0AYF)

--- In loopantennas@yahoogroups.com, "Lee Moore (Gimbert)"
<leemoore500@...> wrote:
>
> Where could I obtain (purchase,Steal,beg) a vacuum varicap
> from?? ;o)
>
> They seem to be rocking horse droppings!! as I`ve googled
> and searched and the only one i can find is on fleabay
> but I am a bit doubtfull of a company I don`t know!!
>
> Lee ... G6ZSG ...
>

5972. Re: SW being vacated

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 20:06:31 UTC
From: gplynas
Topic: 5957 Message: 5972

Hue,
I agree that there is very little HF in the US, but I've been involved for more than 20 years in installing high power broadcast sites throughout the world, and in much of the rest of the world it is alive and well. The installations now are all going forward with transmitters and exciters that can broadcast in AM or DRM. DRM is a digital broadcast mode with almost CD quality, and although the receivers are rare right now, the broadcasters are putting quite a few broadcasts on in digital mode. CBC has broadcasts throughout the day from Sackville Canada. I've even listened for hours to digital broadcast from New Zealand. I received a nice QSL card from them when I sent a signal report. For a receiver, you can modify a standard HF receiver by bringing out the IF to a simple down-converter, and feed it into a computer sound card. "DREAM" software is free and will convert the signal to audio. So new things are happening on HF.
Regards,
Paul
WA5LFY

--- In loopantennas@yahoogroups.com, "Hue Miller" <kargo_cult@...> wrote:
>
> At least in the USA, BBC radio is carried at night on many
> Public Radio, FM stations. SW broadcasting and indeed
> SW use in general has been in steady decline for many
> years. It amuses me to see the short-lived campaigns to
> complain and try to reverse such decisions, after the latest
> broadcaster drops HF. There really is little point in running
> an expensive HF broadcast operation for the sake of a
> small audience, and that mostly hobbyists, and hobbyists
> being of a mostly certain age range and gender.
> I sometimes wonder why some stations are still on the air,
> and who exactly the target audience is. For example, the
> high power Brasil station on 11770 or thereabout. (Altho
> i love to hear the Vallenato or Llanera music from that area.)
> I think maybe the HF broadcast spectrum may eventually
> be repopulated to some degree with smaller, private
> broadcasters more like "hobby broadcasters" than the
> classic big national operations. Perhaps that would look more
> like the early days of HF broadcasting, in the mid-1930s.
> -Hue Miller
>

5973. Miniloop receiver

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 20:13:08 UTC
From: geo
Topic: 5973 Message: 5973

I know it's not a pure loop antenna thing to post, but it works very well!

Last night I listened to Radio Havana and Radio Iceland on this. Radio Havana came in blasting, I had to keep the headphones off my ears. Selectivity was very good, I could pick out Radio Iceland's signal very well!

Today I added the shield over the variocoupler and a second variable capacitor to aid in regeneration control.

Tube lineup=Cossor brand valves, from left to right: 215SG (tuned Tetrode RF preamp), 210HL (regen detector), 210HF (audio gain).

http://groups.yahoo.com/group/loopantennas/photos/album/1163277481/pic/list

5974. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 20:56:44 UTC
From: dean_0_way
Topic: 5949 Message: 5974

Great discussion !

Maybe i should lay out my purpose for this loop,

Prob 1
I live in a stucco house ,so it has that lovely steel mesh skin under the stucco ,While it's nice to look at ? and low maintainance ,it's a signal killer.

Prob 2
Also have a 5000 watt local 2 blocks away

I wanted somthing a little stealthy ? well at least not so visable. To get max signal it was going to have to be outside the house . Easy to build .

Even though it's going to be 90 Degrees off what i actually wanted and it may be oversized ? i think i'll go ahead and put it together , i've learned a lot just from building 2 small loops and from what iv'e been able to figure out on this one ,I think it's worth a try to complete it .Besides if actually learn more by failing than success?

I was concerned about how tight i had the tuning range as well ,so i think i'm going to just hook the variable cap on it at first , then add the extra cap only if i need it ? that brings the top freg. higher but ,o well it's another experiment i can try ?

Iv'e seen some 4 foot loops on the net ,they seem to work ok? this one is roughly 4 times that size ,lol , can you say overkill?

I did notice that the calculater seems to change a lot according to how close the wraps are wound , seems strange to me , i remember reading somewhere that it should'nt make to much difference , but then some say it's very important ? i'm thinking of using one width wire of space between wraps, i can change that later if i need too ?

Anyway the test continues ,I'm having fun ,and nobody gets hurt ? Thanks for the tips !

Dean_0

5975. Re: [loopantennas] Miniloop receiver

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-23 22:12:13 UTC
From: Jim Dunstan
Topic: 5973 Message: 5975

At 08:13 PM 11/23/2008 +0000, you wrote:

>I know it's not a pure loop antenna thing to post, but it works very well!
>
>Last night I listened to Radio Havana and Radio Iceland on this. Radio
>Havana came in blasting, I had to keep the headphones off my ears.
>Selectivity was very good, I could pick out Radio Iceland's signal
>very well!
>
>Today I added the shield over the variocoupler and a second variable
>capacitor to aid in regeneration control.
>
>Tube lineup=Cossor brand valves, from left to right: 215SG (tuned
>Tetrode RF preamp), 210HL (regen detector), 210HF (audio gain).

Hi,

Looking at ur pictures brought back old memories .... especially the
filament adjustment .... when I was a kid I saved up to buy my first tube
(valve) #30 as I recall ... a triode with a 1.5v filament ... the first
time I fired up my receiver the filament lit up and burned out!! I never
forget that and always took extra care with filament voltages after that hi hi.

Your project looks like a lot of fun.

Jim

5976. Re: [loopantennas] Miniloop receiver

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-24 05:26:44 UTC
From: Hanner Montanner
Topic: 5973 Message: 5976

--- On Sun, 11/23/08, Jim Dunstan <dunstan@...> wrote:

From: Jim Dunstan <dunstan@...>
Subject: Re: [loopantennas] Miniloop receiver
To: loopantennas@yahoogroups.com
Date: Sunday, November 23, 2008, 2:12 PM

At 08:13 PM 11/23/2008 +0000, you wrote:

>I know it's not a pure loop antenna thing to post, but it works very well!
>
>Last night I listened to Radio Havana and Radio Iceland on this. Radio
>Havana came in blasting, I had to keep the headphones off my ears.
>Selectivity was very good, I could pick out Radio Iceland's signal
>very well!
>
>Today I added the shield over the variocoupler and a second variable
>capacitor to aid in regeneration control.
>
>Tube lineup=Cossor brand valves, from left to right: 215SG (tuned
>Tetrode RF preamp), 210HL (regen detector), 210HF (audio gain).

Hi,

Looking at ur pictures brought back old memories .... especially the
filament adjustment .... when I was a kid I saved up to buy my first tube
(valve) #30 as I recall ... a triode with a 1.5v filament ... the first
time I fired up my receiver the filament lit up and burned out!! I never
forget that and always took extra care with filament voltages after that hi hi.

Your project looks like a lot of fun.

Jim
 I had a set with plug-in coils in the dirty thirties : 34,30,19. (tubes).
Later, I built a better one : 58,57,56,2A5,80. Got my ticket in '38. HM.

[Non-text portions of this message have been removed]

5977. Re: Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-24 09:13:49 UTC
From: Lee Moore (Gimbert)
Topic: 5959 Message: 5977

Thanks Des, quite a collection at very reasonable prices..

I have already searched fleabay and am looking for a supplier who i can collect from which gives me a chance to view before purchase and also validates the vendor ... (I have had a bad experience with fleabay) ... and is a lot cheaper to collect .. obviously close to Birmingham of course .... I would even purchase privately. ;o)

I had an email from someone on here asking why i wanted a vacuum varicap just to receive!! - who said i wanted to just receive on a magloop ??? all I can say to that person is :- the clue is in the callsign!!!

Cheers.

Lee ... G6ZSG ...

--- In loopantennas@yahoogroups.com, "Des" <d29602960@...> wrote:
>
> Hi Lee,
>
> I just put the title of this posting into the eBay search box and it
> came up with quite a few hits.
>
> If your like me you may prefer to restrict your search to "UK only"
to
> avoid all those possible complications with import duty etc.
>
> Try cut-n-pasting the following link into your browser (Without the
> enclosing brakets) if the link fails then try putting "Vacuum
Variable
> Capacitor" into the eBay search box and then refine your search
to "UK
> only" if you prefer.
>
> (http://shop.ebay.co.uk/items/__Vacuum-Variable-
Capacitor_W0QQLHQ5fPrefLocZ1QQ_dmptZUKQ5fConsumerElectronicsQ5fSpecial
istRadioEquipmentQ5fSMQQ_flnZ1QQ_trksidZp3286Q2ec0Q2em283)
>
> The prices looked pretty good, not as cheap as bring-and-buy rally
> prices a few years ago but very mmuch in-line with what you might
> expect to pay.
>
> I hope this helps.
>
> 73,s

>
> Des (M0AYF)
>
>
> --- In loopantennas@yahoogroups.com, "Lee Moore (Gimbert)"
> <leemoore500@> wrote:
> >
> > Where could I obtain (purchase,Steal,beg) a vacuum varicap
> > from?? ;o)
> >
> > They seem to be rocking horse droppings!! as I`ve googled
> > and searched and the only one i can find is on fleabay
> > but I am a bit doubtfull of a company I don`t know!!
> >
> > Lee ... G6ZSG ...
> >
>

5978. Re: Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-24 09:20:13 UTC
From: revex540
Topic: 5959 Message: 5978

Hi Lee
A local ham is selling a couple. Don't know how much post is to the UK
but might be worth looking at:

http://www.vkclassifieds.vkham.com/cgi-bin/classifieds/classifieds.cgi?session_key=&search_and_display_db_button=on&db_id=59023&query=retrieval

Bob VK7KRW

-- In loopantennas@yahoogroups.com, "Lee Moore (Gimbert)"
<leemoore500@...> wrote:
>
> Thanks Des, quite a collection at very reasonable prices..
>
> I have already searched fleabay and am looking for a supplier who
> i can collect from which gives me a chance to view before purchase
> and also validates the vendor ... (I have had a bad experience with
> fleabay) ... and is a lot cheaper to collect .. obviously close to
> Birmingham of course .... I would even purchase privately. ;o)
>
> I had an email from someone on here asking why i wanted a vacuum
> varicap just to receive!! - who said i wanted to just receive on a
> magloop ??? all I can say to that person is :- the clue is in the
> callsign!!!
>
> Cheers.
>
> Lee ... G6ZSG ...
>
>
> --- In loopantennas@yahoogroups.com, "Des" <d29602960@> wrote:
> >
> > Hi Lee,
> >
> > I just put the title of this posting into the eBay search box and it
> > came up with quite a few hits.
> >
> > If your like me you may prefer to restrict your search to "UK only"
> to
> > avoid all those possible complications with import duty etc.
> >
> > Try cut-n-pasting the following link into your browser (Without the
> > enclosing brakets) if the link fails then try putting "Vacuum
> Variable
> > Capacitor" into the eBay search box and then refine your search
> to "UK

> > only" if you prefer.
> >
> > (http://shop.ebay.co.uk/items/__Vacuum-Variable-
> Capacitor_W0QQLHQ5fPrefLocZ1QQ_dmptZUKQ5fConsumerElectronicsQ5fSpecial
> istRadioEquipmentQ5fSMQQ_flnZ1QQ_trksidZp3286Q2ec0Q2em283)
> >
> > The prices looked pretty good, not as cheap as bring-and-buy rally
> > prices a few years ago but very mmuch in-line with what you might
> > expect to pay.
> >
> > I hope this helps.
> >
> > 73,s
> >
> > Des (M0AYF)
> >
> >
> > --- In loopantennas@yahoogroups.com, "Lee Moore (Gimbert)"
> > <leemoore500@> wrote:
> > >
> > > Where could I obtain (purchase,Steal,beg) a vacuum varicap
> > > from?? ;o)
> > >
> > > They seem to be rocking horse droppings!! as I`ve googled
> > > and searched and the only one i can find is on fleabay
> > > but I am a bit doubtfull of a company I don`t know!!
> > >
> > > Lee ... G6ZSG ...
> > >
> >
>

5979. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-24 13:15:27 UTC
From: tenorman1952
Topic: 5949 Message: 5979

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...>
wrote:
>
> Great discussion !
>
> Maybe i should lay out my purpose for this loop,
>
> Prob 1
> I live in a stucco house ,so it has that lovely steel mesh skin
under
> the stucco ,While it's nice to look at ? and low maintainance ,it's
a
> signal killer.

I have a metal shop building out back, and my loop works in there. I have a friend with his ham shack in his basement, and his loop works down there. At the very worst, you may have to place your loop near a window, but I think you will be surprised at how well it works.

> Prob 2
> Also have a 5000 watt local 2 blocks away
>
> I wanted somthing a little stealthy ? well at least not so visable.
> To get max signal it was going to have to be outside the house .
> Easy to build .
>
> Even though it's going to be 90 Degrees off what i actually wanted
> and it may be oversized ? i think i'll go ahead and put it
together ,
> i've learned a lot just from building 2 small loops and from what
> iv'e been able to figure out on this one ,I think it's worth a try
to
> complete it .Besides if actually learn more by failing than success?
>
> I was concerned about how tight i had the tuning range as well ,so
i
> think i'm going to just hook the variable cap on it at first , then
> add the extra cap only if i need it ? that brings the top freg.
> higher but ,o well it's another experiment i can try ?

Adding a fixed cap in parallel with the variable cap will narrow the tuning range. It is better to adjust the number of turns in the loop, or if a single turn loop, adjust the size of the loop.

> I did notice that the calculater seems to change a lot according to
> how close the wraps are wound , seems strange to me , i remember

> reading somewhere that it should'nt make to much difference , but
> then some say it's very important ?

There is capacitance between the turns of wire. That is why the
spacing makes a difference.

Paul

5980. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-24 17:25:29 UTC
From: airchecklover
Topic: 5949 Message: 5980

Deano-o; I'll second Jim & Paul. I've got the MTM almost 2ft dia loop. I built a 3.5 ft effective diameter loop. The size (volume) difference of two antennas is amazing and 3.5 footer is gangly for indoors. Size aside, the performance difference was not worth mentioning. I'm sure in the desert, 1000's of miles from man-made noise, the 3.5 footer would rule. But in my urban environment I did not get louder, clearer DX signals, I got louder DX signals with correspondingly louder noise. I concluded I'd maxxed out w/ the 2ft loop. I use the loop indoors only btw. You want to mount outdoors? Then you will need to use a variac or some such for remote tuning.

I've gone "one better" than the MTM loop however. I stumbled upon a very hot setup where the sum is greater than the individual components. I use a CCrane Twin-Coil direct-connected to a given radio. I then place the 2ft loop very close and in differing approximations to the T-F ferrite head. The two antennas magnetically couple. When I peak them both, I have as good as, maybe slightly better selectivity (Q seems to improve slightly). With both antennas working as resonant circuits, not much but the exact frequency you want gets through so problems from the locals are a thing of the past. I get better s/n. Yes, better s/n, not just signal strength. And I get interesting and powerful nulling abilities. Best example is I'm in Milwaukee. I've got two stations on 580 - one in Urbana, Ill, the other in Traverse City, MI. They are about 35 degrees from one another and I can null either one 100% during daytime using the two antennas. Can't quite do that with either antenna alone.

Closing thought: If I had to choose between a 2 ft loop or the T-F, I'd choose the loop.

Like you say, have fun!

-Mark

PS - I picked up some Litz wire. Am going to downsize the old 3.5 ft frame PVC frame to maybe 2.5 ft effective diameter and see what happens.

==========

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> Great discussion !
>
> Maybe i should lay out my purpose for this loop,
>
> Prob 1

> I live in a stucco house ,so it has that lovely steel mesh skin under
> the stucco ,While it's nice to look at ? and low maintainance ,it's a
> signal killer.
>
> Prob 2
> Also have a 5000 watt local 2 blocks away
>
> I wanted somthing a little stealthy ? well at least not so visable.
> To get max signal it was going to have to be outside the house .
> Easy to build .
>
> Even though it's going to be 90 Degrees off what i actually wanted
> and it may be oversized ? i think i'll go ahead and put it together ,
> i've learned a lot just from building 2 small loops and from what
> iv'e been able to figure out on this one ,I think it's worth a try to
> complete it .Besides if actually learn more by failing than success?
>
> I was concerned about how tight i had the tuning range as well ,so i
> think i'm going to just hook the variable cap on it at first , then
> add the extra cap only if i need it ? that brings the top freg.
> higher but ,o well it's another experiment i can try ?
>
> Iv'e seen some 4 foot loops on the net ,they seem to work ok? this
> one is roughly 4 times that size ,lol , can you say overkill?
>
> I did notice that the calculater seems to change a lot according to
> how close the wraps are wound , seems strange to me , i remember
> reading somewhere that it should'nt make to much difference , but
> then some say it's very important ? i'm thinking of using one width
> wire of space between wraps, i can change that later if i need too ?
>
> Anyway the test continues ,I'm having fun ,and nobody gets hurt ?
> Thanks for the tips !
>
> Dean_0
>

5981. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-24 17:58:42 UTC
From: dean_0_way
Topic: 5949 Message: 5981

I use a CCrane Twin-Coil direct-connected to a given
> radio. I then place the 2ft loop very close and in differing
> approximations to the T-F ferrite head. The two antennas magnetically
> couple. When I peak them both, I have as good as, maybe slightly
> better selectivity (Q seems to improve slightly). With both antennas
> working as resonant circuits, not much but the exact frequency you
> want gets through so problems from the locals are a thing of the past.

Oh man!
It's like you read my mind?
Iv'e been holding off the itch to buy one of those twin coil ferrite
jobs for about a month ,and you go scratch that spot again ? he heh,

Actually i was going to use this new loop in tandom with a twin
ferrite ,if i ever get one !

Where is that credit card now.....?

Dean_0

5982. Re: [loopantennas] Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-24 19:06:18 UTC
From: Jim Dunstan
Topic: 5949 Message: 5982

At 05:25 PM 11/24/2008 +0000, you wrote:

>Then you will need to use a variac or some such for remote tuning.
>
>I've gone "one better" than the MTM loop however. I stumbled upon a
>very hot setup where the sum is greater than the individual
>components. I use a CCrane Twin-Coil direct-connected to a given
>radio. I then place the 2ft loop very close and in differing
>approximations to the T-F ferrite head. The two antennas magnetically
>couple. When I peak them both, I have as good as, maybe slightly
>better selectivity (Q seems to improve slightly). With both antennas
>working as resonant circuits, not much but the exact frequency you
>want gets through so problems from the locals are a thing of the past.
>I get better s/n. Yes, better s/n, not just signal strength. And I get
>interesting and powerful nulling abilities. Best example is I'm in
>Milwaukee. I've got two stations on 580 - one in Urbana, Ill, the
>other in Traverse City, MI. They are about 35 degrees from one
>another and I can null either one 100% during daytime using the two
>antennas. Can't quite do that with either antenna alone.
>
>Closing thought: If I had to choose between a 2 ft loop or the T-F,
>I'd choose the loop.
>
>Like you say, have fun!
>
>-Mark

Hi Mark,

well you have stumbled on one of the tricks of the crystal set dx crowd ..... using 2 or more loops (inductors) ... to increase gain and/or to provide added selectivity/rejection. With the xtal set crowd rejecting a strong adjacent signal is often the problem ... set one loop for maximum gain on the desired frequency and then set a second loop to the station on the adjacent frequency. then orient the loops one to the other and the second loop will literally 'suck out' the adjacent frequency allowing reception of the desired station. Sometimes 3 and 4 tuned circuits (mini loops) can be used.

If you are doing very weak signal daytime reception the first loop can act as a kind of antenna tuner if you have a long wire antenna ... couple the tuner loop to a second loop and then to the receiver. You can copy stations you couldn't even hear with the best stand alone mw receivers like a Superadio.

Jim

5983. Re: Vacuum Variable Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-25 10:49:32 UTC
From: Lee Moore (Gimbert)
Topic: 5959 Message: 5983

--- In loopantennas@yahoogroups.com, "revex540" <vk7krw@...> wrote:
>
> Hi Lee
> A local ham is selling a couple. Don't know how much post is to the UK
> but might be worth looking at:
>
> http://www.vkclassifieds.vkham.com/cgi-
bin/classifieds/classifieds.cgi?
session_key=&search_and_display_db_button=on&db_id=59023&query=retrieval
>
> Bob VK7KRW

Thanks Bob but i would prefer someone in the UK, that way I will not
be shocked when get the bill .. Heh heh.

Lee... G6ZSG ...

5984. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-25 15:31:40 UTC
From: aircheckIover
Topic: 5949 Message: 5984

There always seems to be a good deal on one at eBay (hint hint :)

++

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> I use a CCrane Twin-Coil direct-connected to a given
> > radio. I then place the 2ft loop very close and in differing
> > approximations to the T-F ferrite head. The two antennas magnetically
> > couple. When I peak them both, I have as good as, maybe slightly
> > better selectivity (Q seems to improve slightly). With both antennas
> > working as resonant circuits, not much but the exact frequency you
> > want gets through so problems from the locals are a thing of the past.
>
> Oh man!
> It's like you read my mind?
> Iv'e been holding off the itch to buy one of those twin coil ferrite
> jobs for about a month ,and you go scratch that spot again ? he heh,
>
> Actually i was going to use this new loop in tandom with a twin
> ferrite ,if i ever get one !
>
> Where is that credit card now.....?
>
> Dean_0
>

5985. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-25 23:36:55 UTC
From: dean_0_way
Topic: 5949 Message: 5985

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
> There always seems to be a good deal on one at eBay (hint hint :)
>
> ++
>
Yaa i was thinking that myself HOWEVER !.........Iv'e been trying to
find a GOOD deal? ,on a pana 2200 or a Zenith trans -o for about a year
Cant see all the hub-bub about the economy bieng so bad ? ,when most
will bring close to new price? And those Sony 2010's ? Yikes!
I even saw somebody buy a broken T-O for almost 200 bucks heh!
So far the Ferrite 's have been getting to within 10 dollars of new
price so I'm still lookin?
The off brand stuff is getting cheap though! i got a LLoyds ,a
Panasonic 5000 look-a like ,for 40 d's ,waiting for it to arrive .

Dean_0

Cheap'os are the best'os?

5986. Re: Antenna the second

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-26 15:46:00 UTC
From: aircheckIover
Topic: 5949 Message: 5986

Wow. I just saw a dusty Panasonic 5000 go for $36, so it can happen.
The thing w/ eBay I have noticed ... it's like going into K-Mart
hoping you got there just in time for the blue light special.
Sometimes you get lucky, sometimes not. But keep your eyes open ... I
grabbed my T-F for abt. $60 like new off eBay. And that was when the
economy was good.

-Mark

==========

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "aircheckIover" <mdh@> wrote:
> >
> > There always seems to be a good deal on one at eBay (hint hint :)
> >
> > ++
> >
> Yaa i was thinking that myself HOWEVER !.....Iv'e been trying to
> find a GOOD deal? ,on a pana 2200 or a Zenith trans -o for about a year
> Cant see all the hub-bub about the economy bieng so bad ? ,when most
> will bring close to new price? And those Sony 2010's ? Yikes!
> I even saw somebody buy a broken T-O for almost 200 bucks heh!
> So far the Ferrite 's have been getting to within 10 dollars of new
> price so I'm still lookin?
> The off brand stuff is getting cheap though! i got a LLoyds ,a
> Panasonic 5000 look-a like ,for 40 d's ,waiting for it to arrive .
>
> Dean_0
>
> Cheap'os are the best'os?
>

5987. the difference between my 2 indoor flags

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-26 19:43:46 UTC
From: DAVID
Topic: 5987 Message: 5987

just a short video on the directions that you can get with indoor flag antennas http://www.youtube.com/watch?v=db_p41MMigA cheers david h ayrshire scotland

5990. Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-27 05:03:16 UTC
From: dean_0_way
Topic: 5990 Message: 5990

E.Bay item num> 160300659525 ,or

http://cgi.ebay.com/EARLY-20s-RADIO-PARTS-GREEN-COIL-LOT_W0QQitemZ160300659525QQihZ006QQcategoryZ38033QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

Wonder what this is? some kind of mini loop? very cool stuff!

Dean_0

5991. Re: [loopantennas] Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-27 05:44:47 UTC
From: Bob Warren
Topic: 5990 Message: 5991

The item is a variometer.

Bob VK7KRW

2008/11/27 dean_0_way <dean_0_way@...>

> E.Bay item num> 160300659525 ,or
>
> http://cgi.ebay.com/EARLY-20s-RADIO-PARTS-GREEN-COIL-
> LOT_W0QQitemZ160300659525QQihZ006QQcategoryZ38033QQssPageNameZWDVWQQrdZ1
> QQcmdZViewItem
>
> Wonder what this is? some kind of mini loop? very cool stuff!
>
> Dean_0
>
>
>

[Non-text portions of this message have been removed]

5992. Re: [loopantennas] Check this out?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-27 19:23:06 UTC
From: brian russell
Topic: 5992 Message: 5992

Hi,
I remember seeing pictures of similar set-up's in old pre WW2 battery domestic radios,
A large diameter vertical coil with a smaller rotatable coil within it, the position of the smaller
one being controlled by a shaft through the wall of the large coil.
Could this be a tuning system of some type ????
72, Brian, G0NSL-QRP.
----- Original Message -----
From: dean_0_way
To: loopantennas@yahoogroups.com
Sent: Thursday, November 27, 2008 4:54 AM
Subject: [loopantennas] Check this out?

[Non-text portions of this message have been removed]

5993. Re: Check this out?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-27 19:42:11 UTC
From: Hiram
Topic: 5992 Message: 5993

Exactly!!
the inner coil is tuned by rotating the shaft, it lessens the coupling, usually to the antenna. Loud signals will overload the detector on these older sets, so 'de-coupling' both decreases sensitivity and increases selectivity. This is a common component on the old regenerative receivers back in the 20's & 30's.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...> wrote:
>
> Hi,
> I remember seeing pictures of similar set-up's in old pre WW2 battery domestic radios,
> A large diameter vertical coil with a smaller rotatable coil within it, the position of the smaller
> one being controlled by a shaft through the wall of the large coil.
> Could this be a tuning system of some type ????
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: dean_0_way
> To: loopantennas@yahoogroups.com
> Sent: Thursday, November 27, 2008 4:54 AM
> Subject: [loopantennas] Check this out?
>
>
>
> [Non-text portions of this message have been removed]
>

5994. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-27 22:48:20 UTC
From: dean_0_way
Topic: 5990 Message: 5994

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...>
wrote:
>
> E.Bay item num> 160300659525 ,or
>
> http://cgi.ebay.com/EARLY-20s-RADIO-PARTS-GREEN-COIL-
>
LOT_W0QQitemZ160300659525QQihZ006QQcategoryZ38033QQssPageNameZWDVWQQrdZ1
> QQcmdZViewItem
>
> Wonder what this is? some kind of mini loop? very cool stuff!

And from the same seller. 160300661684
>
http://cgi.ebay.com/EARLY-20s-RADIO-PARTS-TWIN-COIL-
SET_W0QQitemZ160300661684QQihZ006QQcategoryZ38033QQssPageNameZWDVWQQrdZ1
QQcmdZViewItem

must be the same idea, but a different config ?

Can anyone give a report of the effectivness of these very cool
pieces,how do they work on AM , maybe i see a new project in my
future ? lol
> Dean_0
>

5995. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-27 23:54:26 UTC
From: John
Topic: 5990 Message: 5995

--- In dean_0_way wrote:
> Can anyone give a report of the effectivness of these very cool
> pieces,how do they work on AM , maybe i see a new project in my
> future ?

I've got one of these gadgets. Picked it up last year at a hamfest
for a few dollars.

It's an antenna coupler, with a manual control that turns the inner
coil 90 degrees, such that at one extreme the two coils are fully
concentric and coupled, at the other extreme the inner coil is
perpendicular to the outer (and thus "decoupled"). I guess the
coupling is a kind of gain control. There's no tuning or changing of
inductance involved here, just changing the amount of inductive
coupling between the inner and outer coils.

The outer coil has two windings, side by side, about 10 turns on the
smaller winding and maybe 25 or so on the bigger winding. The inner
coil has maybe 20 or so turns on it.

Mine is very old (pre WWII I think), using bakelite and green-cloth
Litz wire, with nice nickle-plated screw-down connectors to all the
coils. Looks like it might have been part of some old lab equipment,
or possibly an old AM radio.

I've never used mine, but I'm going to hold on to it and one of these
days try it out on AM broadcast signals or 160M.

John/AF4EX

5996. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 00:44:00 UTC
From: Paul Norman
Topic: 5990 Message: 5996

--- In loopantennas@yahoogroups.com, "John" <af4ex.radio@...> wrote:
>
> --- In dean_0_way wrote:
> > Can anyone give a report of the effectivness of these very cool
> > pieces,how do they work on AM , maybe i see a new project in my
> > future ?

Someone else here had identified that device as a "variometer". That term is used to denote an avionic device something quite different from what's under discussion here], but here's the relevant explanation: http://www.qsl.net/in3otd/variodes.html

Adjusting the mutual induction [from "add" to zero, and then to "buck"] by rotating the inner coil is how it works. Probably, the distributed capacitance provides the necessary capacitance to constitute a tuned circuit. The calculations are waaaay beyond me, but I'm "guessing" that the tuning range would be sufficient for the purpose. Litz wire, and NO capacitor, sounds intriguing!

5997. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 02:22:06 UTC
From: John
Topic: 5990 Message: 5997

--- af4ex.radio wrote:
> I've got one of these gadgets. Picked it up last year at a hamfest
> for a few dollars.

I just uploaded a picture of my "variometer" in the AF4EX.RADIO files.

As you can see it has a wooden base and a nice big knob. The coil is angled 45 degrees from the axis of rotation so that you have to turn the knob 180 degrees to move the coil through 90 degrees. Looks like it might have been used for teaching or experimentation.

The guy I bought it from (at the Melbourne Fl hamfest) knew nothing about it and thought it was just useless junk. I think I gave him $3 for it!
:-)
John/AF4EX

5998. Re: [loopantennas] Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 03:38:19 UTC
From: Bob Warren
Topic: 5990 Message: 5998

In avionics a variometer measures changes in altitude but we are talking
about wireless not aircraft.

http://www.schmarder.com/radios/misc-stuff/variometer.htm

Bob VK7KRW

2008/11/28 Paul Norman <pnorman314@...>

> --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>,
> "John" <af4ex.radio@...> wrote:
> >
> > --- In dean_0_way wrote:
> > > Can anyone give a report of the effectivness of these very cool
> > > pieces,how do they work on AM , maybe i see a new project in my
> > > future ?
>
> Someone else here had identified that device as a "variometer". That
> term is used to denote an avionic device something quite different
> from what's under discussion here], but here's the relevant
> explanation: http://www.qsl.net/in3otd/variodes.html
>
> Adjusting the mutual induction [from "add" to zero, and then to
> "buck"] by rotating the inner coil is how it works. Probably, the
> distributed capacitance provides the necessary capacitance to
> constitute a tuned circuit. The calculations are waaaay beyond me, but
> I'm "guessing" that the tuning range would be sufficient for the
> purpose. Litz wire, and NO capacitor, sounds intriguing!
>
>
>

[Non-text portions of this message have been removed]

5999. Grove Flex-Tenna HVU

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 02:08:08 UTC
From: Mike
Topic: 5999 Message: 5999

Hello Everbody,
I'm new to the group,but not new to swling. I'm looking to get a new antenna.At the present time, I'm using a 15 ft. piece of #14 insulated wire draped over my bedroom window hooked to a Grove Mini-Tuner to my receiver(Yaesu FT-747GX). Reception isn't to bad, but could be better. Grove has a Flex-Tenna (24ft long) that can be put either in the atic or run around the ceiling.
Has anybody used one of these or know antbody that has?
Any comments---YAE OR NAE

Thanks,Mike

6000. Re: [loopantennas] Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 05:50:57 UTC
From: Mike-WE0H
Topic: 5990 Message: 6000

Wow, that is one nice variometer there John. I use a big one to tune my
600 meter vertical.

http://www.we0h.us/505kc/600-meter-station-pics/Loading-Coil-2.jpg

Mike
WE0H
WD2XSH/16

John wrote:
> --- af4ex.radio wrote:
>
>> I've got one of these gadgets. Picked it up last year at a hamfest
>> for a few dollars.
>>
>
> I just uploaded a picture of my "variometer" in the AF4EX.RADIO files.
>
> As you can see it has a wooden base and a nice big knob. The coil is
> angled 45 degrees from the axis of rotation so that you have to turn
> the knob 180 degrees to move the coil through 90 degrees. Looks like it
> might have been used for teaching or experimentation.
>
> The guy I bought it from (at the Melbourne Fl hamfest) knew nothing
> about it and thought it was just useless junk. I think I gave him $3
> for it!
> :-)
> John/AF4EX

6001. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 13:09:11 UTC
From: John
Topic: 5990 Message: 6001

--- Mike-WE0H wrote:
>
> Wow, that is one nice variometer there John. I use a big one to
> tune my 600 meter vertical.
> http://www.we0h.us/505kc/600-meter-station-pics/Loading-Coil-2.jpg
>

That looks pretty sturdy, Mike. (Don't think mine would take more than a watt or two without burning up).

My initial impression was that a variometer could be used only for coupling, but you say you're tuning your 600M antenna with yours. I guess if you connect the inner coil to one of the outer coils in series, then the total inductance of the series would indeed change. Is that what you're doing?

Would I be able to hear your station down here in central Florida? Are there any 600 meter operators in this area?

I've been experimenting with VLF lately down around 10kHz, receive only of course. Lots of natural signals to listen to. I've got a couple of hula-hoop (80cm) antennas with 40 turns of wire for wide-band VLF monitoring. I could easily resonate them at 600 meters. Would an opamp circuit and sound-card work OK as a receiver for your CW signals?

Tnx,
John/AF4EX

6002. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 19:57:46 UTC
From: John
Topic: 5990 Message: 6002

--- Bob vk7krw wrote:
>
> In avionics a variometer measures changes in altitude but we are talking
> about wireless not aircraft.
>
> http://www.schmarder.com/radios/misc-stuff/variometer.htm

Bob,
I followed the link to Dave Schmarder's web site. The crystal radio variometer schematic looked simple so I built it on a little board and hooked it up to the antique variometer and my 80m dipole. The first signal that I heard stunned me: AM morse, a beacon sending the call letters "SQT", then I heard the Catholic global shortwave radio station and another faint station.

Does anyone know what and where the SQT beacon is?

The variometer was hooked up as shown in Scharder's schematic, the inner coil in series with the larger outer coil and the other outer coil attached to the dipole.

I posted a picture of this rig in the Files section under AF4EX.RADIO.

There is some tuning action as well as coupling from the variometer, but it's not as sharp as using the variable capacitor. I'd say it's mostly effective for coupling. But perhaps I don't have it set up optimally.

This is a lot of fun. I'm using the same "Trimm Dependable" high impedance (2Kohm) headset that my dad bought for me to use with crystal sets when I was a kid in the 1950's. Had to replace the original cloth-covered wire leads years ago, but the phones are just as sensitive as ever.

Tnx,
John/AF4EX

6003. Re: [loopantennas] Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 20:18:46 UTC
From: Mark McCarthy
Topic: 5990 Message: 6003

Hi John,

Beacon SQT is in Melbourne, Florida. 257 kHz carrier, tones +-1040 Hz.
It has been heard out here on the west coast, but not by me!

Mark, KE7MSU

----- Original Message -----
From: John
To: loopantennas@yahoogroups.com
Sent: Friday, November 28, 2008 11:57 AM
Subject: [loopantennas] Re: Hey check this out loopers!

--- Bob vk7krw wrote:
>
> In avionics a variometer measures changes in altitude but we are
talking
> about wireless not aircraft.
>
> http://www.schmarder.com/radios/misc-stuff/variometer.htm

Bob,
I followed the link to Dave Schmarder's web site. The crystal radio
variometer schematic looked simple so I built it on a little board
and hooked it up to the antique variometer and my 80m dipole. The
first signal that I heard stunned me: AM morse, a beacon sending the
call letters "SQT", then I heard the Catholic global shortwave radio
station and another faint station.

Does anyone know what and where the SQT beacon is?

The variometer was hooked up as shown in Scharder's schematic, the
inner coil in series with the larger outer coil and the other outer
coil attached to the dipole.

I posted a picture of this rig in the Files section under AF4EX.RADIO.

There is some tuning action as well as coupling from the variometer,
but it's not as sharp as using the variable capacitor. I'd say it's
mostly effective for coupling. But perhaps I don't have it set up
optimally.

This is a lot of fun. I'm using the same "Trimm Dependable" high
impedance (2Kohm) headset that my dad bought for me to use with
crystal sets when I was a kid in the 1950's. Had to replace the
original cloth-covered wire leads years ago, but the phones are just
as sensitive as ever.

Tnx,
John/AF4EX

[Non-text portions of this message have been removed]

6004. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 20:49:00 UTC
From: John
Topic: 5990 Message: 6004

--- Mark KE7MSU wrote:
> Beacon SQT is in Melbourne, Florida. 257 kHz carrier, tones
> +-1040 Hz. It has been heard out here on the west coast, but
> not by me!

I live in Palm Bay, adjacent to Melbourne, so the transmitter's
probably not too far here if I can hear it up in the shortwave bands,
on a crytal radio set!

Thanks for solving the mystery!

John/AF4EX

6005. Check out Location Report: SATELLITE NDB (NAVAID) [SQT]

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 21:16:33 UTC
From: MD3381@AOL.COM
Topic: 6005 Message: 6005

Location Report: SATELLITE NDB (NAVAID) [SQT]
(http://nas-architecture.faa.gov/nas/location/location_data.cfm?FID=10600&RBGSY=1999)
**********Finally, one site has it all: your friends, your email, your favorite sites. Try the NEW AOL.com.
(http://www.aol.com/?optin=new-dp&icid=aolcom40vanity&ncid=emlcntaolcom00000006)

[Non-text portions of this message have been removed]

6006. Re: Check out Location Report: SATELLITE NDB (NAVAID) [SQT]

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 21:34:26 UTC
From: John
Topic: 6005 Message: 6006

--- MD3381 wrote:
>
> _Location Report: SATELLITE NDB (NAVAID) [SQT]_
> (http://nas-architecture.faa.gov/nas/location/location_data.cfm?
> FID=10600&RBGSY=1999)

Thanks,
I found another navaid beacon list
http://www.airnav.com/cgi-bin/navaid-info
which gives the exact location of beacon "SQT":
Lat 28.0994689/Lon -80.7008083.
This happens to be 4 miles due North of my QTH (EL98PA). You can see
the antenna if you use Google Earth.
:-)
John/AF4EX

6007. Re: [loopantennas] Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-28 23:10:55 UTC
From: Bob Warren
Topic: 5990 Message: 6007

John
The variometer is a form of loose coupling. You will find a number of variations on the Crystal Radio sites. They are also used in VLF transmitters as someone has already mentioned.

Well done on your experiments.

Bob

2008/11/28 John <af4ex.radio@...>

> --- Bob vk7krw wrote:
> >
> > In avionics a variometer measures changes in altitude but we are
> talking
> > about wireless not aircraft.
> >
> > http://www.schmarder.com/radios/misc-stuff/variometer.htm
>
> Bob,
> I followed the link to Dave Schmarder's web site. The crystal radio
> variometer schematic looked simple so I built it on a little board
> and hooked it up to the antique variometer and my 80m dipole. The
> first signal that I heard stunned me: AM morse, a beacon sending the
> call letters "SQT", then I heard the Catholic global shortwave radio
> station and another faint station.
>
> Does anyone know what and where the SQT beacon is?
>
> The variometer was hooked up as shown in Scharder's schematic, the
> inner coil in series with the larger outer coil and the other outer
> coil attached to the dipole.
>
> I posted a picture of this rig in the Files section under AF4EX.RADIO.
>
> There is some tuning action as well as coupling from the variometer,
> but it's not as sharp as using the variable capacitor. I'd say it's
> mostly effective for coupling. But perhaps I don't have it set up
> optimally.
>
> This is a lot of fun. I'm using the same "Trimm Dependable" high
> impedance (2Kohm) headset that my dad bought for me to use with
> crystal sets when I was a kid in the 1950's. Had to replace the
> original cloth-covered wire leads years ago, but the phones are just
> as sensitive as ever.
>

> Tnx,
> John/AF4EX
>
>
>

[Non-text portions of this message have been removed]

6008. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-29 00:12:35 UTC
From: John
Topic: 5990 Message: 6008

--- Bob vk7krw wrote:
> John
> The variometer is a form of loose coupling. You will find a number
> of variations on the Crystal Radio sites. They are also used in VLF
> transmitters as someone has already mentioned.
>
> Well done on your experiments.

Well, this thread was started by Dean_o who was looking for some advice on buying an antique variometer on EBay. Glad he mentioned it here because it provided me the motive to check out mine (and relive some happy memories from boyhood).

My advice to Dean_o would be to buy some PVC tubing and make your own, which can be customized to whatever frequencies you're intertested in.

I'm thinking of adapting my VLF hula-hoops into a variometer design to make it possible to resonate and tune them to the various Navy nav transmitters that operate between 10kHz and 40kHz.

HTH,
John/AF4EX

6009. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-29 03:39:22 UTC
From: dean_0_way
Topic: 5990 Message: 6009

--- In loopantennas@yahoogroups.com, "John" <af4ex.radio@...> wrote:
> Well, this thread was started by Dean_o who was looking for some
advice
> on buying an antique variometer on EBay. Glad he mentioned it here
> because it provided me the motive to check out mine (and relive
some
> happy memories from boyhood).
>
>Thanks John ;
You must know by now i like the slightly wierd, or old mechanical
stuff the best?
These looked very interesting to me, so i thought ? give the loop
list something to talk about as well, I am sure going to check out
some possibilities for making one of these fit into my collection of
stuff!
To bad i got home a little late tonight and missed them both ,but
i'm sure they will have more a bit later ? or as you said , i bet i
can make one too!

Thanks All

Dean_0

6010. Re: [loopantennas] Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-29 05:22:26 UTC
From: Mike-WE0H
Topic: 5990 Message: 6010

Hi John,

The variometer is in the middle of the loading coil windings. It works excellent tuning my 70' inverted L vertical. I get coverage of the lower 48 states with just 90w output with regular CW. Have a look at www.500kc.com for more info on the operations. You should hear many stations where you live. Pat /6 is 4 blocks from the Gulf in Mississippi so it'll be a saltwater path between you guys. If you look at the station map on that site you can see where I am at. I am station #16.

I have connected the mic input on a soundcard to a 1:1 transformer connected to a feedline/wire antenna dn seen many signals in the VLF band. SAQ is one of them I have seen here but not very often. Lots of signals to listen and watch for in ARGO, Spectran or whatever is your favorite graphical software. Fun stuff.

Mike
WE0H
/16

John wrote:
> --- Mike-WE0H wrote:
>
>> Wow, that is one nice variometer there John. I use a big one to
>> tune my 600 meter vertical.
>> http://www.we0h.us/505kc/600-meter-station-pics/Loading-Coil-2.jpg
>>
>>
>
> That looks pretty sturdy, Mike. (Don't think mine would take more
> than a watt or two without burning up).
>
> My initial impression was that a variometer could be used only for
> coupling, but you say you're tuning your 600M antenna with yours. I
> guess if you connect the inner coil to one of the outer coils in
> series, then the total inductance of the series would indeed change.
> Is that what you're doing?
>
> Would I be able to hear your station down here in central Florida?
> Are there any 600 meter operators in this area?
>
> I've been experimenting with VLF lately down around 10kHz, receive
> only of course. Lots of natural signals to listen to. I've got a
> couple of hula-hoop (80cm) antennas with 40 turns of wire for wide-
> band VLF monitoring. I could easily resonate them at 600 meters.
> Would an opamp circuit and sound-card work OK as a receiver for your

> CW signals?
>
> Tnx,
> John/AF4EX

6011. Re: Hey check this out loopers!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-29 12:53:48 UTC
From: John
Topic: 5990 Message: 6011

--- Mike-WE0H wrote:
> ... Have a look at
> www.500kc.com for more info on the operations. ...

Ok, Mike, thanks for the info. That web page seems to be off the air
for the moment (latest cache 21-Nov), but I'll try again later.

Tnx & 73,
John/AF4EX

6012. New Member, With Loop Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-29 06:57:44 UTC
From: markandlou74
Topic: 6012 Message: 6012

HI to the Group .Thanks for letting me join

I want to put up a multi band 80 Meter loop fed with 300 ohm Window ladder line into a proper Balanced Tuner !,UP about 30 feet

Where the loop would be placed in the yard I have a 65 foot free standing tower with a 80Meter inverted V.

The tower will end up smack in the center of the Loop! Will this have any bad effect's on the loop ??

The Shack would be under one corner of the loop ! What would be the minimum lenth of the fed line??

Thanks TO ALL

Mark VK2FTMB

6013. Antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-30 00:03:19 UTC
From: jefeickert
Topic: 6013 Message: 6013

Which is the best way to have a long wire to go ?
East and west?
or
North and south
I can 20-30" either way
JIM sfeickert@...

6014. Re: [loopantennas] Antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-30 01:36:36 UTC
From: Ray Phillips
Topic: 6013 Message: 6014

Hi Jim,

a long wire antenna is not as simple as many people think. Google "Beverage", "terminated long wire", "windom" and "OCF" antennas. You will find that the length, orientation and feedpoint of long wire antennas can affect how they work.

Having said that, a multiple wavelength long wire antenna can have excellent performance. And it does not have to be high. All you need is a BIG piece of land.

If you don't have a large chunk of real estate, then try a horizontal loop. While it may not have the performance of a multiple wavelength of wire, it does offer good receive performance and low noise at quite modest heights. But, if you want to transmit long distances, it really needs to be over half a wavelength in height.

You've indicated that you have 20-30 inches available. I am sure you mean 20-30 feet. Can you please confirm the space available?

If you come back with your location, your location(s) of interest, receive only or transmit, the space available and the frequency(ies) of interest, I am sure members of this group will offer you more detailed advice.

Ray,
vk5ugs

> Which is the best way to have a long wire to go ?
> East and west?
> or
> North and south
> I can 20-30" either way
> JIM sfeickert@...
>
>

All the best,
Ray

6015. Re: Antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-30 15:35:37 UTC
From: John
Topic: 6013 Message: 6015

--- jefeickert wrote:
>
> Which is the best way to have a long wire to go ?
> East and west?
> or
> North and south
> I can 20-30" either way

Jim,
You need to tell us what you mean by 'I can 20-30" either way'.

As far as orientation goes, it depends entirely what signals you're interested in: local rag chews, USA contacts or DX. Then orient the antenna with its major lobes pointing horizontally in the directions of interest. High vertical angle lobes for local stuff or low vertical angle lobes for DX.

You probably know that a half-wave antenna has its major lobes "broad side" to the antenna. A long wire has more wavelength multiples than a half-wave, and as the number of multiples go up the lobes tend to steer themselves towards the ends of the ends of the antenna ("end-fire") and the broad-side lobe diminishes (but doesn't entirely go away).

I remember setting up a long-wire antenna in the Philippines on top the dormitory building where I stayed (many years ago). Worked like gangbusters on 20m, getting my 100-watt signal into the US, both coasts.

HTH,
John/AF4EX

6016. indoor slinky flag

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-30 17:10:48 UTC
From: DAVID
Topic: 6016 Message: 6016

here is a vid of my indoor slinky flag sorry about it being dark but u can make it out cheers david h
http://www.youtube.com/watch?v=WVP9jUAuhOc

6017. Re: [loopantennas] indoor slinky flag

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-30 17:47:53 UTC
From: Paul V Birke PEng
Topic: 6016 Message: 6017

Dear David

thanks for the video

very nice implementation

I am wondering about the placement of the termination resistor (variable, nice) and the balun at the bottom corners. I thought usually the flag is constructed with these at centre height on the vertical portions of the antenna. Do you gain an advantage in the gain pattern at the bottom or was (and is I should say) just convenient to put them at the corners

best wishes
Paul in Guelph ON Canada

From: DAVID <dhamilton1@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, November 30, 2008 12:10:48 PM
Subject: [loopantennas] indoor slinky flag

here is a vid of my indoor slinky flag sorry about it being dark but u
can make it out cheers david h
http://www.youtube. com/watch? v=WVP9jUAuhOc

[Non-text portions of this message have been removed]

6018. Re: [loopantennas] indoor slinky flag

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-11-30 18:23:51 UTC
From: david/lorraine
Topic: 6016 Message: 6018

hi as my flag is in the attic its easier to feed at the corners rather than ducking under coax on the way up to the shack. as for rejection etc there seems no difference ie i have holland on 1008 khz which is s9++ but i cun null it out with the resistor to virtually zero with a spanish in its place and this hopefully lets the signals come in from the west and north west .. cheers david ... ayrshire scotland

[Non-text portions of this message have been removed]

6019. Oldest Variometer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 01:20:29 UTC
From: herbdean38
Topic: 5990 Message: 6019

I have a very old variable coupler that I was told by the
man who had it that he used it for a crystal radio before
he had a variable capacitor, it allowed him to tune stations.

I have a picture to post but have not yet worked out how
to do it, I am into the forum but can't seem to get it on.

I first saw this unit on the friends bench in the early
fifties. When Myron died his son gave it to me, I'm
70 and the son just passed away at age 84 so the unit is OLD.

I have a couple oddities that I was given at the same time,
I'll have to photo and post them.

Herb Dean WA1IBN

6020. Oldest Varicoupler Photo

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 01:28:51 UTC
From: WA1IBN
Topic: 6020 Message: 6020

I finally got the "Oldest varicoupler?" photo loaded.
Am interested in comments.
Herb Dean WA1IBN@...

[Non-text portions of this message have been removed]

6021. Re: [loopantennas] indoor slinky flag

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 01:41:17 UTC
From: Gary Pewitt
Topic: 6016 Message: 6021

Very nice. I've made slinky dipoles before but never thought of making
a slinky vertical loop. I just may give that a try.
Congrats on having a very original idea.
73 Gary N9ZSV

DAVID wrote:
>
> here is a vid of my indoor slinky flag sorry about it being dark but u
> can make it out cheers david h
> http://www.youtube.com/watch?v=WVP9jUAuhOc
> <http://www.youtube.com/watch?v=WVP9jUAuhOc>
>
>

6022. Re: Oldest Varicoupler Photo

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 01:44:20 UTC
From: John
Topic: 6020 Message: 6022

--- Herb WA1IBN wrote:
>
> I finally got the "Oldest varicoupler?" photo loaded.
> Am interested in comments.

Looks old Herb. Very old. I think you have just won the "Oldest Variometer" contest! :-)

I'm assuming the rod on the side spins the rotor coil inside the stationary coil, which appears to have two windings (in the circular opening), which would make it functionally similar to the one I have.

Have you tried it out?

John/AF4EX

6023. Re: Oldest Varicoupler Photo

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 02:56:02 UTC
From: dean_0_way
Topic: 6020 Message: 6023

--- In loopantennas@yahoogroups.com, "WA1IBN" <wa1ibn@...> wrote:
>
> I finally got the "Oldest varicoupler?" photo loaded.
> Am interested in comments.
> Herb Dean WA1IBN@...
>
> Nice Herb ;
The guy who was selling the bakelite ones on the bay, also had one that
was wood like yours but his was painted a soft red color so i agree you
have the oldest one !]

Thanks for the pic

Dean-0
>

6024. Re: Oldest Varicoupler Photo

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 11:44:52 UTC
From: John
Topic: 6020 Message: 6024

Herb,
http://crystalradio.org/May98.html
I found this group called the "Xtal Set Society" which published a
picture of a 1922-vintage variometer in their May-98 newsletter.
It's round, not square, but otherwise looks a lot like yours.

Perhaps yours is even older.

You might want to contact them and show them your photo. They can
probably pinpoint the era it was made.

HTH,
John/AF4EX
--- af4ex wrote:
>
> --- Herb WA1IBN wrote:
> >
> > I finally got the "Oldest varicoupler?" photo loaded.
> > Am interested in comments.
>
> Looks old Herb. Very old. I think you have just won the "Oldest
> Variometer" contest! :-)
>
> I'm assuming the rod on the side spins the rotor coil inside the
> stationary coil, which appears to have two windings (in the
circular
> opening), which would make it functionally similar to the one I
have.
>
> Have you tried it out?
>
> John/AF4EX
>

6025. Mininec vs. EZnec

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 15:06:23 UTC
From: Jon Maguire
Topic: 6025 Message: 6025

Which method of moments program is best for modeling loops? Wire antennas in general?
Thanks for any/all comments.

73... Jon W1MNK

6026. Bipolat Transistor Evaluation

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 16:02:54 UTC
From: Chris Trask
Topic: 6026 Message: 6026

I completed an evaluation of bipolar transistors that are suitable for
active antennas and preamplifiers and placed the results on my web page at:

http://www.home.earthlink.net/~christrask/Paper015.html

I hope to live long enough to see this trend of using obsolete
transistors in new designs come to an end.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6027. nulling with the indoor slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 19:18:47 UTC
From: DAVID
Topic: 6027 Message: 6027

hi here is a video of me nulling out holland here in scotland to
hopefully leave a good path open to the west many thanks david ..
ayrshire scotland
http://www.youtube.com/watch?v=rgZ4y0Gql6k

6028. Re: [loopantennas] nulling with the indoor slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 19:31:59 UTC
From: Paul V Birke PEng
Topic: 6027 Message: 6028

Dear David

excellent

btw are those brass slinkys?
what diameter?

if brass how do you feel about use of the common steel variety

best wishes from the Northern Colony
Paul in Guelph ON

From: DAVID <dhamilton1@...>
To: loopantennas@yahoogroups.com
Sent: Monday, December 1, 2008 2:18:47 PM
Subject: [loopantennas] nulling with the indoor slinky loop

hi here is a video of me nulling out holland here in scotland to
hopefully leave a good path open to the west many thanks david ..
ayrshire scotland
http://www.youtube. com/watch? v=rgZ4y0Gql6k

[Non-text portions of this message have been removed]

6029. Re: [loopantennas] nulling with the indoor slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 20:00:10 UTC
From: david/lorraine
Topic: 6027 Message: 6029

hi they are just butt standard slinkys but i got usa ones as i think they have more wire ie 70 or so feet on each slinky ... cheers david .. ayrshire scotland
----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@yahoogroups.com
Sent: Monday, December 01, 2008 7:31 PM
Subject: Re: [loopantennas] nulling with the indoor slinky loop

Dear David

excellent

btw are those brass slinkys?
what diameter?

if brass how do you feel about use of the common steel variety

best wishes from the Northern Colony
Paul in Guelph ON

From: DAVID <dhamilton1@...>
To: loopantennas@yahoogroups.com
Sent: Monday, December 1, 2008 2:18:47 PM
Subject: [loopantennas] nulling with the indoor slinky loop

hi here is a video of me nulling out holland here in scotland to hopefully leave a good path open to the west many thanks david .. ayrshire scotland
http://www.youtube. com/watch? v=rgZ4y0Gql6k

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6030. RE: [loopantennas] nulling with the indoor slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 20:17:58 UTC
From: John Bruckner
Topic: 6027 Message: 6030

Hello David;
Maybe I missed it but what software is shown on the screen?
Thanks,
John

_____

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of david/lorraine
Sent: Monday, December 01, 2008 2:00 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] nulling with the indoor slinky loop

hi they are just butt standard slinkys but i got usa ones as i think they have more wire ie 70 or so feet on each slinky ... cheers david .. ayrshire scotland
----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@ <mailto:loopantennas%40yahoogroups.com> yahoogroups.com
Sent: Monday, December 01, 2008 7:31 PM
Subject: Re: [loopantennas] nulling with the indoor slinky loop

Dear David

excellent

btw are those brass slinkys?
what diameter?

if brass how do you feel about use of the common steel variety

best wishes from the Northern Colony
Paul in Guelph ON

_____
From: DAVID <dhamilton1@tiscali. <mailto:dhamilton1%40tiscali.co.uk> co.uk>
To: loopantennas@ <mailto:loopantennas%40yahoogroups.com> yahoogroups.com
Sent: Monday, December 1, 2008 2:18:47 PM
Subject: [loopantennas] nulling with the indoor slinky loop

hi here is a video of me nulling out holland here in scotland to hopefully leave a good path open to the west many thanks david .. ayrshire scotland
http://www.youtube. com/watch? v=rgZ4y0Gql6k

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6031. LOADING COILS FOR A LOOP ANTENNA?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 19:31:40 UTC
From: wwetbottom
Topic: 6031 Message: 6031

MY HORNET II 2ELEMENT 6 METER CUBICAL QUAD IS RESONANT AT ABOUT 53 MHZ
DESPITE CONSTRUCTING THE DRIVEN ELEMENT FOR 50.1 MHZ. IF I MAKE
THE DRIVEN ELEMENT LONGER, THE REFLECTOR WILL BE TO SMALL. LENGTHS OF
THE SPREADER ARMS PRECLUDE MAKING THE WHOLE ANTENNA LARGER.
I THOUGH OF USING LOADING COIL(S)SO I COULD KEEP THE DIMENSIONS THE SAME
WHILE BRINGING THE LOWEST SWR DOWN TO THE LOW END OF 6 METERS. ANY IDEAS
ON WHERE TO PLACE THE COIL(S)IN THIS DIAMOND SHAPED QUAD?
OTHER OPTIONS ?
WILLARD

6032. Re: [loopantennas] nulling with the indoor slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 23:37:57 UTC
From: david/lorraine
Topic: 6027 Message: 6032

its the software for the perseus sdr radio .. thanks david
----- Original Message -----
From: John Bruckner
To: loopantennas@yahoogroups.com
Sent: Monday, December 01, 2008 8:17 PM
Subject: RE: [loopantennas] nulling with the indoor slinky loop

Hello David;
Maybe I missed it but what software is shown on the screen?
Thanks,
John

_____

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of david/lorraine
Sent: Monday, December 01, 2008 2:00 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] nulling with the indoor slinky loop

hi they are just butt standard slinkys but i got usa ones as i think they have more wire ie 70 or so feet on each slinky ... cheers david .. ayrshire scotland
----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@ <mailto:loopantennas%40yahoogroups.com> yahoogroups.com
Sent: Monday, December 01, 2008 7:31 PM
Subject: Re: [loopantennas] nulling with the indoor slinky loop

Dear David

excellent

btw are those brass slinkys?
what diameter?

if brass how do you feel about use of the common steel variety

best wishes from the Northern Colony
Paul in Guelph ON

_____
From: DAVID <dhamilton1@tiscali. <mailto:dhamilton1%40tiscali.co.uk> co.uk>
To: loopantennas@ <mailto:loopantennas%40yahoogroups.com> yahoogroups.com
Sent: Monday, December 1, 2008 2:18:47 PM
Subject: [loopantennas] nulling with the indoor slinky loop

hi here is a video of me nulling out holland here in scotland to
hopefully leave a good path open to the west many thanks david ..
ayrshire scotland
http://www.youtube. com/watch? v=rgZ4y0Gql6k

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6033. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 00:12:47 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6033

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6034. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 00:12:47 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6034

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6035. Help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 00:22:09 UTC
From: jefeickert
Topic: 4329 Message: 6035

I am looking for the loop antenna that is about 2" wide and is about 8-12" dia.
and it sits close to a radio bring in stations.
I think they run around $60.00
JIM

6036. Re: [loopantennas] LOADING COILS FOR A LOOP ANTENNA?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-01 20:37:21 UTC
From: Jim Francoeur KC1FB
Topic: 6031 Message: 6036

Put a stub in the reflector near a corner and tune it to about 5% lower in frequency than the driven element after you have it tuned.

Jim Francoeur KC1FB
----- Original Message -----
From: wwetbottom
To: loopantennas@yahoogroups.com
Sent: Monday, December 01, 2008 2:31 PM
Subject: [loopantennas] LOADING COILS FOR A LOOP ANTENNA?

MY HORNET II 2ELEMENT 6 METER CUBICAL QUAD IS RESONANT AT ABOUT 53 MHZ
DESPITE CONSTRUCTING THE DRIVEN ELEMENT FOR 50.1 MHZ. IF I MAKE
THE DRIVEN ELEMENT LONGER, THE REFLECTOR WILL BE TO SMALL. LENGTHS OF
THE SPREADER ARMS PRECLUDE MAKING THE WHOLE ANTENNA LARGER.
I THOUGH OF USING LOADING COIL(S)SO I COULD KEEP THE DIMENSIONS THE SAME
WHILE BRINGING THE LOWEST SWR DOWN TO THE LOW END OF 6 METERS. ANY IDEAS
ON WHERE TO PLACE THE COIL(S)IN THIS DIAMOND SHAPED QUAD?
OTHER OPTIONS ?
WILLARD

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.176 / Virus Database: 270.9.12/1822 - Release Date: 12/1/2008 8:23 AM

[Non-text portions of this message have been removed]

6037. Re: [loopantennas] Help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 02:18:37 UTC
From: Gary Pewitt
Topic: 4329 Message: 6037

Jim, do a google search for Select-A-Tenna I see one on Amazon.com but
it's $99.00 which I think is ridiculous.
I think I paid about $12.00 for mine used.
I also see a Terk Technology version from $28.29.

My select-a-tenna works very well with an ordinary AB broadcast receiver
. When I tried it with my SuperRadio III it didn't help much as the
radio has an rf amp and doesn't need the help.
There is also a powered Super Select-A-Tenna but it costs $199.95 new.
Should work quite well but I've never tried it.
Lots more hits on that search. Good luck. 73 Gary N9ZSV

jefeickert wrote:
>
> I am looking for the loop antenna that is about 2" wide and is about
> 8-12" dia.
> and it sits close to a radio bring in stations.
> I think they run around $60.00
> JIM
>
>

6038. Oldest coupler

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 02:36:51 UTC
From: WA1IBN
Topic: 6038 Message: 6038

John and Dean-O,
Thank you for a reply, I've sent a note and photo to the xtalset forum.

I should have originally included the info below.
It has only two posts so is in effect one winding.
This unit has continuity between the posts.
The name plate says "Trade Mark", "Simplex
Radio Company", "Phila, PA".
The size is 5 1/4 * 5 1/4 * 3 1/4 inches.

I'll post if any info is forth coming.

Herb Dean WA1IBN@...

[Non-text portions of this message have been removed]

6039. Re: Help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 03:03:54 UTC
From: jefeickert
Topic: 4329 Message: 6039

WOW They sure are costly. Maybe aI will go with a long wire on the Kenwood R1000-
>
>
>
> >
>

6040. Re: [loopantennas] Re: Help

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 03:56:53 UTC
From: Jim Dunstan
Topic: 4329 Message: 6040

At 03:03 AM 12/2/2008 +0000, you wrote:

>WOW They sure are costly. Maybe aI will go with a long wire on the Kenwood
>R1000-

Hi,

You could build your own ... such a form could be made from a crochet hoop which come in various sizes and can be found in craft stores. However, I believe the Kenwood R1000 does not have a ferrite tuned antenna and would not work with just close proximity to the loop. You would have to include a second pickup loop on the form. Some of the commercial models include this feature and some do not.

Jim

6041. Re: [loopantennas] Oldest coupler

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 04:20:11 UTC
From: Jim Francoeur KC1FB
Topic: 6038 Message: 6041

I just looked at your picture, and I have one exactly like yours in a crystal set (that looks like it was homebrew) as a portion of the tuning circuit. It has a label, saying it is made by Webster Electric Co. Racine, Wis, U.S.A.

Jim Francoeur KC1FB
----- Original Message -----
From: WA1IBN
To: loopantennas@yahoogroups.com
Sent: Monday, December 01, 2008 9:36 PM
Subject: [loopantennas] Oldest coupler

John and Dean-O,
Thank you for a reply, I've sent a note and photo to the xtalset forum.

I should have originally included the info below.
It has only two posts so is in effect one winding.
This unit has continuity between the posts.
The name plate says "Trade Mark", "Simplex
Radio Company", "Phila, PA".
The size is 5 1/4 * 5 1/4 * 3 1/4 inches.

I'll post if any info is forth coming.

Herb Dean WA1IBN@...

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.176 / Virus Database: 270.9.12/1822 - Release Date: 12/1/2008 8:23 AM

[Non-text portions of this message have been removed]

6042. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 08:28:57 UTC
From: C. Beijersbergen
Topic: 5773 Message: 6042

Maarten Hagg died in 2005. Friends of his kept his design available to others on:

http://wl1030.com/

To enter pages with the design details you have to register. This is without any obligation or other negative side effect. You can then see the schematics, parts lists and PCB layout.

>WL1030 by maartenhagg
>Wideband Magnetic Loop 10kHz - 30MHz
>http://home.hetnet.nl/~maartenmiriam/index.html

[Non-text portions of this message have been removed]

6043. Re: Oldest coupler

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 14:18:55 UTC
From: John
Topic: 6038 Message: 6043

--- Jim Francoeur KC1FB wrote:
>
> I just looked at your picture, and I have one exactly like yours in a crystal set (that looks like it was homebrew) as a portion of

> the tuning circuit. It has a label, saying it is made by Webster Electric Co. Racine, Wis, U.S.A.

There is one of these Webster units on EBay, with a claimed date of 1918!

http://cgi.ebay.com/WEBSTER-ELECTRIC-Wooden-Radio-Variometer---Circa-191\
8_W0QQitemZ180307397412QQcmdZViewItemQQimsxZ20081118?IMSfp=TL08111811700\
3r655
<http://cgi.ebay.com/WEBSTER-ELECTRIC-Wooden-Radio-Variometer---Circa-19\
18_W0QQitemZ180307397412QQcmdZViewItemQQimsxZ20081118?IMSfp=TL0811181170\
03r655>

John/AF4EX

[Non-text portions of this message have been removed]

6044. antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 22:54:08 UTC
From: jefeickert
Topic: 6044 Message: 6044

I have a Kenwood R-1000
In hooking up antenna I found 4 places in back of radio in a row
from left to right
Red MWANT Black GND Red SWb SWa(male plug)
below all that is a SW ANT select switch
which switch from SWa to SWb.
I think I know what the a/b switch is for
and I understand the Black is as well as the SWa (male)
But I don't know how to connect the 2 Red they are 1/2 X3/8 "
squares?
JIM

6045. Re: [loopantennas] antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 23:05:31 UTC
From: Don
Topic: 6044 Message: 6045

They are for a non coax antenna leadin like ladder line or just a wire.
Usually the impedance will be more than 50 ohms.

Don
Upland, CA

jefeickert wrote:
> I have a Kenwood R-1000
> In hooking up antenna I found 4 places in back of radio in a row
> from left to right
> Red MWANT Black GND Red SWb SWa(male plug)
> below all that is a SW ANT select switch
> which switch from SWa to SWb.
> I think I know what the a/b switch is for
> and I understand the Black is as well as the SWa (male)
> But I don't know how to connect the 2 Red they are 1/2 X3/8 "
> squares?
> JIM
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG - http://www.avg.com
> Version: 8.0.176 / Virus Database: 270.9.12/1824 - Release Date: 12/2/2008 9:31 AM
>
>

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.176 / Virus Database: 270.9.12/1824 - Release Date: 12/2/2008 9:31 AM

[Non-text portions of this message have been removed]

6046. Re: antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-02 23:16:41 UTC
From: John
Topic: 6044 Message: 6046

--- jefeickert wrote:
>
> I have a Kenwood R-1000

Jim, what you really need is the R-1000 manual, which explains all of these connectors and switches! (Nice little receiver, BTW)
http://www.rigpix.com/kenwood/r1000_manual.pdf
:-)
John/AF4EX

6047. Re: antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-03 10:12:09 UTC
From: jefeickert
Topic: 6044 Message: 6047

the manual I have and it tells what they are for
But Not how they hook on.
JIM

6048. found it

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-03 10:27:03 UTC
From: jefeickert
Topic: 6048 Message: 6048

never mind I figured it out " you push down on the top of the pole
it opens up and wire goes in"
DA never says that in the manual
JIM

6049. Introduction and questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-03 10:37:58 UTC
From: Paul M Tas
Topic: 6049 Message: 6049

Hello every one.

I'm a new licensed amateur of The Netherlands just got my call in October :) Was always intrested in amateur radio since a small child. Have a ts-520 for hf and a ts-700 for 2 meters. Been reading the news letter for a while though.

My questions is as follows:

1. I have a restriction in placeing an antenne, and wonderd if a 2m loop antenne will help in covering most of the reapeters close to me? I do have a small mobile antenne to use for genreal coverage but can only connect to 1 repeater at the moment, that is why the question.

2. If I make a magnetic loop antenne for 2m what is the gamma matsh for that loop? I know if I make a 30cm diameter loop the Ferreday loop wil be about 6cm, but what must the gamma matsh be for the 2m loop?

3. What is the best diameter for a 2m magnetic loop?

4. Where can I get information on Gamma Matsh for Magnetic Loop antenne's?

5. What is better the Gamma Matsh or the Ferreday Loop?

Gr Paul M Tas (PD0TAS .--. -.. ----- - .- ...)
Tel: +31622074502

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.176 / Virus Database: 270.9.13/1825 - Release Date: 12/2/2008 8:44 PM

[Non-text portions of this message have been removed]

6050. Re: [loopantennas] Introduction and questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-03 12:44:18 UTC
From: Jim Dunstan
Topic: 6049 Message: 6050

At 11:37 AM 12/3/2008 +0100, you wrote:

>Hello every one.
>
>I'm a new licensed amateur of The Netherlands just got my call in October
>:) Was always intrested in amateur radio since a small child. Have a
>ts-520 for hf and a ts-700 for 2 meters. Been reading the news letter for
>a while though.
>
>My questions is as follows:
>
>1. I have a restriction in placeing an antenne, and wonderd if a 2m loop
>antenne will help in covering most of the reapeters close to me? I do have
>a small mobile antenne to use for genreal coverage but can only connect to
>1 repeater at the moment, that is why the question.

Yes, a full size (1 wavelength) loop on 2 meters is a very good antenna ... far superior to a small mobile antenna (I assume you mean like a rubber duckie). However, you might consider making 2 loops .... one a driven element and the other a parasitic reflector or director ... a cubical quad ... which has further gain over a portable antenna and directional qualities.

>2. If I make a magnetic loop antenne for 2m what is the gamma matsh for
>that loop? I know if I make a 30cm diameter loop the Ferreday loop wil be
>about 6cm, but what must the gamma matsh be for the 2m loop?

Maybe I am missing something here. A square loop (easiest to construct) would be approximately 7 ft or 2.5 mtrs in circumference. About 1.75 ft or 53 cm to a side. This would be a full size 1 wavelength loop. Such a loop is self resonant at 2m frequency. It can be constructed of wire ... supported by a plastic frame or copper tubing that is self supporting. The usual method of coupling to a coax feed line is to use a gamma match not a faraday loop.

A small tuned loop (usually defined as 1/10 of a wavelength in circumference) is often coupled using a faraday loop nominally 1/5 the circumference of the main loop. However, a loop 53 cm on a side may look small but is in fact full size at 2m frequency.

There are many articles on the internet giving complete instructions on constructing such a loop for the 2mtr band.

Again I make assumptions that you are making a full size loop for 2m band .... not a portable antenna. I have used such an antenna and it is very efficient. It takes little additional effort to construct a second similar parasitic element giving additional gain and directivity. Heavy wire works well at low power.

I think this answers your other questions as well. Search the Internet for 2mtr loop antennas and you will find a number of full construction articles.

Jim,

VE3CI

6051. Re: [loopantennas] Introduction and questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-03 12:56:08 UTC
From: Jim Dunstan
Topic: 6049 Message: 6051

At 11:37 AM 12/3/2008 +0100, you wrote:

>Hello every one.
>
>I'm a new licensed amateur of The Netherlands just got my call in October
>:) Was always intrested in amateur radio since a small child. Have a
>ts-520 for hf and a ts-700 for 2 meters. Been reading the news letter for
>a while though.

Jim hr again.

If you search the internet some of the best articles are found under '2mtr cubical quad'. If you just want a single loop then just leave the second element off hi hi.

73

Jim, VE3CI

6052. Re: [loopantennas] Introduction and questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-03 18:57:24 UTC
From: Paul M Tas
Topic: 6049 Message: 6052

Hello Jim

My problem here is I don't have space to do a number of quad's. I have to make it so that only one loop can work in my situation. I have to make it so that I can turn it on a pvc pipe so that its easy to turn around and easy to tune the cap. So a quad is out of the question for me like you said a director and reflector I can't use at this stages. I looked around for a 2m magnetic loop and found one and made out of -+ 3mm wire/rod and the curcramfrince is about 54cm so its not that big and I can use it in my home/flat. Will keep you all up to date. Only now I need to find a 0.. to 20 pf cap.

Yes, a full size (1 wavelength) loop on 2 meters is a very good antenna .. far superior to a small mobile antenna (I assume you mean like a rubber duckie). However, you might consider making 2 loops .... one a driven element and the other a parasitic reflector or director ... a cubical quad .. which has further gain over a portable antenna and directional qualities.

>2. If I make a magnetic loop antenne for 2m what is the gamma matsh for
>that loop? I know if I make a 30cm diameter loop the Ferreday loop wil be
>about 6cm, but what must the gamma matsh be for the 2m loop?

What I ment was that what is the length of the gamma matsh when you build a loop. Thing is I know what the curcramfrince is of the matshing loop is 1/5 of the big loop but what is the length of the gamma matsh???????

Maybe I am missing something here. A square loop (easiest to construct) would be approximately 7 ft or 2.5 mtrs in circumference. About 1.75 ft or 53 cm to a side. This would be a full size 1 wavelength loop. Such a loop is self resonant at 2m frequency. It can be constructed of wire ... supported by a plastic frame or copper tubing that is self supporting. The usual method of coupling to a coax feed line is to use a gamma match not a faraday loop.

A small tuned loop (usually defined as 1/10 of a wavelength in circumference) is often coupled using a faraday loop nominally 1/5 the circumference of the main loop. However, a loop 53 cm on a side may look small but is in fact full size at 2m frequency.

There are many articles on the internet giving complete instructions on constructing such a loop for the 2mtr band.

Again I make assumptions that you are making a full size loop for 2m band ... not a portable antenna. I have used such an antenna and it is very efficient. It takes little additional effort to construct a second similar parasitic element giving additional gain and directivity. Heavy wire works well at low power.

I think this answers your other questions as well. Search the Internet for
2mtr loop antennas and you will find a number of full construction articles.

Jim,

VE3CI

Gr Paul M Tas (PD0TAS .--. -.. ----- - .- ...)
Tel: +31622074502

PS: why I write so big is I'm busy getting blind and ask to be eccused for the big letters.

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.176 / Virus Database: 270.9.13/1825 - Release Date: 12/2/2008 8:44 PM

[Non-text portions of this message have been removed]

6053. Re: [loopantennas] Introduction and questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-03 19:20:44 UTC
From: brian russell
Topic: 6049 Message: 6053

Paul,
Have a Google search for details of building a 2m Moxon Loop,
a compact single element antenna, no fancy tuning, ' just cut and go '
great F/B ratio.
W3RNL site had a ' stand alone ' calculator for them.
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

6054. Gregory Browne

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 08:45:42 UTC
From: David
Topic: 6054 Message: 6054

As in the title, who is this person ??

I keep receiving grouply invitations from them and I'm getting pissed
off with receiving them.

David
GM7UED
Aberdeen

6055. Grouply? Re: Gregory Browne

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 14:30:34 UTC
From: Steve
Topic: 6054 Message: 6055

Normally I'd not want this discussed on the list but I'd like to know
if others are receiving these. I don't want this to take on a life of
its own, though.

Greg is a member of this list.

Greg?

At this point I consider Grouply invitations spam. I've received them
personally and as a moderator of groups and I am sick of it. I won't
immediately condemn anyone for having their name attached to a Grouply
invitation.

Steve Greenfield
Your friendly neighborhood moderator

--- In loopantennas@yahoogroups.com, "David" <gm7ued@...> wrote:
>
> As in the title, who is this person ??
>
> I keep receiving grouply invitations from them and I'm getting pissed
> off with receiving them.
>
> David
> GM7UED
> Aberdeen
>

6056. Re: Introduction and questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 16:03:14 UTC
From: tenorman1952
Topic: 6049 Message: 6056

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
> >My questions is as follows:
> >
> >1. I have a restriction in placeing an antenne, and wonderd if a 2m loop
> >antenne will help in covering most of the reapeters close to me? I do have
> >a small mobile antenne to use for genreal coverage but can only connect to
> >1 repeater at the moment, that is why the question.

I've been using a 2m J-pole with good success. It is on the top of a 20' (6m) mast, and I easily hit a repeater 45 miles (72 km) away with only 8 watts.

Paul C.
AE5JU

6057. Grouply? Re: Gregory Browne

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 16:38:03 UTC
From: cank13cat
Topic: 6054 Message: 6057

Yeh, I started receiving Grouply invitations this year. No idea on which Yahoo group it might have started since I'm on several, all radio related. No biggie, I just delete 'em and block the sender. Some folks who tried Grouply didn't realize that what they considered personal information such as mailing lists might be hijacked for spamming by Grouply.

--- In loopantennas@yahoogroups.com, "Steve" <alienrelics@...> wrote:
>
> ...I consider Grouply invitations spam...

6058. Re: [loopantennas] Grouply? Re: Gregory Browne

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 17:40:39 UTC
From: Paul V Birke PEng
Topic: 6054 Message: 6058

At this point I consider Grouply invitations spam.

en francaisexactement

this is the ONLY way to treat them

Paul in Guelph

[Non-text portions of this message have been removed]

6059. Re: Grouply.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 19:27:48 UTC
From: Hanner Montanner
Topic: 6059 Message: 6059

I receive them and generally delete them. I have little enthusiasm to join a group that wants info from me first when I know little about them. H.M.

6060. Re: Grouply.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 20:39:15 UTC
From: Mike
Topic: 6059 Message: 6060

--- In loopantennas@yahoogroups.com, Hanner Montanner <vasaloj@...>
wrote:
>
> I receive them and generally delete them. I have little enthusiasm
to join a group that wants info from me first when I know little about
them. H.M.
>
I receive the Grouply invites too. I also quit joining other groups. I
joined the "BC780 XLT cellmod" group and all I've seen so far is a
bunch of people looking for dates or to get together. Haven't seen a
thing about a scanner.

6061. oil filled cap

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 20:59:20 UTC
From: dean_0_way
Topic: 6061 Message: 6061

Hi
A while back there was a disscusion about putting oil around a tuning capacitor, i was snooping on the bay today and found this ?
http://cgi.ebay.com/Oil-Filled-Variable-Capacitor-w-gear-head-servo-drive_W0QQitemZ180311141442

and with a drive too!

Dean-0

6062. Re: oil filled cap

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-05 02:36:33 UTC
From: Paul Norman
Topic: 6061 Message: 6062

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> Hi
> A while back there was a disscusion about putting oil around a tuning
> capacitor, i was snooping on the bay today and found this ?
> http://cgi.ebay.com/Oil-Filled-Variable-Capacitor-w-gear-head-servo-
> drive_W0QQitemZ180311141442
>
> and with a drive too!
>
> Dean-0
>

Is this what you were referring to?: http://tinyurl.com/5wjde4

This Group doesn't seem to handle those extra-long URLs very well.
Consider using TinyUrl at: http://tinyurl.com/

Regards, Paul Norman [From the Left Coast]

6063. Re: [loopantennas] Gregory Browne

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-04 21:12:39 UTC
From: Howard Bingham
Topic: 6054 Message: 6063

The list owner/moderator needs to go into the subscriber data base & ban the member (If really a Loopantennas member..

Best thing to do, hit the delete button..

If you know how to write "kill file" filters for your e-mail client, make one that filters out any message in subject line that includes the "Grouply" name..

The subscriber if reading this, needs to find a NEW ISP, as once password & security code is given Grouply, their address can be used by anyone with Grouply access to spam everyone in their address book. (If the subscriber is using a Yahoo.com address, they need to drop Yahoo.com & get some other web mail address on another service such as Hotmail, as their computer has been compromised as long as they maintain a Yahoo account.).

In short: DELETE anything that says GROUPLY..! It is nothing but bad news..!

Howard Bingham
KE5APJ

--

David wrote:

> As in the title, who is this person ??
>
> I keep receiving grouply invitations from them and I'm getting pissed
> off with receiving them.
>
> David
> GM7UED
> Aberdeen
>
.

6064. Re: [loopantennas] Re: oil filled cap

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-05 20:35:28 UTC
From: Andy
Topic: 6061 Message: 6064

> This Group doesn't seem to handle those extra-long URLs very well.

Actually, it's not the Group. It's probably the sender's email program that does the line-wraps.

I save mine as a Draft first, which lets me see what it will look like before it leaves me.

Andy

6065. To Jim Francoeur KC1FB

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-05 22:53:59 UTC
From: WA1IBN
Topic: 6065 Message: 6065

Hello Jim,
I didn't see an address to use to contact you off forum.

If you had a schematic you could send me of the crystal
set, I would like to build one using the coupler I have.
I think it would be a fitting tribute to my mentor of so many
years ago.

Thanks for considering. Herb Dean WA1IBN@...

[Non-text portions of this message have been removed]

6066. Variometer for transmitting (supersized)

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-06 20:26:34 UTC
From: gplynas
Topic: 6066 Message: 6066

For those interested in variometers, I've uploaded photos to an album of a VLF transmitting variometer which I repaired and upgraded a couple of years ago. Size is about 25 feet high. The variometer is wound with litz wire about 2 inches in diameter. This is part of an antenna tuning network for about 100 to 150 kHz.
Regards,
Paul
WA5LFY

6067. Re: [loopantennas] Gregory Browne

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-07 16:07:35 UTC
From: Andy
Topic: 6054 Message: 6067

> In short: DELETE anything that says GROUPLY..! It is nothing but bad
> news..!

I almost agree with you.

However, there's a couple of members on another ham radio oriented group I belong to, who wisely use Grouply, and I and the group have never seen any spam or other junk from these folks. The only reason I know they use Grouply, is a 1-line mention of it at the bottom of their emails.

So it is possible to use Grouply and not have trouble. But you need to know to change the settings, to make Grouply behave.

(I am not in favor of indiscriminately banning anyone who uses Grouply. Only those whose use of it results in unwanted junk for the rest of us.)

Andy

6068. ACOPLADOR E LOOPSTICK

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-07 16:21:14 UTC
From: Eduardo
Topic: 6068 Message: 6068

Boa tarde!

Ainda restam algumas pe?as da antena Loopstick GE e do Acoplador Indutivo para Ondas M?dias e Ondas Curtas.
Caso tenham interesse, contactar atrav?s do e-mail: adcas@...
ou pelo site www.radiodx.qsl.br ou www.radiodx.com.br

Atenciosamente,

Eduardo

[Non-text portions of this message have been removed]

6069. Re: [loopantennas] LOADING COILS FOR A LOOP ANTENNA?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-07 17:29:28 UTC
From: Willard Wetbottom
Topic: 6031 Message: 6069

JIM, THANKS FOR THE TIP. THIS MAY WELL BE THE SOLUTION BUT ITS GETTING TO
COLD AND SNOWY. IT MAY HAVE TO AWAIT SPRING AND THE ARRIVAL OF AND
ANTENNA ANALYZER.

PETE / WA2LPW

--- On Mon, 12/1/08, Jim Francoeur KC1FB <kc1fb@...> wrote:
From: Jim Francoeur KC1FB <kc1fb@...>
Subject: Re: [loopantennas] LOADING COILS FOR A LOOP ANTENNA?
To: loopantennas@yahoogroups.com
Date: Monday, December 1, 2008, 8:37
PM

Put a stub in the reflector near a corner and tune it to about 5% lower in frequency than the driven element after you have it tuned.

Jim Francoeur KC1FB

----- Original Message -----

From: wwetbottom

To: loopantennas@ yahoogroups. com

Sent: Monday, December 01, 2008 2:31 PM

Subject: [loopantennas] LOADING COILS FOR A LOOP ANTENNA?

MY HORNET II 2ELEMENT 6 METER CUBICAL QUAD IS RESONANT AT ABOUT 53 MHZ

DESPITE CONSTRUCTING THE DRIVEN ELEMENT FOR 50.1 MHZ. IF I MAKE

THE DRIVEN ELEMENT LONGER, THE REFLECTOR WILL BE TO SMALL. LENGTHS OF

THE SPREADER ARMS PRECLUDE MAKING THE WHOLE ANTENNA LARGER.

I THOUGH OF USING LOADING COIL(S)SO I COULD KEEP THE DIMENSIONS THE SAME

WHILE BRINGING THE LOWEST SWR DOWN TO THE LOW END OF 6 METERS. ANY IDEAS

ON WHERE TO PLACE THE COIL(S)IN THIS DIAMOND SHAPED QUAD?

OTHER OPTIONS ?

WILLARD

------------ --------- --------- --------- --------- --------- -

No virus found in this incoming message.

Checked by AVG - http://www.avg. com

Version: 8.0.176 / Virus Database: 270.9.12/1822 - Release Date: 12/1/2008 8:23 AM

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6070. Three question about Loop Antenna Construction - Wanting something for LF band.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-07 21:49:16 UTC
From: sernstfortin
Topic: 6070 Message: 6070

Loop Antenna Calculator predicts the loop antenna I'm currently constructing will be put into resonance in the MW band, but I'd really like to tune it in the LF band.

Actually, I'd like something that tuned from 30KHz to 500KHz. I must be dreaming, right?

Three questions.
First: if I have a simple rectangular loop, and I'm constrained by how much wire I use and it's spacing, can I artifically add capacitance in parallel to the tuning capacitor, and inductance in series with the main resonant coil to shift the low- and high- tuning extents of the antenna, or am I just shooting myself in the foot?

Second (2 parts): most if not all the loop designs I've looked at use one coil for the pickup or sensing coil. Can I use multiple windings, and is there anything that says it can't be wound at the same extents of the main loop, or must it reside inside of the resonant main loop?

Third: do I need to use a pre-amp on the sensing loop brought back to the radio?

6071. ? inductance

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 04:43:33 UTC
From: dean_0_way
Topic: 6071 Message: 6071

I'm using Bruce Carters formula calculator;
http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

My question is ? In making an air loop is the point to make the inductance as high as possible to have maximum gain ,or is there a limit to how much inductance you should try to get in the loop ?

Another Question i had is , is there a way to block a Freq. I have a AM station 2 blocks away, I thought if i could block that single Freq, it wouldn't overload my reciever ?

Thanks ,,
Dean_0

6072. Re: [loopantennas] Three question about Loop Antenna Construction - Wanting something for LF band.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 05:22:45 UTC
From: Jim Dunstan
Topic: 6070 Message: 6072

At 09:49 PM 12/7/2008 +0000, you wrote:

>Loop Antenna Calculator predicts the loop antenna I'm currently
>constructing will be put into resonance in the MW band, but I'd really
>like to tune it in the LF band.
>
>Actually, I'd like something that tuned from 30KHz to 500KHz. I must be
>dreaming, right?

The range may be a little large .. You may need to do some switching of turns and/or capacitance.

>Three questions.
>First: if I have a simple rectangular loop, and I'm constrained by how
>much wire I use and it's spacing, can I artifically add capacitance in
>parallel to the tuning capacitor, and inductance in series with the
>main resonant coil to shift the low- and high- tuning extents of the
>antenna, or am I just shooting myself in the foot?

Not sure what you mean 'artificial' .... you certainly can connect 1, 2, or 3 capacitors in parallel to lower the range. You can also tap the loop to lower/raise inductance.

>Second (2 parts): most if not all the loop designs I've looked at use
>one coil for the pickup or sensing coil. Can I use multiple windings,
>and is there anything that says it can't be wound at the same extents
>of the main loop, or must it reside inside of the resonant main loop?

The pickup loop is usually 1 to 3 turns (untuned) in proximity to the tuned loop. The pickup loop is tricky ... in my experience the inductive coupling has great effect on the efficiency of the tuned loop. Too much coupling lowers the Q ... it is best if you can adjust coupling.

>Third: do I need to use a pre-amp on the sensing loop brought back to
>the radio?

A tuned loop usually provides sufficient signal for modern receivers .... in this case the coupling is adjusted for a compromise between maximum signal transfer and best loop selectivity (Q). If you are designing an untuned loop a pre-amplifier is usually necessary ... and is best located right at the feed point to the loop.

Jim

6073. Re: Three question about Loop Antenna Construction - Wanting something for LF ba

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 05:49:48 UTC
From: sernstfortin
Topic: 6070 Message: 6073

Jim wrote:
> Not sure what you mean 'artificial' .... you certainly can connect
1, 2, or
> 3 capacitors in parallel to lower the range. You can also tap the
loop to
> lower/raise inductance.
>

OK. I can add capacitance. What type of capacitor would be necessary? Non-polarized, non ceramic?

Can I add an inductor in series with the coil? ;)

You mentioned the sensing coil... If the loop is square, can the sensing coil be round? What else can you tell me based on your experiences?

Your responses have been very helpful, thank you.

6074. Re: [loopantennas] ? inductance

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 14:41:12 UTC
From: Chris Trask
Topic: 6071 Message: 6074

>
>I'm using Bruce Carters formula calculator;
>http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm
>
>My question is ? In making an air loop is the point to make the
>inductance as high as possible to have maximum gain ,or is there a
>limit to how much inductance you should try to get in the loop ?
>

It's a bit difficult to explain in text form. The inductance and resistance of the loop are not directly related, and the loop actually takes on the form of a shorted transmission line after a point, while the resiatance has it's own characteristics. The guiding quantity is the antenna efficiency, which happens to coincide at about the point where the inductance makes that transition, and before the resistance becomes asymptotic (sp?). I wrote about this in:

"Active Loop Aerials for HF Reception, Part 1: Practical
Loop Aerial Design," QEX, Jul/Aug 2003, pp. 35-42.

>
>Another Question i had is , is there a way to block a Freq. I have a
>AM station 2 blocks away, I thought if i could block that single
>Freq, it wouldn't overload my reciever ?
>

Yes, you can put a high-Q parallel-resonant trap in the feedline between the antenna and the receiver, if it's a single station. If it's multiple stations, then a sharp highpass filter would be a better option.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6075. Re: [loopantennas] ? inductance

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 18:34:54 UTC
From: Samuel Ernst-Fortin
Topic: 6071 Message: 6075

Chris,
Can you take a loop and treating it like an LC circuit in resonance, add some parallel capacitance via capacitor, and series inductance via inductors and shift things into the band you ideally want?

I got the makings of a decent AM/MW loop predicted by Carter's formula which I want to bring down to the LF band below 500KHz without doing too much to it.

And:
I have an RF signal generator.. Can I attach a small whip to it say, then attach the loop to my radio and check resonance / operation that way so I have an idea of how it'll work before sticking it outside?

It's getting cold down south.

Thanks,

Another poster wrote:
>
>I'm using Bruce Carters formula calculator;
>http://www.mindspri ng.com/~loop_ antenna/umr_ emc_calc. htm
>
>My question is ? In making an air loop is the point to make the
>inductance as high as possible to have maximum gain ,or is there a
>limit to how much inductance you should try to get in the loop ?
>

Chris wrote:
>>
It's a bit difficult to explain in text form. The inductance and resistance of the loop are not directly related, and the loop actually takes on the form of a shorted transmission line after a point, while the resiatance has it's own characteristics. The guiding quantity is the antenna efficiency, which happens to coincide at about the point where the inductance makes that transition, and before the resistance becomes asymptotic (sp?). I wrote about this in:

"Active Loop Aerials for HF Reception, Part 1: Practical
Loop Aerial Design," QEX, Jul/Aug 2003, pp. 35-42.
>>

6076. Re: [loopantennas] Re: Three question about Loop Antenna Construction - Wanting something for LF ba

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 18:46:24 UTC
From: Jim Dunstan
Topic: 6070 Message: 6076

At 05:49 AM 12/8/2008 +0000, you wrote:

>Jim wrote:
> >
>
>OK. I can add capacitance. What type of capacitor would be necessary?
>Non-polarized, non ceramic?

I have never used fixed value capacitors ..... You would use values with low dielectric loss ... perhaps others might suggest quality fixed value capacitor types. I have used multi unit capacitors ... eg. a capacitor with 2 or more gangs ... e.g. they might be 365 pfd per gang on the same shaft. You could use just one ... switch in a second ... switch in a third.

>Can I add an inductor in series with the coil? ;)

I suppose you could use a switched in series inductor .... although I have not done this. Switching in a series inductor would indeed increase the total inductance in the circuit allowing resonance at a lower frequency. As mentioned before, I have changed inductance by reducing the number of turns on the loop itself by shorting them out. This starts with maximum inductance and reduces inductance as turns are shorted out thus raising the resonant frequency.

>You mentioned the sensing coil... If the loop is square, can the
>sensing coil be round? What else can you tell me based on your
>experiences?

Yes, one loop doesn't exactly care what the shape of the other loop is hi hi ... but as i mentioned, the loops interact and the best performance is a balance. A Goldylocks situation ... not too much and not too little .... but just right. I have found it best if the pickup loop can be physically adjusted for best coupling. In order to achieve this requires that they are moveable in relation to each other. Maximum coupling occurs when the main and pickup loop are in the same plane. Thus, rotating the pickup loop in relation to the main loop will reduce coupling .... with minimum when they are 90 deg to each other. A mechanical problem hi hi.

You mentioned filtering out signals ... this is possible with dual loops .... one loop tuned to the desired frequency/station and the second loop tuned to the frequency of the offending station splashing over. Carefully move the loops together (until coupling is just right) and the second loop actually appears to 'suck out the offending signal). The second (sucking loop) does not have to be large ... but high Q.

I must mention that my tuned loop experimentation has been either for mw ... 540-1700 or SW in the 5-15 mhz range. All previous comments were related to MW tuned loops.

>Your responses have been very helpful, thank you.
>
>

[Non-text portions of this message have been removed]

6077. Re: [loopantennas] ? inductance

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 20:06:14 UTC
From: Chris Trask
Topic: 6071 Message: 6077

Tuning loop antennas is a tricky business, and so far I have only found single-frequency series tuning to be satisfactory overall, though some people do like to tune them in parallel into a high-impedance amplifier. I've tried all sorts of methods, and my opinion is a result of years of experience and quite a few disappointments.

Earlier this year I looked into the possibility of wide-band matching a loop for just a narrow band of frequencies, such as the 40M band. The results were more than just disappointing, and despite that I published the results here:

http://www.home.earthlink.net/~christrask/Paper010.html

That, however, led me into looking into a passive method of series-tuning a loop antenna, and the results were much better than I had anticipated, such that I retired my earlier active loop and now use this for the 49-25m bands:

http://www.home.earthlink.net/~christrask/Paper011.html

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Samuel Ernst-Fortin" <sernstfortin@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, December 08, 2008 11:34 AM
Subject: Re: [loopantennas] ? inductance

> Chris,
> Can you take a loop and treating it like an LC circuit in resonance, add

some parallel capacitance via capacitor, and series inductance via inductors and shift things into the band you ideally want?
>
> I got the makings of a decent AM/MW loop predicted by Carter's formula which I want to bring down to the LF band below 500KHz without doing too much to it.
>
> And:
> I have an RF signal generator.. Can I attach a small whip to it say, then attach the loop to my radio and check resonance / operation that way so I have an idea of how it'll work before sticking it outside?
>
> It's getting cold down south.
>
> Thanks,
>
> Another poster wrote:
> >
> >I'm using Bruce Carters formula calculator;
> >http://www.mindspri ng.com/~loop_ antenna/umr_ emc_calc. htm
> >
> >My question is ? In making an air loop is the point to make the
> >inductance as high as possible to have maximum gain ,or is there a
> >limit to how much inductance you should try to get in the loop ?
> >
>
>
> Chris wrote:
> >>
> It's a bit difficult to explain in text form. The inductance and resistance of the loop are not directly related, and the loop actually takes on the form of a shorted transmission line after a point, while the resiatance has it's own characteristics. The guiding quantity is the antenna efficiency, which happens to coincide at about the point where the inductance makes that transition, and before the resistance becomes asymptotic (sp?). I wrote about this in:
>
> "Active Loop Aerials for HF Reception, Part 1: Practical
> Loop Aerial Design," QEX, Jul/Aug 2003, pp. 35-42.
> >>
>
>
>
>
>

6078. Re: [loopantennas] ? inductance

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 23:23:34 UTC
From: Ray Phillips
Topic: 6071 Message: 6078

Dean_0,

the gain of a loop is a function of its cross-sectional area. The larger the area within the loop perimeter, the larger the gain. But, as with most things, there is a natural limit.

Every loop has a natural inductance and capacitance and therefore has a natural resonant frequency. As the loop gets bigger (or more turns) the inductance and capacitance rises and the natural resonant frequency drops. This is one of the basic priciples for making efficient loops - make the loop so that it's resonant frequency is just above the band of interest and then use the variable capacitor to tune down into the band.

If you add series inductance, the gain will not rise because the loop area has not changed, but the resonance of the loop will drop. I have never heard of anyone adding parallel inductance to a loop but it would make an interesting experiment.

As for blocking (filtering) a frequency.

1. You can rotate the loop until a low gain direction (null point) is pointed at the unwanted station - this will minimise the gain of the loop from that direction and reduce the unwanted signal. Each loop has two null points 180 degrees apart. This nulling ability is one of the benefits of loop antennas.

2. Using an inductor and capacitor, make a PARALLEL tuned circuit whose resonant frequency matches that of the unwanted station. A parallel resonant circuit (sometimes also called a tank circuit) has its HIGHEST impedance at its resonant frequency and so it acts as a barrier to that frequency when in series with the signal. Note: it does not have to be a loop and you could use turns of wire around a ferrite rod for low frequencies or a few turns air wound for higher frequencies or an RF choke of the right value bought from a parts supplier. Because capacitors are notoriously imperfect, it is best to use a trimmer capacitor so that the exact resonant frequency can be tuned. Put this tuned circuit in series with the signal.

3. Using an inductor and capacitor make a SERIES resonant circuit similar to the methods used for the parallel circuit. A series resonant circuit offers its LOWEST impedance at the point of resonance and if placed in parallel with the signal will appear to be a short circuit at the resonant frequency and so drop the signal level of the unwanted frequency.

The formula for calculating the resonant frequency of an LC circuit (it's the same for both series and parallel) is 1 / 2PI x SQRT(LC) where the inductance is in henries and the capacitance in farads.

There is nothing stopping you from making the series or parallel tuned filter circuit with a variable capacitor so that you can change the frequency of the station being tuned out. You could also use a series resonant circuit and a parallel resonant circuit in combination to get even more unwanted signal rejection. OR, if you are getting problems from two stations, using two tuned circuits tuned to one unwanted station each, to reject both of them.

There are a few caveats, however;

if the unwanted frequency is too close to your wanted frequency, the filter will lower the wanted signal also. Nulling is the best option here.

Each filter will lower the wanted signal a bit; this is called insertion loss. Too many filters and insertion loss becomes a problem.

Filters can also affect the tuning of the loop if they are too close (electrically close) to the loop. One solution is to use a wide bandwidth amplifier at the loop and place the filters after the amplifier. This uses the amplifier as a "signal buffer" - the filters are electrically isolated from the loop and so the filters do not interact with the loop tuning.

With your nuisance station so close you might like to try these additional things. Put your radio in an earthed metal box (a box made from bird wire will do) to stop any direct radiation into the radio. If you have external speakers, wrap about ten turns of each speaker lead around a ferrite rod close to the radio end of the wires. Use a mains filter or run the radio from batteries (also inside the metal box).

Hope I haven't confused you.

Ray
vk5ugs

> I'm using Bruce Carters formula calculator;
> http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm
>
> My question is ? In making an air loop is the point to make the
> inductance as high as possible to have maximum gain ,or is there a
> limit to how much inductance you should try to get in the loop ?
>
> Another Question i had is , is there a way to block a Freq. I have a
> AM station 2 blocks away, I thought if i could block that single
> Freq, it wouldn't overload my reciever ?
>
> Thanks ,,
> Dean_0
>
>

All the best,
Ray

6079. Re: [loopantennas] ? inductance

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-09 00:02:55 UTC
From: Samuel Ernst-Fortin
Topic: 6071 Message: 6079

I hope I have this correct, by the nature of the equation for Fo, to get to a lower resonant frequency, either capacitance, inductance or both need to go up.

If that were the goal (as in my case because I want to take a resonant loop in the MW range and move it down into the LW range), I would add capacitance in parallel with the tuning capacitor across the main resonant loop, or if going the inductance route, i would add an inductor in series with the tuning capacitor.

I would think nothing comes for free, and thus doing either of those things might lower the level of the signal available for exciting the sensing loop, all other things remaining the same. Maybe I have that wrong, but it's what I'd expect.

Adding parallel inductance would lower overall L, and increase Fo, just as if someone added series capacitance, overall C would drop and increase Fo.

Ray wrote:
>>
Dean_0,

the gain of a loop is a function of its cross-sectional area. The larger the area within the loop perimeter, the larger the gain. But, as with most things, there is a natural limit.

Every loop has a natural inductance and capacitance and therefore has a natural resonant frequency. As the loop gets bigger (or more turns) the inductance and capacitance rises and the natural resonant frequency drops. This is one of the basic priciples for making efficient loops - make the loop so that it's resonant frequency is just above the band of interest and then use the variable capacitor to tune down into the band.

If you add series inductance, the gain will not rise because the loop area has not changed, but the resonance of the loop will drop. I have never heard of anyone adding parallel inductance to a loop but it would make an interesting experiment.
>>

6080. For Sale Wellbrook ALA 1530+ loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-08 16:29:07 UTC
From: spudie14
Topic: 6080 Message: 6080

Have a wellbrook ala1530+ loop that i no longer use and would like to sell sold the loop a couple of moths ago but the buyer was in brazil and postage turned out to be a major problem in getting it there as outsize items to brazil are a joke in the prices they charge for shipping so loop is back up for sale again looking for $300 plus shipping thanks Edd

6081. Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-09 13:10:40 UTC
From: Sal
Topic: 6081 Message: 6081

I have a fairly unique situation - the top of my house house a pentagonal cupola with a roof overhang of two feet. This creates a pentagon with sides of about 11 feet. The cupola roof sits at 32 feet above the ground.

Here is my question: What kind of a loop antenna can I create by winding wire around the fascia board? I can also extend rods from each vertex to add length to the sides. Since I have plenty of space, I will also probably install a longwire and/or some other wire antenna stretching from a mast outwards.

So I guess my question revolves around how best to utilize the cupola space. My listening area will be under the cupola about 10 below it (my home is a geodesic dome) and I could install a movable sensing loop up near the plane of the outside loop but inside the building. I could also build the loop inside the cupola, but that would be visually intrusive and induce unwanted signals from my wife!

6082. Re: [loopantennas] For Sale Wellbrook ALA 1530+ loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-09 19:56:09 UTC
From: tmartin831@aol.com
Topic: 6080 Message: 6082

Always helps to list your location.

In a message dated 12/9/2008 9:58:13 A.M. Eastern Standard Time,
riches1234@... writes:

Have a wellbrook ala1530+ loop that i no longer use and would like to
sell sold the loop a couple of moths ago but the buyer was in brazil
and postage turned out to be a major problem in getting it there as
outsize items to brazil are a joke in the prices they charge for
shipping so loop is back up for sale again looking for $300 plus
shipping thanks Edd

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

**********Make your life easier with all your friends, email, and
favorite sites in one place. Try it now.
(http://www.aol.com/?optin=new-dp&icid=aolcom40vanity&ncid=emlcntaolcom00000010)

[Non-text portions of this message have been removed]

6083. Re: [loopantennas] For Sale Wellbrook ALA 1530+ loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-09 20:20:29 UTC
From: Brant Hunt
Topic: 6080 Message: 6083

Dear Sir,
  I have some interest in your wellbrook antenna ALA 1530+ loop antenna. Question is the antenna in good shape? Could you sent photos of the loop? Does this loop have a metric threads on the end? My email is branthunt@... Thank you. Brant

--- On Mon, 12/8/08, spudie14 <riches1234@...> wrote:

From: spudie14 <riches1234@...>
Subject: [loopantennas] For Sale Wellbrook ALA 1530+ loop antenna
To: loopantennas@yahoogroups.com
Date: Monday, December 8, 2008, 11:29 AM

Have a wellbrook ala1530+ loop that i no longer use and would like to
sell sold the loop a couple of moths ago but the buyer was in brazil
and postage turned out to be a major problem in getting it there as
outsize items to brazil are a joke in the prices they charge for
shipping so loop is back up for sale again looking for $300 plus
shipping thanks Edd

[Non-text portions of this message have been removed]

6084. Re: Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-09 22:08:37 UTC
From: Hiram
Topic: 6081 Message: 6084

Sal,
I checked one of the many online calculators link here:
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=15196

and it came up with a resonant frequency of 18 mhz with one turn of wire around the periphery (55 feet) you can lower the frequency by adding capacitance across it, or adding more turns.

For more in depth replies, it would help to know what bands you normally listen to, what kind of radio you have, etc.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "Sal" <sal.cerda@...> wrote:
>
> I have a fairly unique situation - the top of my house house a
> pentagonal cupola with a roof overhang of two feet. This creates a
> pentagon with sides of about 11 feet. The cupola roof sits at 32 feet
> above the ground.
>
> Here is my question: What kind of a loop antenna can I create by
> winding wire around the fascia board? I can also extend rods from
> each vertex to add length to the sides. Since I have plenty of space,
> I will also probably install a longwire and/or some other wire antenna
> stretching from a mast outwards.
>
> So I guess my question revolves around how best to utilize the cupola
> space. My listening area will be under the cupola about 10 below it
> (my home is a geodesic dome) and I could install a movable sensing
> loop up near the plane of the outside loop but inside the building. I
> could also build the loop inside the cupola, but that would be
> visually intrusive and induce unwanted signals from my wife!
>

6085. Re: [loopantennas] Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-10 04:54:09 UTC
From: Jim Dunstan
Topic: 6081 Message: 6085

At 01:10 PM 12/9/2008 +0000, you wrote:

>I have a fairly unique situation - the top of my house house a
>pentagonal cupola with a roof overhang of two feet. This creates a
>pentagon with sides of about 11 feet. The cupola roof sits at 32 feet
>above the ground.
>
>Here is my question: What kind of a loop antenna can I create by
>winding wire around the fascia board? I can also extend rods from
>each vertex to add length to the sides. Since I have plenty of space,
>I will also probably install a longwire and/or some other wire antenna
>stretching from a mast outwards.
>
>So I guess my question revolves around how best to utilize the cupola
>space. My listening area will be under the cupola about 10 below it
>(my home is a geodesic dome) and I could install a movable sensing
>loop up near the plane of the outside loop but inside the building. I
>could also build the loop inside the cupola, but that would be
>visually intrusive and induce unwanted signals from my wife!

It sounds like a delightful loop frame. My first question is what do you want to do with the loop. The only clue is the mention of a possible sensing loop below the cupola which would leave me to believe it is for listening to something hi hi.

In any event simply putting a wire outside around the outer edge would produce a 55' horizontal loop that is naturally resonant at around 18 mhz and extending the corners with rods would easily give you between 70 and 80 ft. Such an antenna (single turn) would make an excellent transmitting antenna. You would either feed it with ladder line to a tuner at the operating position below the cupola or put an automatic antenna tuner like made by SGC right up at the feed point (outside at one of the corners).

If just for listening ... eg SW ... feed it with RG58 coax to a simple tuner and you would get excellent reception across the SW bands.

Jim, VE3CI

6086. Re: Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-10 15:57:30 UTC
From: tenorman1952
Topic: 6081 Message: 6086

--- In loopantennas@yahoogroups.com, "Sal" <sal.cerda@...> wrote:
>
> I have a fairly unique situation - the top of my house house a
> pentagonal cupola with a roof overhang of two feet. This creates a
> pentagon with sides of about 11 feet. The cupola roof sits at 32
feet
> above the ground.
>
> Here is my question: What kind of a loop antenna can I create by
> winding wire around the fascia board? I can also extend rods from
> each vertex to add length to the sides.

For another antenna project I recently found some great fiberglass rods from Kencove Farm Fence Supplies. They are white, and in various lengths and diameters. They are tremendously strong, and even supporting some 10' telescoping whips out on the ends show no sign of sag.

http://www.kencove.com/fence/ and click Fiberglass on the left side.

I have also found similar, though smaller diameter rods at Lowe's and industrial safety supply stores, though those are bright orange and have reflective tape on them. The ones from Kencove are white.

Paul C.
tenorman1952

6087. Re: Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-10 16:35:59 UTC
From: tenorman1952
Topic: 6081 Message: 6087

--- In loopantennas@yahoogroups.com, "Sal" <sal.cerda@...> wrote:
>
> I have a fairly unique situation - the top of my house house a
> pentagonal cupola with a roof overhang of two feet. This creates a
> pentagon with sides of about 11 feet. The cupola roof sits at 32
feet
> above the ground.
>
> Here is my question: What kind of a loop antenna can I create by
> winding wire around the fascia board? I can also extend rods from
> each vertex to add length to the sides. Since I have plenty of
space,
> I will also probably install a longwire and/or some other wire
antenna
> stretching from a mast outwards.
>
> So I guess my question revolves around how best to utilize the
cupola
> space. My listening area will be under the cupola about 10 below
it
> (my home is a geodesic dome) and I could install a movable sensing
> loop up near the plane of the outside loop but inside the building.
I
> could also build the loop inside the cupola, but that would be
> visually intrusive and induce unwanted signals from my wife!
>

6088. Re: Small Loop Info Wanted

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-10 21:49:39 UTC
From: capntripps2000
Topic: 5905 Message: 6088

Geoff,

Ive built several mag loops based on web searches but this one was one
of the simplest to get on 40M and works very well.

http://www.antennex.com/hws/ws0902/hardline.html

I started using the novel tuning capacitor approach they used on other
loop projects with excellent results. Nice quick approach when you
don't have a vacuum variable capacitor available. An SWR antenna
analyzer will make your life much easier. I've used both the MFJ-259B
and the simpler MFJ-207 with equally effective results.

Also, check my QRZ web page for more details of other mag loops.

Andy N3LCW

--- In loopantennas@yahoogroups.com, "kb8uum" <kb8uum@...> wrote:
>
> Group,
>
> I am looking to build a small magnetic loop to cover 40/30-10m at my
> new apartment QTH and was wondering if anyone in the group has done so
> or might point me in the direction of some good websites. Plan on
> operating QRP, nothing much. Look forward to your responses.
>
> Geoff
>

6089. Re: Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-11 01:20:58 UTC
From: cank13cat
Topic: 6081 Message: 6089

I've been getting very good results with a makeshift loop from old cable TV coax, just a 25' length wrapped around a closet door as a frame for two complete wraps. Fed via a hinky arrangement better illustrated than described (and I haven't done the illustrations yet). No tuning capacitor.

It's directional on MW below around 1000 kHz. Best for late night skywave above 1000 kHz. I use it for KVNS 1700, KXTR 1660 and XEEP 1060 after dark.

Surprisingly, it also works with reasonably strong shortwave signals up to 10 MHz. A proper tuning capacitor would probably improve the HF performance.

It's a lot less hassle to set up than the usual approach of many wraps of finer wire. No idea how it'd work in a horizontal arrangement, I'd need a longer hank of coax to try it around the perimeter of my ceiling. I suspect it'd work fine in horizontal orientation for shortwave (with a tuner) and for omnidirectional skywave on MW. A low noise pre-amp might help too. Of my various homebrewed indoor antennas this has been the best performer because it's the most resistant to local noise (from my own PC and various appliances, and neighbors' RFI-generators).

6091. Re: the big un

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-11 06:39:18 UTC
From: dean_0_way
Topic: 6090 Message: 6091

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...>
wrote:
>
> Thanks to all for the replies ,sry i have'nt got back to you ,iv'e
> been busy ,
>
> I started this experiment with the idea that bigger is better , if
> nothing else ,at least to prove to myself it wasn't ,he heh?
anyway
> after the last few day's tweaking here's what i have ;
>
> A square loop of 75 inches by 62 inches , i started with 4 turns
> spaced 1/4 inch (0.250) ,,the feed line is the ends of the loop
wires
> twisted into a pair about 4 feet long then the tuning cap added on
> one of the lead-ins.
>
> According to the calculator with a tuning cap of 365-9.6 Pf it
should
> tune MW.. .731 Mhz to 4.6311...Mhz it didn't ? well it did from
> 500 up to about 1000Khz ....also had serious overload from my
> local station ,but i wanted more ? so i added 3 more
wraps .....calc
> says .429...Mhz to2.646...Mhz ,now it tuned from 650 up to about
> 1000 Khz oops? and overload was worse ,, something is amiss! so
in
> an effort to bring the higher end back in i changed the tuning cap
> out for a lower value cap ,and added 2 more turns , calc
> says,.444...Mhz to 2.2741 Mhz ,overload gone! but now it seems the
> tuning cap makes very little difference so i dropped the cap and
> hooked the feedline direct into the radio .
>
> Tonight i'm getting a station almost every 20 Khz , and i'm
getting
> something up on 1700 for the first time , so i think the gain is
> better ? but maybe the Am band is just getting out better tonight?
>
> I'm not ready to give up on this design yet but i'd like to know
that
> i'm headed in the right direction .with a little over 200 feet of
> wire up it would be a shame to tear it all down ? lol
>
> If anyone knows ? How do I figure out the actual resonance of a
loop?
> using either feet or inches ? cant seem to find it on the net .

>
> Any other ideas are welcome ....
>
> Dean_0
>

6092. Re: [loopantennas] Re: Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-11 13:55:07 UTC
From: Jim Dunstan
Topic: 6081 Message: 6092

At 01:20 AM 12/11/2008 +0000, you wrote:

>I've been getting very good results with a makeshift loop from old
>cable TV coax, just a 25' length wrapped around a closet door as a
>frame for two complete wraps. Fed via a hinky arrangement better
>illustrated than described (and I haven't done the illustrations yet).
>No tuning capacitor.

Just goes to show that any piece of wire will act as an antenna hi hi.

6093. Re: Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-11 23:52:43 UTC
From: cank13cat
Topic: 6081 Message: 6093

Very true. Even a paper clip in the Hi-Z input will receive the more powerful shortwave and local MW stations.

But I was surprised to discover that my abomination of a fugly coax loop actually is a loop and not just another hank of random wire. On MW it has all the characteristics of an actual loop. On shortwave, well... it's a compromise. The fact that it works at all is a pleasant surprise.

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> Just goes to show that any piece of wire will act as an antenna hi hi.
>

6094. Re: Horizontal loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-12 16:06:05 UTC
From: tenorman1952
Topic: 6081 Message: 6094

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:

> Just goes to show that any piece of wire will act as an antenna hi hi.

Hah... you bet!

http://nl.youtube.com/watch?v=RtjvfpEwbFY

Paul
AE5JU

6095. Commercial loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-12 20:22:24 UTC
From: bobby_047
Topic: 6095 Message: 6095

Hi all, I am new here and enjoy the reading knowledge. has anyone had experience with commercially valuable loops, and if so any reviews?

6096. tiny SCR Preselector available now

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-12 22:43:53 UTC
From: juanm0wwa
Topic: 6096 Message: 6096

Hi all,

The tiny SCR Preselector is available now in two options assembled or kit.
I just updated the photos and files on the corresponding sections.

Also all pending orders have been sent.

The tiny SCR Preselector is the little brother of the SCR Preselector. It is a modular tuneable five band pass filters bank for HF bands covering 1.8 to 30 MHz.

The user through the Graphic User Interface commands from PC the tiny SCR Preselector via Plug and Play high speed USB v2.

The software runs under Windows XP OS or Windows Vista32 OS at the same time with any SDR program without interfering, allowing to the user to control both simultaneously.

Both options come with USB cable and CDROM including software, USB driver for XP/Vista32 OS and manuals.

The kit option includes the preprogrammed PIC microcontroller 18F2455.

Best Regards.

Juan, M0WWA

http://www.m0wwa.co.uk/page/projects.html
<http://www.m0wwa.co.uk/page/projects.html>

[Non-text portions of this message have been removed]

6097. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-13 00:38:04 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6097

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /tiny SCR Preselector/tiny_SCR_Preselector_web_manual.pdf
Uploaded by : juanm0wwa <groups@...>
Description : tiny SCR Preselector condensed manual.

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/tiny%20SCR%20Preselector/tiny_SCR_Preselector_web_manual.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

juanm0wwa <groups@...>

6098. Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-14 17:14:05 UTC
From: David Feldman
Topic: 6098 Message: 6098

www.qrss.thersgb.net/active-loop-receiving-antenna.html

I am interested in building the antenna mentioned in the URL above, or something similar, or buying a commercial product that is similar (a mid-sized rx loop antenna with integrated pre-amplifier). I have a new serious source of QRN/RFI at home QTH (VDSL telephone network leakage) that renders 40-20M bands very difficult RX (using my elevated-radial vertical and a dipole, both are badly affected.)
As this problem (the VDSL RFI/QRN) is new to me, I am seeking solutions to restore my lost receive capability, and am considering a receive loop antenna. Any advice very gratefully welcomed.

Thank you,

73 Dave WB0GAZ wb0gaz@...

6099. antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-16 10:56:09 UTC
From: jefeickert
Topic: 6044 Message: 6099

I would like so info an Antenna called"Stick shortwave radio antenna.
anyone tried one theses?
JIM

6100. Re: antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-16 11:54:13 UTC
From: John
Topic: 6044 Message: 6100

--- jefeickert wrote:
>
> I would like so info an Antenna called"Stick shortwave radio antenna.

I don't know anything about that particular antenna, but it sounds like it might be an "active antenna", which are not tuned to any frequency but rely on sampling and amplifying signals on very short antennas. So they're very compact and broad-band, good for SWL (and sometimes amateur) reception.

Just Google 'active antennas' for more info on these kinds of antennas. (Just tried that myself and one of the first articles that popped up was one of Chris Trask's reference lists)
:-)
John/AF4EX

6101. Re: ***SPAM*** [loopantennas] antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-16 12:09:09 UTC
From: Eduardo
Topic: 6101 Message: 6101

Hi Jim,
see the site www.radiodx.qsl.br
respectfully,

Eduardo
----- Original Message -----
From: jefeickert
To: loopantennas@yahoogroups.com
Sent: Tuesday, December 16, 2008 8:56 AM
Subject: ***SPAM*** [loopantennas] antenna Question

I would like so info an Antenna called"Stick shortwave radio antenna.
anyone tried one theses?
JIM

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG.
Version: 7.5.552 / Virus Database: 270.9.17/1844 - Release Date: 11/12/2008 20:58

[Non-text portions of this message have been removed]

6102. Re: [loopantennas] antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-16 21:41:47 UTC
From: Ray Phillips
Topic: 6044 Message: 6102

Hi Jim,

I think you are looking for a broomstick antenna. The broomstick antenna can be made resonant but, due to its short length, has lower gain than the same length of wire stretched out.

Try this URL http://www.radiohc.org/Distributions/Dxers/broomstick.html

The broomstick is similar to just about every short antenna. In order to tune the short wire down to the frequencies of interest some inductance must be added. The broomstick has the inductance wound all along its length (distributed inductance) whereas most other short antennas have a compact lump of inductance somewhere along their length.

> I would like so info an Antenna called"Stick shortwave radio antenna.
> anyone tried one theses?
> JIM
>
>

All the best,
Ray
vk5ugs

6103. Re: ***SPAM*** [loopantennas] antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-16 21:48:47 UTC
From: jefeickert
Topic: 6101 Message: 6103

I am so very sorry

6104. styro loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-16 22:06:17 UTC
From: dean_0_way
Topic: 6104 Message: 6104

I finally got around to fixing this little loop i made months ago;

original config ;
16"x14" 21 turn of 22 #awg stranded insulated wire spaced 1\8" 365-
9.6 tuning cap.

Used it mostly to clean up braodcast MW ,Mutual copling ,but i didn't
like having to leave it by the radio ,got bumped a lot !

After a lot of reading on the net ,and some scrounging in the
basement.

New config ; 16"x14" 19 turns 20 #awg solid copper wire spaced 1
\8",365-9.6 tuning cap , to this i added a sense loop inside the
styro box connected directly to my KA 2100 antenna posts.
The sense loop is a solid wire loop 8 " across ,like the ones on the
old rabbit ears you used to see on the top of some tv sets,but has a
spring wound on the ends of the circle and on the mounting posts so
you can rotate the loop and lay it flat,loop is mounted on a thin
piece of wood with bolts , which hold the feed wires to set also.

I simply placed this inside the box with packing tape and whaala ! A
tunable loop you can put almost anywhere?
It tunes the whole band on MW and is a good perfomer i think ?
althought maybe not perfect ?

On KWMT 540 Khz Fort Dodge Ia.
The Champ 1700 Khz Urbandale Ia.
In the middle, KRVN 880 Khz Lexington Ne.
All with no signal on the set to listenable signal with loop (daytime)

The other night i was playing around with it and got a station from
San Antonio Texas ,forget the call signs ? almost 1000 miles
distant ,,,not bad i'd say?

Possibly i would get even better signal pickup if i ran a sense loop
inside the box replacing the steel wire loop , but it makes a cool
looking loop anyway ,and i don't have to move it , just reach down
and tune the capacitor .....Easy!

Thanks all for the help !
Dean_0

P.S. I bet i build another loop ??? :)

6105. Re: styro loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-17 15:28:02 UTC
From: tenorman1952
Topic: 6104 Message: 6105

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...>
wrote:
>
> The other night i was playing around with it and got a station from
> San Antonio Texas ,forget the call signs ? almost 1000 miles
> distant ,,,not bad i'd say?

Probably WOAI on 1200 khz.

Paul C.

6106. antenna Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-17 22:27:44 UTC
From: jefeickert
Topic: 6044 Message: 6106

Doe anyone know where I can get 50-75 ohm coaxial cable Antenna with UHF connector for signal above 2 Mhz?
and is a thing loaded antenna that will work?

6107. Re: styro loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-17 23:36:01 UTC
From: cank13cat
Topic: 6104 Message: 6107

Hey, that might be an excellent catch, depending on where you are. I live in N. Central Texas and have recently been able to catch KWMT from Fort Dodge, IA, right at evening grey line since November 2008, for 5-15 minutes at a time. For me it's a very tough catch because the station puts out only 5,000 watts and competes with two regional powerhouses on 540. At night KWMT powers down to less than 1,000 watts and I haven't been able to catch 'em between the more powerful regional stations.

BTW, I caught KWMT using a barefoot Magnavox D2935 portable, just the internal loopstick, indoors.

My homebrewed loop for another receiver (Palstar R30C), is just a hank of TV coaxial cable wrapped twice around a closet door, which makes for a handy and somewhat directional frame. It's much quieter than the loopsticks on my portables but less directional, and mostly useful for nulling out local RFI from my household appliances. Good for nighttime skywave reception above 1000 kHz, where distant stations sound like chugging mush on the portables.

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> On KWMT 540 Khz Fort Dodge Ia.
>

6108. Re: styro loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-18 00:13:25 UTC
From: dean_0_way
Topic: 6104 Message: 6108

--- In loopantennas@yahoogroups.com, "cank13cat" <wa_jenkins@...>
wrote:
>
For me it's a very tough catch because
> the station puts out only 5,000 watts and competes with two regional
> powerhouses on 540. At night KWMT powers down to less than 1,000
> watts and I haven't been able to catch 'em between the more powerful
> regional stations.

Hey good One ! I'm in North east Neb. i can get them at night and
somtimes at sunset barefoot , so i use the loop to clean it up

> My homebrewed loop for another receiver (Palstar R30C), is just a
hank
> of TV coaxial cable wrapped twice around a closet door, which makes
> for a handy and somewhat directional frame. It's much quieter than
> the loopsticks on my portables but less directional, and mostly
useful
>
Oh your the guy! i laughed about that setup but hey ! if it works ?
It's cool! i've built things i couldn't describe too! lol!

I cant be sure at this point but i thought the Texas station was up
on 1700 mhz ? couldnt find it on the net so ill have to try for that
one again!

Yep San antonio i can get at 1200 mhz 6.10 central....barely ...lots
of drift , my local is kicking it's teeth in too. maybe later ?

Dean_0
have to tune out my local with the loop

6109. styro loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-18 07:37:28 UTC
From: brian russell
Topic: 6104 Message: 6109

Dean,
Your loop sounds very interesting, is there a picture anywhere ???
72, Brian, G0NSL-QRP.
----- Original Message -----
From: dean_0_way
To: loopantennas@yahoogroups.com
Sent: Tuesday, December 16, 2008 10:06 PM
Subject: [loopantennas] styro loop

[Non-text portions of this message have been removed]

6110. Re: styro loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-18 08:55:45 UTC
From: cank13cat
Topic: 6104 Message: 6110

Yesss, the dreaded fugly loop, or fugloop as I have dubbed it. One of these days I'll build a proper loop but meanwhile the fugloop works and cost 'zackly nuttin'. I rescued the TV coax from the dumpster at my apartment complex.

It even works ohh-kay on shortwave up to 10 MHz. Not great, but RFI is very low, so even weak signals are fairly intelligible, compared with the higher signal strength but fierce static I get on an outdoor random wire.

The Texas oldies station on 1700 is KVNS out of Brownsville on the hurricane coast. Reportedly only 8800 watts daytime, 880 nighttime. Night catches are pretty easy, tho' the signal drifts in and out, swapping with a couple of unid stations. I've snagged it a few times during the day but it's usually wiped out by what I think is a local co-channel for KLIF (similar programming to 570). KVNS carries well enough at night to hear on a portable using a whip rather than a proper MW loopstick - my older portables consider 1700 to be shortwave territory, so the loopsticks cut out and default to the whip.

6111. Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-18 19:59:01 UTC
From: sidney7539
Topic: 6098 Message: 6111

Hi, I too would be interested in the performance of this active loop.
It looks most interesting as I have the same QRN problem. Does anyone
have any experience with this active loop, and if so the capabilities
with receiving weak DX amateur signals on the amateur bands compared
with the dipole?
73 de Sid.

--- In loopantennas@yahoogroups.com, "David Feldman" <wb0gaz@...> wrote:
>
> www.qrss.thersgb.net/active-loop-receiving-antenna.html
>
> I am interested in building the antenna mentioned in the URL above, or
> something similar, or buying a commercial product that is similar (a
> mid-sized rx loop antenna with integrated pre-amplifier). I have a new
> serious source of QRN/RFI at home QTH (VDSL telephone network
leakage) that
> renders 40-20M bands very difficult RX (using my elevated-radial
vertical
> and a dipole, both are badly affected.)
> As this problem (the VDSL RFI/QRN) is new to me, I am seeking
solutions to
> restore my lost receive capability, and am considering a receive loop
> antenna. Any advice very gratefully welcomed.
>
> Thank you,
>
> 73 Dave WB0GAZ wb0gaz@...
>

6112. Loop Antenna Preamp for Broadband Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-18 20:24:42 UTC
From: Adam E.
Topic: 6112 Message: 6112

The loop antenna that I used to display in the pics in the other group had a makeover. I had to cut the long leads down to a connection point and connected the loop to the homemade ferrite coupler antenna. I need a schematic for the loop antenna. What I need to do is use the preamp in between the coupler that is connected to the loop antenna and then connect the second coupled connector to the preamp circuit directly into the DX-392 receiver. The loop has only 7 turns of wire on the and the coupling coils are most 16 turns of wire. Can someone submit me a schematic. Its getting hard to find schematics on google.

Adam E.

6113. Re: For Sale Wellbrook ALA 1530+ loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-17 00:33:11 UTC
From: ted2me
Topic: 6080 Message: 6113

--- In loopantennas@yahoogroups.com, "spudie14" <riches1234@...> wrote:
>
> Have a wellbrook ala1530+ loop that i no longer use and would like
to
> sell sold the loop a couple of moths ago but the buyer was in brazil
> and postage turned out to be a major problem in getting it there as
> outsize items to brazil are a joke in the prices they charge for
> shipping so loop is back up for sale again looking for $300 plus
> shipping thanks Edd
>
I also have some interest in your loop. What is your location and what
condition is it in? Could you also email me some pictures.
Sincere thanks, Dave Bell.

6114. Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-16 19:26:01 UTC
From: sidney7539
Topic: 6098 Message: 6114

Looks very interesting, I too would like to know more as I too get high QRN. Any idea off the DX capability for weak amateur signals, say compared with the dipole. Sid G3PQB

--- In loopantennas@yahoogroups.com, "David Feldman" <wb0gaz@...> wrote:
>
> www.qrss.thersgb.net/active-loop-receiving-antenna.html
>
> I am interested in building the antenna mentioned in the URL above, or
> something similar, or buying a commercial product that is similar (a
> mid-sized rx loop antenna with integrated pre-amplifier). I have a new
> serious source of QRN/RFI at home QTH (VDSL telephone network leakage) that
> renders 40-20M bands very difficult RX (using my elevated-radial vertical
> and a dipole, both are badly affected.)
> As this problem (the VDSL RFI/QRN) is new to me, I am seeking solutions to
> restore my lost receive capability, and am considering a receive loop
> antenna. Any advice very gratefully welcomed.
>
> Thank you,
>
> 73 Dave WB0GAZ wb0gaz@...
>

6115. Re: styro loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-18 22:25:46 UTC
From: dean_0_way
Topic: 6104 Message: 6115

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...>
wrote:
>
> Dean,
> Your loop sounds very interesting, is there a picture
anywhere ???
> 72, Brian, G0NSL-QRP.
>Thanks
Sry no pics , if i can figure how to add it to the group photo thing
ill put it in ?

I started with an omaha steak styrofoam box (just the lid) because i
was reading about Bruce Carter's loops ,link below .... By the way
some medical supplies are shipped in the same type boxes .

Anyway this one measures about 14 " - 16" and is about 4 inches deep
The steel loop i got in a box of radio junk at an estate sale some
years ago .

Not very pretty ? but so far..... no stray resistance from the
wife ! lol .

Dean_0

http://www.mindspring.com/~loop_antenna/

6117. Re: styro loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-18 23:26:22 UTC
From: dean_0_way
Topic: 6104 Message: 6117

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...>
wrote:
>
> OK i think they are there ? 3 pixs of the loop in the photo section .
>
> a little dark but i think you'll get the idea ?
>
> Dean_0
>

6118. Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-19 15:12:03 UTC
From: Des
Topic: 6098 Message: 6118

Hi Dave and everyone on the list,

The Broadband Loop Antenna described in the URL below is from my web-page so I am bound to say its the best thing since "sliced bread" and the Internet :-)

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

Most of the credit should go to John (G8CQX, previously G4UAZ), my loop is based on his original active loop design. I made changes to the biasing levels (increased the devices standing current) in order to reduce the risk of overload due to very strong EU BC stations around 40 Mtrs.

Someone asked if the loop worked well for reciving weak amateur signals. The answer is "yes", in fact this is my main station receiving antenna. I frequently use it to monitor QRSS signals on 30 Mtrs from all around the globe. These signals certainly qualify as "weak signals" and are generally below the audible noise floor. But the antenna is good for all general ham radio and BC station RX use.

The antenna was built as part of a stratagy to combat local noise from things like plasma TV sets, game stations and PC's etc. It has turned out to be one of the most successful projects ever built here at M0AYF.

One of the nice things about the loop amplifier is that it is very "tame" and forgiving of the construction methods used. I have built and tested severel versions of the loop amplifier on everything from tin lids to strip-board with no problems. My first test version used a bread-board and it also worked well.

My advice would be to build the loop amplifier on a scrap of copper clad board (or a food can lid) and try it with a loop of wire about 1 or 2 Mtrs in diameter. Because its an easy-to-construct design you could have it built over a week-end and evaluate the performance for yourself. In my particular case the results are nothing less than spectacular but results may vary depending on the nature of the interference you are trying to get rid of.

The loop will not do much to reduce QRN but the local QRM will be significantly reduced. In my case QRM was around S5 to S7 all the time (sometimes higher) but using the loop has reduced local QRM to S1 or less. If you have a dipole or long wire then its interesting to compare the signals from the loop with those of the LW or dipole. The first thing you will notice is that most signals are "down" on the loop compared to a dipole or long wire but the signal-to-noise ratio will be vastly improved which makes weak signals more readable.

At my QTH I use a long wire and auto ATU for TX while a relay selects the loop for RX. Prior to using the loop I would find operators returning to my calls but I was unable to work them because of my local QRM. Since using the loop I can now copy (and work) much weaker stations.

Please give the loop a try, you may be surprised at the results. I would be happy to hear from anyone testing or using the loop.

Best wishes,

Des (M0AYF)

--- In loopantennas@yahoogroups.com, "David Feldman" <wb0gaz@...> wrote:
>
> www.qrss.thersgb.net/active-loop-receiving-antenna.html
>
> I am interested in building the antenna mentioned in the URL above, or
> something similar, or buying a commercial product that is similar (a
> mid-sized rx loop antenna with integrated pre-amplifier). I have a new
> serious source of QRN/RFI at home QTH (VDSL telephone network leakage) that
> renders 40-20M bands very difficult RX (using my elevated-radial vertical
> and a dipole, both are badly affected.)
> As this problem (the VDSL RFI/QRN) is new to me, I am seeking solutions to
> restore my lost receive capability, and am considering a receive loop
> antenna. Any advice very gratefully welcomed.
>
> Thank you,
>
> 73 Dave WB0GAZ wb0gaz@...
>

6119. Re: [loopantennas] Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-19 17:45:20 UTC
From: Paul V Birke PEng
Topic: 6098 Message: 6119

From: Des <d29602960@...>
To: loopantennas@yahoogroups.com
Sent: Friday, December 19, 2008 10:12:03 AM
Subject: [loopantennas] Re: Have you tried building the antenna in this article (URL below)?

Hi Dave and everyone on the list,

The Broadband Loop Antenna described in the URL below is from my
web-page so I am bound to say its the best thing since "sliced bread"
and the Internet :-)

http://www.qrss. thersgb.net/ active-loop- receiving- antenna.html

R8 in the long tail can be replaced by a constant current generator or a current mirror to improve performance

p

[Non-text portions of this message have been removed]

6120. Re: [loopantennas] Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-19 18:28:17 UTC
From: Paul V Birke PEng
Topic: 6098 Message: 6120

Hi

the constant current generator makes no difference

in this case

Paul

From: Paul V Birke PEng <nonlinear@...>
To: loopantennas@yahoogroups.com
Sent: Friday, December 19, 2008 12:45:20 PM
Subject: Re: [loopantennas] Re: Have you tried building the antenna in this article (URL below)?

From: Des <d29602960@yahoo. co.uk>
To: loopantennas@ yahoogroups. com
Sent: Friday, December 19, 2008 10:12:03 AM
Subject: [loopantennas] Re: Have you tried building the antenna in this article (URL below)?

Hi Dave and everyone on the list,

The Broadband Loop Antenna described in the URL below is from my
web-page so I am bound to say its the best thing since "sliced bread"
and the Internet :-)

http://www.qrss. thersgb.net/ active-loop- receiving- antenna.html

R8 in the long tail can be replaced by a constant current generator or a current mirror to improve performance

p

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6121. Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-20 23:37:27 UTC
From: David Feldman
Topic: 6098 Message: 6121

Thank you, Des and Paul --- I am struggling with a newly introduced S7-S9 RFI from VDSL services just started; this has left me largely deaf on 160-20M bands (and not at all happy).

I will let you and the list know how I fare.

73 Dave WB0GAZ wb0gaz@...

6122. Re: [loopantennas] Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-22 04:21:49 UTC
From: japerlick@aol.com
Topic: 6098 Message: 6122

Hey, Dave
Can you tell me what your noise from VDSL sounds like?? I have a new noise here, quite strong at some frequencies, but it is a lot of carriers spread from about 2 to 28 MHz with the classic up/dopwn notch at 12 MHz.? I looked at it with the spectrum analyzer and it is obviously some sort of comm modulation but I have not been able to track it down because it is literally everywhere....I can't sniff it out.? I drive for miles iwth a small loop and I receive it in every direction.

Thanks

John

-----Original Message-----
From: David Feldman <wb0gaz@...>
To: loopantennas@yahoogroups.com
Sent: Sat, 20 Dec 2008 3:37 pm
Subject: [loopantennas] Re: Have you tried building the antenna in this article (URL below)?

Thank you, Des and Paul --- I am struggling with a newly introduced S7-S9
RFI from VDSL services just started; this has left me largely deaf on
160-20M bands (and not at all happy).

I will let you and the list know how I fare.

73 Dave WB0GAZ wb0gaz@...

[Non-text portions of this message have been removed]

6123. Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-23 16:47:48 UTC
From: David Feldman
Topic: 6098 Message: 6123

Hi John,

In this case the signal is just broadband hash, although there are some peaks in the spectrum (I've looked at with a spectrum analyzer attached to the antenna feedline.) I've heard the multi-carrier type signal you describe before elsewhere in the past, but in this case the best way I can think of to describe it is like snow or rain static on an ungrounded antenna. It's very severe (S7-S9), which is mostly taken me off the air.

I have tried walking a few blocks in the neighborhood, as well as my back yard where my antennas are, while carrying a Yaesu VR500 handheld receiver tuned to 10.165 (one of the spectral peaks); the noise varies widely in level and peaks in several different places on my walk (of course, one peak is near my antenna farm!).

What would be really useful would be some sort of small HF receive loop antenna I could attach to the hand-held's BNC port and see if I can find null directions. As the noise problem started recently/suddenly (about 3 weeks ago) I haven't yet found tools/expertise to narrow the problem down. Mainly, I'd like to try to figure out if the source is local (nearby houses, for example) or external to the local area. For this, I believe such a loop antenna would be very helpful.

73 Dave WB0GAZ wb0gaz@...

----- Original Message -----
From: <loopantennas@yahoogroups.com>
To: <loopantennas@yahoogroups.com>
Sent: Monday, December 22, 2008 4:02 AM
Subject: [loopantennas] Digest Number 1292

> There is 1 message in this issue.
>
> Topics in this digest:
>
> 1a. Re: Have you tried building the antenna in this article (URL below)?
> From: japerlick@...
>
>
> Message
> _____
> 1a. Re: Have you tried building the antenna in this article (URL below)?
> Posted by: "japerlick@..." japerlick@... jadbp
> Date: Sun Dec 21, 2008 8:33 pm ((PST))
>
> Hey, Dave

> Can you tell me what your noise from VDSL sounds like?? I have a new noise here, quite strong at some frequencies, but it is a lot of carriers spread from about 2 to 28 MHz with the classic up/dopwn notch at 12 MHz.? I looked at it with the spectrum analyzer and it is obviously some sort of comm modulation but I have not been able to track it down because it is literally everywhere....I can't sniff it out.? I drive for miles iwth a small loop and I receive it in every direction.
>
> Thanks
>
> John
>
>
> -----Original Message-----
> From: David Feldman <wb0gaz@...>
> To: loopantennas@yahoogroups.com
> Sent: Sat, 20 Dec 2008 3:37 pm
> Subject: [loopantennas] Re: Have you tried building the antenna in this article (URL below)?
>
>
>
>
>
>
> Thank you, Des and Paul --- I am struggling with a newly introduced S7-S9
> RFI from VDSL services just started; this has left me largely deaf on
> 160-20M bands (and not at all happy).
>
> I will let you and the list know how I fare.
>
> 73 Dave WB0GAZ wb0gaz@...
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> Messages in this topic (8)
>
>
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the

Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!
>
> --
> Yahoo! Groups Links
>
>
>
> --
>
>

6124. Re: Have you tried building the antenna in this article (URL below)?

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-23 19:02:31 UTC
From: cank13cat
Topic: 6098 Message: 6124

That sounds similar to a problem I had earlier this year. It turned out to be a fault in a neighborhood electrical utility supply (I think the service tech called it an "air dielectric switch"?).

The problem was impossible for me to trace any closer than my entire block, hundreds of yards in every direction, because every power line in the neighborhood was radiating the noise. Walking around with a portable radio I was able to pin it down to within roughly a city block, but that's about all. It was non-directional.

Fortunately the troubleshooter for the electric company is a ham and understood the problem based on my description and audio clips I recorded off air. They fixed the problem within a couple of weeks. (The main reason for the delay was a massive power outage in a nearby community, which took priority.)

6125. Greetings !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-23 17:23:17 UTC
From: brian russell
Topic: 6125 Message: 6125

Seasonal Greetings
to
All Group Members.
72, Brian, G0NSL-QRP.

6126. List life

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-30 01:18:18 UTC
From: wa6bkq1
Topic: 6126 Message: 6126

I haven't seen much activity as of late. Is the list dying? Dave

6127. Re: List life

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-30 05:26:00 UTC
From: Steve
Topic: 6126 Message: 6127

103 messages this month! Hardly dying.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "wa6bkq1" <wa6bkq1@...> wrote:
>
> I haven't seen much activity as of late. Is the list dying? Dave
>

6128. Re: HF loop model OE-316A/TSC on EBAY.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-30 15:20:48 UTC
From: Vahe ohanian
Topic: 6128 Message: 6128

Hello Group:

Has anyone have experience with this loop. It has been selling on the Ebay. Was able to find the manual on the net and seems to be a loop group/network active antenna.

It seems that they are selling like hot cakes, despite of the fact the active component is missing.

Did anyone from this gourp purchase the antenna and can provide a feed back.

Sincerely

Vahe

****** Merry Xmas all ******

[Non-text portions of this message have been removed]

6129. Re: [loopantennas] Re: HF loop model OE-316A/TSC on EBAY.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-30 17:09:45 UTC
From: Tracey Gardner
Topic: 6128 Message: 6129

The UK equivalent of this antenna is shown in the Photos section of the list under "CSA Loop"
Are you sure that the active component is missing, presumably that point was raised in earlier auctions?

Tracey

> Has anyone have experience with this loop. It has been selling on the
> Ebay. Was able to find the manual on the net and seems to be a loop
> group/network active antenna.
>
> It seems that they are selling like hot cakes, despite of the fact the
> active component is missing.
>
> Did anyone from this gourp purchase the antenna and can provide a feed
> back.
>
> Sincerely
>
> Vahe
>

6130. "THE STICK" SHORTWAVE ANTENNA sw ham radio dx swl

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-30 19:45:49 UTC
From: jefeickert
Topic: 6130 Message: 6130

Buy the **Original** and get the **QUALITY*

"LISTEN TO THE WORLD"

Up for bid is "The Stick" Shortwave Radio Antenna. This antenna is very easy to hook up and use. 1. find a desired location and mount "The Stick" shortwave antenna (with its two included screws) or prop it standing up in a window, on a dresser, desk etc. 2. Uncoil all the 20 foot copper lead in wire and 3. Clip the alligator clip from the lead in wire to your
radios telescopic antenna, or screw terminal and thats it. Very easy to use and works great.

Will work on all shortwave radios with a telescopic or external antenna connection. works with Radio Shack (Realistic), Sangean, Grundig, Sony, Drake, Hallicrafters, Heathkit, Eton,
GE, Kenwood, Zenith, Tecsun, Kaito, Telefunken, Motorola, Eico, Sears, Panasonic, Philco, RCA and many more.

This antenna is perfect for the apartment dweller that needs an excellent shortwave radio all band antenna And does not want to hassle with the landlord, neighbors, spouse, etc... or where space is limited, or where there are big outside antenna restrictions. Antenna is also perfect for traveling when staying in a Hotel room.

"The Stick" takes up very little space right at 3 foot so it can easily be mounted and hidden
out of sight. "The Stick" is a helically wound vertical antenna housed inside durable ABS tube housing with top and bottom cap fittings. "The Stick" has a mounting bracket and comes with two screws to mount the antenna to your desired location. "The Stick" has a 20 foot heavy duty 16/18 guage copper primary lead in wire that is plastic coated with a alligator clip for easy connection to your radio. *NOTE - the lower the guage number on wire the thicker and more durable it will be*)

NOTE - DO not mount "The Stick" on or alongside any aluminum or metal as this will effect the antenna and it will not work well.

"The Stick" shortwave antenna performs very well indoors but screams to be mounted outdoors where it will work to optimum performance.

"The Stick" shortwave antenna DOES NOT require any special tuning or batteries like a Amplified or a Loop antenna does. Why would you want to waste time tuning the antenna everytime to a station only to have to tune it again and again as you tune your radio across
the band on your DX hunt? *Just mount and hook "The Stick" up and your ready to go*.

The Stick shortwave antenna covers all the Shortwave Bands 11 Meters Through 120 Meters. ...*Please note Bands 11 Meters through 21 Meters Are Mostly open during daylight hrs....And Bands 31 Meters through 120 Meters are excellent for nightime hrs after 6pm.

Photo below (In picture 3) shows how easy it is to hook "The Stick shortwave antenna to your radio... *Of Course The Shortwave Radio, 10 Meter Radio, Noise Canceller And SWR Meter Are Not Included In This Auction*.

**r.

*DO NOT HANG "THE STICK" SHORTWAVE ANTENNA AROUND POWER LINES WHICH CAN CAUSE ELECTRICAL SHOCK. *

PLEASE NOTE This antenna is intended to be used as a Shortwave Radio Antenna , it is not intended for use as a cb or ham radio transmitting antenna however it can be used for receiving signals on a cb or ham radio.

Does anyone know about this Antenna?
JIM

000

6131. Re: [loopantennas] Re: HF loop model OE-316A/TSC on EBAY.

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-30 20:59:05 UTC
From: Vahe ohanian
Topic: 6128 Message: 6131

Thanks for the reply Tracey

I will look under CSA loop...

There is no mention of the active component requirement or being sold with the antenna kit.

Vahe

Tracey Gardner <tracey.gardner@...> wrote:

The UK equivalent of this antenna is shown in the Photos section of the list
under "CSA Loop"
Are you sure that the active component is missing, presumably that point was
raised in earlier auctions?

Tracey

> Has anyone have experience with this loop. It has been selling on the
> Ebay. Was able to find the manual on the net and seems to be a loop
> group/network active antenna.
>
> It seems that they are selling like hot cakes, despite of the fact the
> active component is missing.
>
> Did anyone from this gourp purchase the antenna and can provide a feed
> back.
>
> Sincerely
>
> Vahe
>

[Non-text portions of this message have been removed]

6132. Re: [loopantennas] "THE STICK" SHORTWAVE ANTENNA sw ham radio dx swl

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-30 22:56:45 UTC
From: Jim Dunstan
Topic: 6130 Message: 6132

At 07:45 PM 12/30/2008 +0000, you wrote:

>"The Stick" takes up very little space right at 3 foot so it can easily be
>mounted and hidden
>out of sight. "The Stick" is a helically wound vertical antenna housed
>inside durable ABS
>tube housing with top and bottom cap fittings. "The Stick" has a mounting
>bracket and
>comes with two screws to mount the antenna to your desired location. "The
>Stick" has a
>20 foot heavy duty 16/18 guage copper primary lead in wire that is plastic
>coated with a
>alligator clip for easy connection to your radio. *NOTE - the lower the
>guage number on
>wire the thicker and more durable it will be*)
>
>**NOTE** - DO not mount "The Stick" on or alongside any aluminum or metal
>as this will
>effect the antenna and it will not work well.
>
>"The Stick" shortwave antenna performs very well indoors but screams to be
>mounted
>outdoors where it will work to optimum performance.

Hi,

If you get one for free no harm in trying it. Portable SW radios such as the majority of those listed have a high impedance front end designed for short capacitive type antennas as do automobile AM radios. Clipping 20' of wire wound on a 3' core will add very little .... especially when it is located right next to the built in whip/radio.

Any antenna will work better outdoors .... away from RFI ... especially since your radio has to be located there as well hi hi.

Helically wound antennas, to be useful, are generally wound so that they become resonant at some frequency .... then, once resonant at the desired frequency the bottom of the antenna becomes one half of the feed point. A ground becomes the other. the feed point is low impedance .... the opposite of the input impedance of portable SW receivers (that have whips).

In addition if the inductance and capacitance of the helical coil/antenna resonates at some frequency it is non-resonant at all the others. In my opinion clipping such a coil of wire to your whip antenna will have the same effect as clipping a simple wire 3 to 20 ft long ..... very little.

Jim

6133. Re: "THE STICK" SHORTWAVE ANTENNA sw ham radio dx swl

Yahoo group: loopantennas (2008 — 2012)
Date: 2008-12-31 02:32:06 UTC
From: jefeickert
Topic: 6130 Message: 6133

-Thank You For clearing this up for me-- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote: uo
>
> At 07:45 PM 12/30/2008 +0000, you wrote:
>
> >"The Stick" takes up very little space right at 3 foot so it can easily be
> >mounted and hidden
> >out of sight. "The Stick" is a helically wound vertical antenna housed
> >inside durable ABS
> >tube housing with top and bottom cap fittings. "The Stick" has a mounting
> >bracket and
> >comes with two screws to mount the antenna to your desired location. "The
> >Stick" has a
> >20 foot heavy duty 16/18 guage copper primary lead in wire that is plastic
> >coated with a
> >alligator clip for easy connection to your radio. *NOTE - the lower the
> >guage number on
> >wire the thicker and more durable it will be*)
> >
> >**NOTE** - DO not mount "The Stick" on or alongside any aluminum or metal
> >as this will
> >effect the antenna and it will not work well.
> >
> >"The Stick" shortwave antenna performs very well indoors but screams to be
> >mounted
> >outdoors where it will work to optimum performance.
>
> Hi,
>
> If you get one for free no harm in trying it. Portable SW radios such as
> the majority of those listed have a high impedance front end designed for
> short capacitive type antennas as do automobile AM radios. Clipping 20' of
> wire wound on a 3' core will add very little .... especially when it is
> located right next to the built in whip/radio.
>
> Any antenna will work better outdoors .... away from RFI ... especially
> since your radio has to be located there as well hi hi.
>
> Helically wound antennas, to be useful, are generally wound so that they
> become resonant at some frequency .... then, once resonant at the desired
> frequency the bottom of the antenna becomes one half of the feed point. A
> ground becomes the other. the feed point is low impedance .... the
> opposite of the input impedance of portable SW receivers (that have whips).
>
> In addition if the inductance and capacitance of the helical coil/antenna

> resonates at some frequency it is non-resonant at all the others. In my
> opinion clipping such a coil of wire to your whip antenna will have the
> same effect as clipping a simple wire 3 to 20 ft long ..... very little.
>
> Jim
>

6134. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-01 20:18:59 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6134

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6135. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-01 20:18:59 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6135

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6136. Shielded Magnetic Loop Antennas for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-01 21:16:22 UTC
From: Chuck
Topic: 6136 Message: 6136

I have two magnetic loop antennas for sale. These are both PK'S LOOP ANTENNAS from Australia where long range radio still lives!

I saw these antennas in use in Northern Austrailia a couple of years and bought two.

A-LOOP-REMSW620. This 10" high, 6-20 MHz remote, amplified, shielded loop antenna has never been used at all. Designed for out door use with a rotator I was never able to get all the parts together for the rotator. I'm asking $120 for this shipped to your CONUS address.

SHIELD MAGNETIC AM LOOK. This 13" high MW/BCB loop antenna works wonderfully on a table outdoors, or in my basement office. Designed for AM frequencies. Tunable at the antenna (not remote). $60 including shipping to your CONUS address.

Both antennas require 12v DC (not furnished).

USPS money orders, please.

-- Chuck

6137. Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-02 10:14:32 UTC
From: jefeickert
Topic: 6137 Message: 6137

I have heard of that in Cuba I remember his Name(sorry) anyway I believe had article once about laying wire in the ground outside.
Would really work?
Living a condo gives me very little space.
and it has to outside I gave up on indoor one.
JIM

6138. Re: [loopantennas] Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-02 17:29:02 UTC
From: Samuel Ernst-Fortin
Topic: 6137 Message: 6138

jefeickert wrote:
>>jefeickert@...
Living a condo gives me very little space.
and it has to outside I gave up on indoor one.
JIM
>>

Jim,.
As squirrely as it sounds, a rain gutter for an antenna comes to mind. Do an internet search.
Sam

6139. Re: Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-02 20:57:12 UTC
From: jefeickert
Topic: 6137 Message: 6139

Sam
this condo is 3.5 yrs old they don't put metal parts in this new of dump.
Even the water pipes are plastic not cooper, making finding a Ground head scratching hard>
JIM

6140. Re: Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-03 03:03:55 UTC
From: Hiram
Topic: 6137 Message: 6140

Got a balcony? could use the metal rail for an antenna. Are you on first or second floor? If on the first floor, you might be able to jury rig a ground, if second floor, a flagpole with a wire hanging off the end could work for an antenna.

For a temporary antenna, I tossed some #22 magnet wire up over the roof of our house. The end is supported by a 10' piece of Plastic electrical conduit. Works better than an indoor antenna, even laying on the roof. You could go stealth and use smaller wire, tie a small weight to the end and chuck it up onto the roof. If you are on the second floor, you might not even see it from the ground.

Try something and see if it works. Then try something else. Have some fun with it.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> Sam
> this condo is 3.5 yrs old they don't put metal parts in this new of dump.
> Even the water pipes are plastic not cooper, making finding a Ground head scratching
> hard>
> JIM
>

6141. Re: Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-03 12:16:35 UTC
From: gmcjetpilot
Topic: 6137 Message: 6141

What frequency are you looking at and what radio. Yes a wire is great. I bought a spool of high quality 22 stranded Teflon coated wire on ebay for fairly cheap. I used some as a random wire and also made a loop antenna. It is almost invisible, running it from 2nd story window to tree, about 60 ft. It works well. 75' is ideal.

You can run it out a window to a tree? You have to allow some tree movement. When it gets to your window transition to coaxial ASAP to avoid RFI from inside the house. This is down and dirty.

At the tree end I threw a string/cord over a branch (put a weight on the end). A tied the wire to the string and hosted into the tree. I secured the free end of the string with a stake in the ground.

I also grounded the shield of the coax (just inside the window) with another wire to a telephone ground. The ground wire is the same 22gage wire out the window down to the phone box and ground wire that goes into the ground. Don't do use utility "power" ground, but I figure the phone ground is pretty good and safe. Better is your own good ground stake. There is debate ground or not. Trust me GROUND is awesome and justice noise down.

My Condo/House is new construction as well and has vinyl windows. So where these small wires come in I have small foam spacers to allow the window to be cracked just a bit. Its not as good as sealed closed but no drilling. To do it right I should go through the wall into the attic and out the roof eve or peak. Too much work for now. I am so pleased with the results I am leaving it for now.

The other good thing I did was make a 9:1 BALUN. This set up goes to a TenTex RX320. You may want to try the SW antenna group not the loop group.

Some truths about good antennas I found:

- good ground
- good matching (impedance) with a BALUN*
- the higher the better (not always for loops)
- outside antennas are always better than indoor

* The BALUN is a fun little project you can make. The BIG expensive ones are for transmitting. For receiving you can make a small one with a torrid and some magnetic wire. Google antenna transformer or BALUN or throw in 9:1. The reason for 9:1 ratio is a random wire is about 400-600 ohms. Most radios are 50 ohm. So 9:1 is about right. With out the BALUN and Ground I had wicked RFI problems not its a joy.

Of course this being the LOOP GROUP you can make a nice 2' x 2' loop for LF and MW or low SW. You can get a magnetic loops an amplified loop for broad band. You can have the LOOP inside and point it manually (pick it up and move it). Loops are good for gain and rejection of nose but need to be tuned for each freq.

There is nothing like 75' of wire for SW (150's is better but who has room for that). For general SW listening a good wire out side is going to be best overall; more spacific radio listening loops are great. If money is no object, Wellbrook makes nice RX Loops. You can put a loop in the attic with a rotor and run all the wires to your radio room. I assume you have CODE that keeps you from having out side antenna. You know a loop can be subtle and most CODES allow satellite dishes. Tell them its satellite.

The down side of any indoor antenna is picking up RFI in the home. RFI is terrible now a days with WiFI, Flat Screen TV's, Computer, wireless everything, Printer/Scanner and so on. The further you antenna is from that stuff the better.

Need help write. Give me some details of your scenario.

Cheers George

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> I have heard of that in Cuba I remember his Name(sorry) anyway I believe had article once about laying wire in the ground outside.
> Would really work?
> Living a condo gives me very little space.
> and it has to outside I gave up on indoor one.
> JIM
>

6142. Re: Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-03 12:16:35 UTC
From: gmcjetpilot
Topic: 6137 Message: 6142

What frequency are you looking at and what radio. Yes a wire is great. I bought a spool of high quality 22 stranded Teflon coated wire on ebay for fairly cheap. I used some as a random wire and also made a loop antenna. It is almost invisible, running it from 2nd story window to tree, about 60 ft. It works well. 75' is ideal.

You can run it out a window to a tree? You have to allow some tree movement. When it gets to your window transition to coaxial ASAP to avoid RFI from inside the house. This is down and dirty.

At the tree end I threw a string/cord over a branch (put a weight on the end). A tied the wire to the string and hosted into the tree. I secured the free end of the string with a stake in the ground.

I also grounded the shield of the coax (just inside the window) with another wire to a telephone ground. The ground wire is the same 22gage wire out the window down to the phone box and ground wire that goes into the ground. Don't do use utility "power" ground, but I figure the phone ground is pretty good and safe. Better is your own good ground stake. There is debate ground or not. Trust me GROUND is awesome and justice noise down.

My Condo/House is new construction as well and has vinyl windows. So where these small wires come in I have small foam spacers to allow the window to be cracked just a bit. Its not as good as sealed closed but no drilling. To do it right I should go through the wall into the attic and out the roof eve or peak. Too much work for now. I am so pleased with the results I am leaving it for now.

The other good thing I did was make a 9:1 BALUN. This set up goes to a TenTex RX320. You may want to try the SW antenna group not the loop group.

Some truths about good antennas I found:

- good ground
- good matching (impedance) with a BALUN*
- the higher the better (not always for loops)
- outside antennas are always better than indoor

* The BALUN is a fun little project you can make. The BIG expensive ones are for transmitting. For receiving you can make a small one with a torrid and some magnetic wire. Google antenna transformer or BALUN or throw in 9:1. The reason for 9:1 ratio is a random wire is about 400-600 ohms. Most radios are 50 ohm. So 9:1 is about right. With out the BALUN and Ground I had wicked RFI problems not its a joy.

Of course this being the LOOP GROUP you can make a nice 2' x 2' loop for LF and MW or low SW. You can get a magnetic loops an amplified loop for broad band. You can have the LOOP inside and point it manually (pick it up and move it). Loops are good for gain and rejection of nose but need to be tuned for each freq.

There is nothing like 75' of wire for SW (150's is better but who has room for that). For general SW listening a good wire out side is going to be best overall; more spacific radio listening loops are great. If money is no object, Wellbrook makes nice RX Loops. You can put a loop in the attic with a rotor and run all the wires to your radio room. I assume you have CODE that keeps you from having out side antenna. You know a loop can be subtle and most CODES allow satellite dishes. Tell them its satellite.

The down side of any indoor antenna is picking up RFI in the home. RFI is terrible now a days with WiFI, Flat Screen TV's, Computer, wireless everything, Printer/Scanner and so on. The further you antenna is from that stuff the better.

Need help write. Give me some details of your scenario.

Cheers George

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> I have heard of that in Cuba I remember his Name(sorry) anyway I believe had article once about laying wire in the ground outside.
> Would really work?
> Living a condo gives me very little space.
> and it has to outside I gave up on indoor one.
> JIM
>

6143. Re: Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-03 18:27:52 UTC
From: whamlog
Topic: 6137 Message: 6143

Some good information can be had at the Nordic DX site:

http://www.hard-core-dx.com/ specifically:

http://www.hard-core-dx.com/nordicdx/antenna/special/swlant.html

As well, you can Google "snake antennas" for more related links.

Werner

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...>
wrote:
>
> I have heard of that in Cuba I remember his Name(sorry) anyway I
believe had article once about laying wire in the ground outside.
> Would really work?
> Living a condo gives me very little space.
> and it has to outside I gave up on indoor one.
> JIM
>

6144. Re: [loopantennas] Re: Condo Antenna (this is for the birds)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-04 00:04:10 UTC
From: Samuel Ernst-Fortin
Topic: 6144 Message: 6144

Jim wrote:
>>Sam
>>this condo is 3.5 yrs old they don't put metal parts in this new of dump.
>>Even the water pipes are plastic not cooper, making finding a Ground head scratching
>>hard

Perhaps a Bird Feeder Antenna then? ;)
Sam

6145. Re: Shielded Magnetic Loop Antennas for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-04 12:10:12 UTC
From: Chuck
Topic: 6136 Message: 6145

The AM Loop antenna is sold.

The 6MHz - 20MHz antenna remains.

> A-LOOP-REMSW620. This 10" high, 6-20 MHz remote, amplified, shielded
> loop antenna has never been used at all. Designed for out door use
> with a rotator I was never able to get all the parts together for the
> rotator. I'm asking $120 for this shipped to your CONUS address.
>

This requires 12v DC. Comes with the pair of coax cables needed to power the radio and receive the signals, a bracket for your rotator, sealant for the connectors, and the inside control tuning panel. This antenna need not be permanently mounted and can be placed on an apartment balcony or used on a table top.

Shown at the top of page 5 in the PK Loop cagalog.

http://users.bigpond.net.au/CygnusX3/PK's%20Loop%20Antennas%20Catalogue%202009.pdf

This is it in the foreground with the control box. Very compact 10" high loop.

http://img.villagephotos.com/p/2004-11/892154/21980852-Loopantennas.jpg

-- Chuck

6146. First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-05 13:08:29 UTC
From: sernstfortin
Topic: 6146 Message: 6146

Finally finished my first loop antenna.

It is composed of 26 turns of 24AWG uninsulated copper wire around a square frame made primarily from wood dowels (spent a lot of time and effort there). ;)

Depth of loop was approx 5inches.

Variable air-gap capacitor used was speced by the source that I purchased it from to be 16pF to 390pF.

I used the 5/2003 version of Bruce Carter's AM Loop Calculator to predict performance.

What I discovered through testing with my radio was a tuning range of Freq(lo)= 200KHz, and Freq(hi) = 433KHz...

I believe this off-design result to be primarily a function of the wire I used and final construction / routing of the sensing coil and connection to tuning capacitor.

While there was quite a difference between predicted vs. actual, what I did find when using Spectrum Lab was the antenna did a fair job of nulling off-tuned frequency content, and the directional nulling was pretty good too.

And, while I was using this antenna in my basement, I scored another NDB in preliminary testing.

I'm wondering how the antenna will do outdoors and elevated about 12 feet above ground as opposed to 6 ft below ground in the basement...

Regards.

6147. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-05 13:23:22 UTC
From: aimo ruoho
Topic: 6146 Message: 6147

Interesting...

26 turns of very thin wire, but what size of the frame?
How long sides of the loop, how long wood dowels in a
cross-form?

What kind of transmissions were you wishing to receive?

73 de Amigo

De: sernstfortin <sernstfortin@...>
Para: loopantennas@yahoogroups.com
Enviado: lunes, 5 de enero, 2009 14:08:29
Asunto: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Finally finished my first loop antenna.

It is composed of 26 turns of 24AWG uninsulated copper wire around a
square frame made primarily from wood dowels (spent a lot of time and
effort there). ;)

Depth of loop was approx 5inches.

Variable air-gap capacitor used was speced by the source that I
purchased it from to be 16pF to 390pF.

I used the 5/2003 version of Bruce Carter's AM Loop Calculator to
predict performance.

What I discovered through testing with my radio was a tuning range of
Freq(lo)= 200KHz, and Freq(hi) = 433KHz...

I believe this off-design result to be primarily a function of the wire
I used and final construction / routing of the sensing coil and
connection to tuning capacitor.

While there was quite a difference between predicted vs. actual, what I
did find when using Spectrum Lab was the antenna did a fair job of
nulling off-tuned frequency content, and the directional nulling was
pretty good too.

And, while I was using this antenna in my basement, I scored another
NDB in preliminary testing.

I'm wondering how the antenna will do outdoors and elevated about 12
feet above ground as opposed to 6 ft below ground in the basement...

Regards.

[Non-text portions of this message have been removed]

6148. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-05 15:34:46 UTC
From: John Hoopes
Topic: 6146 Message: 6148

I built a similar loop, square frame, 34" per side and 31 turns of 18 gauge wire. Tuned from 160 kHz to 440 kHz. I also used 1/4 turn link coupling into a low Z pre amp. Worked great for NDBs.

IMO, loops are the best thing since sliced bread for DXing the weak stations!

John/AB4MS

--- On Mon, 1/5/09, sernstfortin <sernstfortin@...> wrote:

From: sernstfortin <sernstfortin@...>
Subject: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual
To: loopantennas@yahoogroups.com
Date: Monday, January 5, 2009, 8:08 AM

Finally finished my first loop antenna.

It is composed of 26 turns of 24AWG uninsulated copper wire around a square frame made primarily from wood dowels (spent a lot of time and effort there). ;)

Depth of loop was approx 5inches.

Variable air-gap capacitor used was speced by the source that I purchased it from to be 16pF to 390pF.

I used the 5/2003 version of Bruce Carter's AM Loop Calculator to predict performance.

What I discovered through testing with my radio was a tuning range of Freq(lo)= 200KHz, and Freq(hi) = 433KHz...

I believe this off-design result to be primarily a function of the wire I used and final construction / routing of the sensing coil and connection to tuning capacitor.

While there was quite a difference between predicted vs. actual, what I did find when using Spectrum Lab was the antenna did a fair job of nulling off-tuned frequency content, and the directional nulling was pretty good too.

And, while I was using this antenna in my basement, I scored another NDB in preliminary testing.

I'm wondering how the antenna will do outdoors and elevated about 12 feet above ground as opposed to 6 ft below ground in the basement...

Regards.

[Non-text portions of this message have been removed]

6149. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-05 17:56:35 UTC
From: Samuel Ernst-Fortin
Topic: 6146 Message: 6149

aimo ruoho writes:
>>Interesting. ..
26 turns of very thin wire, but what size of the frame?
How long sides of the loop, how long wood dowels in a
cross-form?
What kind of transmissions were you wishing to receive?
>>
Yes,

24gauge uninsulated wire.

frame is: 34"x34" sides. 26 turns effectively 5" deep on the frame (total frame depth may be 24-30"... I don't remember to be honest)

NDBs and other LF signals is my target.

6150. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-05 18:14:57 UTC
From: Samuel Ernst-Fortin
Topic: 6146 Message: 6150

John Hoopes wrote:
>>
>>I built a similar loop, square frame, 34" per side and 31 turns of 18 gauge wire. Tuned from 160 kHz to 440 kHz. I also used 1/4 turn link coupling into a low Z
>>pre amp. Worked great for NDBs.
>>

John,
Thanks for the encouragement. The Frame got a lot of attention.... The other parts, not so much. You know, prototype one and plan to toss it. ;)

OK, I've got questions:
18AWG insulated or uninsulated?
Multi-strand wire or solid?
What width for the 31 turns?
What do you mean with a 1/4 turn link coupling (just two sides on the outside of the frame, or the length of the outter perimeter (34"*4 / 4) on the inside of the frame? If so, where in the inside of the frame?
Link shaped like a circle or square?
Can you provide more details on the low-Z pre-amp?

I forgot to mention, I used 1 loop about the perimeter for sensing sent to the radio. The resonant loop and the sensing loop share no common in what I prototyped.

I was a bit surprised to be able to audibly and visually see the effects of adjusting the tuning capacitor... Like I should have doubted the concept at all. I mean, I was building one based on what other people are doing. If it didn't work... well, maybe I'd take it to the fire place. The dowels would make good kindling if nothing else, and the evidence of the experiment would be gone.

Having a knob for the variable capacitor was important. Touching the shaft of the var cap affected tuning (of course).

Outside I think it will perform better. I mean I'm fairly well below grade on 3 sides.

I hear what you are saying with respect to the greatest thing since sliced bread. One begins to think rotor, remote adjustments for the tuning...

Sam

6151. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-05 19:08:05 UTC
From: aimo ruoho
Topic: 6146 Message: 6151

Thanks!
Do you send reception reports to these NDBs
and others, and if you do, do they send back
QSLs?
Amigo

De: Samuel Ernst-Fortin <sernstfortin@...>
Para: loopantennas@yahoogroups.com
Enviado: lunes, 5 de enero, 2009 18:56:35
Asunto: Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

aimo ruoho writes:
>>Interesting. ..
26 turns of very thin wire, but what size of the frame?
How long sides of the loop, how long wood dowels in a
cross-form?
What kind of transmissions were you wishing to receive?
>>
Yes,

24gauge uninsulated wire.

frame is: 34"x34" sides. 26 turns effectively 5" deep on the frame (total frame depth may be 24-30"... I don't remember to be honest)

NDBs and other LF signals is my target.

[Non-text portions of this message have been removed]

6152. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-05 19:45:42 UTC
From: Jim Dunstan
Topic: 6146 Message: 6152

At 01:08 PM 1/5/2009 +0000, you wrote:

>Finally finished my first loop antenna.
>
>It is composed of 26 turns of 24AWG uninsulated copper wire around a
>square frame made primarily from wood dowels (spent a lot of time and
>effort there). ;)
>
>Depth of loop was approx 5inches.
>
>Variable air-gap capacitor used was speced by the source that I
>purchased it from to be 16pF to 390pF.
>
>I used the 5/2003 version of Bruce Carter's AM Loop Calculator to
>predict performance.
>
>What I discovered through testing with my radio was a tuning range of
>Freq(lo)= 200KHz, and Freq(hi) = 433KHz...
>
>I believe this off-design result to be primarily a function of the wire
>I used and final construction / routing of the sensing coil and
>connection to tuning capacitor.

Hi,

I don't know what your design goals were .... or the dimensions of the loop ... e.g. distance between the dowels. However, my loop which is approx. 1' square (also use dowels at the corners) is wound with 18 turns close spaced of insulated hook-up wire. It resonates from about 530 khz to 1500 khz using a similar but slightly smaller capacitor to yours. So I am not surprised at your tuning range. I don't use a sensing coil with mine as all the radios I used work with mutual inductive coupling (it works vy well).

>While there was quite a difference between predicted vs. actual, what I
>did find when using Spectrum Lab was the antenna did a fair job of
>nulling off-tuned frequency content, and the directional nulling was
>pretty good too.
>
>And, while I was using this antenna in my basement, I scored another
>NDB in preliminary testing.
>
>I'm wondering how the antenna will do outdoors and elevated about 12
>feet above ground as opposed to 6 ft below ground in the basement...

I predict little difference except perhaps for less RFI opportunity. My loop performs better out on the deck ... less noise out there from local household wiring etc. Elevating the small loop doesn't seem to have much effect ... except for further reduction of RFI ..... it seems ground effect is low with small tuned loops.

Jim

6153. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-05 16:52:28 UTC
From: kevin asato
Topic: 6146 Message: 6153

I gotta ask - 1/4 turn ?? How is this accomplished?

73,
kevin
kc6pob
--- On Mon, 1/5/09, John Hoopes <jdh1812@...> wrote:
From: John Hoopes <jdh1812@...>
Subject: Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual
To: loopantennas@yahoogroups.com
Date: Monday, January 5, 2009, 7:34 AM

I built a similar loop, square frame, 34" per side and 31 turns of 18 gauge wire. Tuned from 160 kHz to 440 kHz. I also used 1/4 turn link coupling into a low Z pre amp. Worked great for NDBs.

IMO, loops are the best thing since sliced bread for DXing the weak stations!

John/AB4MS

--- On Mon, 1/5/09, sernstfortin <sernstfortin@ yahoo.com> wrote:

From: sernstfortin <sernstfortin@ yahoo.com>

Subject: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

To: loopantennas@ yahoogroups. com

Date: Monday, January 5, 2009, 8:08 AM

Finally finished my first loop antenna.

It is composed of 26 turns of 24AWG uninsulated copper wire around a

square frame made primarily from wood dowels (spent a lot of time and

effort there). ;)

Depth of loop was approx 5inches.

Variable air-gap capacitor used was speced by the source that I

purchased it from to be 16pF to 390pF.

I used the 5/2003 version of Bruce Carter's AM Loop Calculator to

predict performance.

What I discovered through testing with my radio was a tuning range of

Freq(lo)= 200KHz, and Freq(hi) = 433KHz...

I believe this off-design result to be primarily a function of the wire I used and final construction / routing of the sensing coil and connection to tuning capacitor.

While there was quite a difference between predicted vs. actual, what I did find when using Spectrum Lab was the antenna did a fair job of nulling off-tuned frequency content, and the directional nulling was pretty good too.

And, while I was using this antenna in my basement, I scored another NDB in preliminary testing.

I'm wondering how the antenna will do outdoors and elevated about 12 feet above ground as opposed to 6 ft below ground in the basement...

Regards.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6154. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-06 01:18:44 UTC
From: Samuel Ernst-Fortin
Topic: 6154 Message: 6154

Jim wrote
>>
>>I predict little difference except perhaps for less RFI opportunity. My
>>loop performs better out on the deck ... less noise out there from local
>>household wiring etc. Elevating the small loop doesn't seem to have much
>>effect ... except for further reduction of RFI .... it seems ground
>>effect is low with small tuned loops
>>Thank you for that information. If the RFI is lower, then the SNR will be higher, and the utility of the loop will be better. Ideally, I'd use a battery supply out on >>my deck. One unfortunate drawback of a loop is that one has to tune the loop.
>>
The square (cube) frame is approx. 34x34x30. I'm concerned I may not be using an ideal sensing coil to maximize the amount of signal detected sent to the receiver.

Your loop seems ideal for AM/MW reception. Ideally, I'd be able to tune a loop from 30KHz to 540KHz.

I am currently awaiting a variable capacitor with a much wider span (34pF-740pF) than the one I am using now. ;)

Sam

6155. I Wonder if

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-06 01:29:40 UTC
From: jefeickert
Topic: 6155 Message: 6155

I wonder if this my problem and if anyone is?
this come from SW Pirates.
Dear shortwave radio user.

This is an update from UKQRM the group trying to fight back against Power Line Technologies that are wiping out the radio spectrum.
These devices (PLT) are used within a household to set up computer networks using the mains power cables of that house.
If you want an example you need only go to our video page
http://www.mikeandsniffy.co.uk/UKQRM/videos.htm

Probably the main offender here is the Comtrend Power Line Ethernet adaptors supplied as part of BT's Vision package.
But there are many other types that have nearly the same potential to destroy our hobbies and way of life.
The interference extends up to 500 yards around the house using the devices!
The cumulative effect of many hundreds of these devices is so bad that NATO has even raised concerns!

6156. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-06 17:42:58 UTC
From: John Hoopes
Topic: 6146 Message: 6156

Hi Sam,

They say a picture is worth a thousand words. Follow this link and you can see a schematic and a couple of pics of a BCB version of the LF loop, minus the amplifier.

http://groups.yahoo.com/group/loopantennas/photos/album/227852299/pic/list

The wire I used was stranded copper, tinned, and insulated with a Teflon coating, MIL spec I believe. I tuned it with a 365 pF variable. Turns were close wound with the only spacing provided by the thick insulation (about equivalent to a wire diameter).

The amplifier was a design by the late Ralph Burhans called an H90A. I have the schematic for that if you're interested.

I experimented with one turn coupling and the 1/4 turn provided less loading and a higher Q for the loop coil thus improving selectivity. It was a marked improvement over the one turn!

I have an article I wrote up for the Lowdown many years back that I can send you if you'd like.

John/AB4MS

[Non-text portions of this message have been removed]

6157. Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-06 18:13:08 UTC
From: Misha
Topic: 6157 Message: 6157

I plan to install a loop antenna on my backyard, receive only. The plan is to not tune it and to use a broadband preamp, for matching the impedance and for insulating the antenna from the common mode noise pickup on the feeder.
But I still would like to be able to control the null direction remotely. My feeling is that if signals from 2 orthogonal loops are added with a variable phase shift, the null direction may rotate with the phase change.
Did anybody experiment with a setup like this?

6158. Re: [loopantennas] Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-06 18:24:35 UTC
From: John Hoopes
Topic: 6157 Message: 6158

Interesting idea using electronic steering. I haven't tried it but it should work.

Years ago I steered a broad banded loop using a TV antenna rotator. It worked very well but was a little slow.

John/AB4MS

--- On Tue, 1/6/09, Misha <3ym3ym@...> wrote:

From: Misha <3ym3ym@...>
Subject: [loopantennas] Rotating the null direction without moving the antenna
To: loopantennas@yahoogroups.com
Date: Tuesday, January 6, 2009, 1:13 PM

I plan to install a loop antenna on my backyard, receive only. The
plan is to not tune it and to use a broadband preamp, for matching the
impedance and for insulating the antenna from the common mode noise
pickup on the feeder.
But I still would like to be able to control the null direction
remotely. My feeling is that if signals from 2 orthogonal loops are
added with a variable phase shift, the null direction may rotate with
the phase change.
Did anybody experiment with a setup like this?

[Non-text portions of this message have been removed]

6159. Re: [loopantennas] Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-06 18:36:51 UTC
From: Chris Trask
Topic: 6157 Message: 6159

>
> I plan to install a loop antenna on my backyard, receive only. The
> plan is to not tune it and to use a broadband preamp, for matching the
> impedance and for insulating the antenna from the common mode noise
> pickup on the feeder.
> But I still would like to be able to control the null direction
> remotely. My feeling is that if signals from 2 orthogonal loops are
> added with a variable phase shift, the null direction may rotate with
> the phase change.
> Did anybody experiment with a setup like this?
>

I was doing exactly that about a year ago and settled on using an orthogonal pair of active short dipoles, though loops would work as well. The circuitry required for achieving the phase shift was a bit ambitious as I wanted the phase and gain to be constant over the band of 5MHz to 15MHz. Dallas Lankford has a frequency-dependent phase shifter for what you have in mind, and it's much simpler than mine though it needs to be adjusted for any change in frequency.

The commercial cancellers such as those made by MFJ and Timewave to not have legitimate phase shifters. What they have is an amplifier with balanced outputs and a pot between the outputs. Basically, all you get is a variable gain that ranges from +/- 1.0 and no phase change inbetween. They seem to have copied each others design with no ragard to the complete lack of continuous phase shift.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6160. Re: Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-06 20:32:28 UTC
From: Misha
Topic: 6157 Message: 6160

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
> Dallas Lankford has a frequency-dependent phase shifter for what you have in
> mind, and it's much simpler than mine though it needs to be adjusted for any
> change in frequency.
>

Thanks a lot for pointing to Dallas Lankford site! I didn't know about him before.
I think I'll go with 2 loops or dipoles, 2 preamps and 2 feeders, with all the phaser controls and adjustments in the shack. At least for the experimenting phase of the project.
The problem I am trying to address is a strong noise on SW. I walked around with FT-817 and a small loop antenna to find a low-noise location and/or antenna orientation on my small backyard. The noise comes from different directions at different times and on different frequencies, which means I can not use a fixed loop. I am really lazy, so playing with rotators and other mechanical stuff is out of the question.

6161. Re: [loopantennas] Re: Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-06 20:41:42 UTC
From: Chris Trask
Topic: 6157 Message: 6161

```
>
> > Dallas Lankford has a frequency-dependent phase shifter for what you
> > have in mind, and it's much simpler than mine though it needs to be
adjusted
> > for any change in frequency.
>
>
> Thanks a lot for pointing to Dallas Lankford site! I didn't know about
> him before.
> I think I'll go with 2 loops or dipoles, 2 preamps and 2 feeders, with
> all the phaser controls and adjustments in the shack. At least for the
> experimenting phase of the project.
> The problem I am trying to address is a strong noise on SW. I walked
> around with FT-817 and a small loop antenna to find a low-noise
> location and/or antenna orientation on my small backyard. The noise
> comes from different directions at different times and on different
> frequencies, which means I can not use a fixed loop. I am really lazy,
> so playing with rotators and other mechanical stuff is out of the
> question.
>

With a little adjustment. I can turn my orthogonal dipole/phaser setup
into an electronically steerable antenna, but I haven't taken the project
that far yet. It was originally intended just for cancelling strong
adjacent signals, and I learned along the way that two methods need to be
brought to bear as the phasing of two antennas for cancellation is pretty
useless if the antennas are co-located and the two stations are in the same
direction.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
```

c__; c__; '-..'>.__

Graphics by Loek Frederiks

6162. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 01:44:02 UTC
From: Mike-WE0H
Topic: 6146 Message: 6162

That is a very nice looking loop John. I use Teflon insulated wire on my loops and other antennas. It lasts forever.
If you can could you send that schematic and article to me? Many thanks.

Mike
WE0H

John Hwrote:
> Hi Sam,
>
> They say a picture is worth a thousand words. Follow this link and you can see a schematic and a couple of pics of a BCB version of the LF loop, minus the amplifier.
>
> http://groups.yahoo.com/group/loopantennas/photos/album/227852299/pic/list
>
> The wire I used was stranded copper, tinned, and insulated with a Teflon coating, MIL spec I believe. I tuned it with a 365 pF variable. Turns were close wound with the only spacing provided by the thick insulation (about equivalent to a wire diameter).
>
> The amplifier was a design by the late Ralph Burhans called an H90A. I have the schematic for that if you're interested.
>
> I experimented with one turn coupling and the 1/4 turn provided less loading and a higher Q for the loop coil thus improving selectivity. It was a marked improvement over the one turn!
>
> I have an article I wrote up for the Lowdown many years back that I can send you if you'd like.
>
> John/AB4MS
>

6163. Re: [loopantennas] Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 03:11:44 UTC
From: Jay Heyl
Topic: 6157 Message: 6163

On Tue, Jan 6, 2009 at 1:13 PM, Misha <3ym3ym@...> wrote:

> But I still would like to be able to control the null direction
> remotely. My feeling is that if signals from 2 orthogonal loops are
> added with a variable phase shift, the null direction may rotate with
> the phase change.

As the other replies have made clear, it is certainly possible. My reading on the topic has suggested that better null steering is achieved with the antennas as far apart as possible and slightly off from orthogonal, say 75 degrees instead of 90. This may vary depending on the specifics of the loops and the frequencies in question. The limited experience I have is with phasing antennas for MW reception so it may not be the same with SW reception.

-- Jay

[Non-text portions of this message have been removed]

6164. Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 05:42:08 UTC
From: Bill McGraw
Topic: 6146 Message: 6164

I sent two different loop calculators to sernstfortin@... plus my difficulties in dealing with any antenna and about my 8" loop that seems to work OK in the MW band. His narrow frequency range was unusual and makes me think to study this some more before making a loop.

How does one calculate the pf capacitance of a v-cap? I have 9 of them and one works well with a crude crystal radio and with 2 inexpensive AM radios using the 8" loop. I don't fully understand how to attach the dual v-caps to the antenna or loop, sensing coil or without the sensing coil.

I use my DX 398 to verify frequencies on the AM radios using the 8" loop; I have a scanner with an OCF wire taped to my office wall, a square loop around my office ceiling for the DX 398 (the regular telescoping antenna seems to work as well) and a single loop around a large photo frame that seems to work only on FM. All antennas are inside but I had an outside aerial at one time.

"First Loop Experience: Predicted Peformance vs. Actual
Posted by: "sernstfortin" sernstfortin@yahoo.com sernstfortin
Mon Jan 5, 2009 5:08 am (PST)"

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

6165. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 05:38:08 UTC
From: Dennis Gibson
Topic: 5136 Message: 6165

About 75% of these links are 404's.

--- In loopantennas@yahoogroups.com, loopantennas@yahoogroups.com wrote:
>
>
> Amplifiers for Antennas and Pre-Selectors
> http://members.cts.com/king/j/jlkolb/site/ant.htm
> - presented by John Kolb [KK6IL]
>
> Four(4) Schmatic Diagrams are provided:
>
> * The KRS AA-1 Active Antenna was sold through Radio West
> in the early '70's, and was a good performer.
> http://members.cts.com/king/j/jlkolb/site/aa-1.pdf
>
> * In the '70's, this Circuit was developed suitable for
> use as an Antenna Pre-Amplifier or as the Amplifier for
> a Box Loop Antenna or Ferrite Rod Antenna.
> http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf
>
> * A fancier version, with a Dual-Gate FET, featuring an
> RF Gain Control. Dual-Gate FET's can still be found,
> but not easily. This Schematic is closely related to
> a Pre-Selector sold as the KS Pre-Selector.
> http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf
>
> * Better Nulling is obtained with a Loop Antenna when it
> is Center Tapped and Amplified with a Balanced Amplifier.
> http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf
>
>
> Justice AM Antenna With Twin Coil Ferrite
> Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
> http://www.ccrane.com/justice_antenna.asp
>
> Directional Terminated MW/LW Loop by WellBroook (UK)
> K9AY is the Remote Controlled Variable Termination; Provides a
Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses
Two Delta Loops.
> http://www.wellbrook.uk.com/K9AY.html
>
> Kiwa - High Performance MW Air-Core Loop Antenna
> High Performance MW Air-Core Loop Antenna by KIWA
> http://www.kiwa.com/kiwaloop.html
>

> Palomar Engineers Loop Antennas LW-MW-SW2
> Palomar's Loop Antenna gives superb performance on the AM
medium-wave broadcast band. The loop rotates and tilts to give deep
nulls so you can eliminate local interference. It also allows you to
null out a station and listen to another one on the same frequency.
> http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html
>
> Q-Stick+
> The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
> http://www.dx-tools.com/QStick.htm
>
> Quantum QX Loop and other DX-Tools Products
> The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
> http://www.dx-tools.com/PRODUCTS.htm
>
> Terk AM loop at Amazon.com
> Here is a place you can buy yourself a TERK AM loop antenna, even
some other stuff that is kind of off topic to talk about. 73
>
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-871
2984-4397719
>
> WL1030 by maartenhagg
> Wideband Magnetic Loop 10kHz - 30MHz
> http://home.hetnet.nl/~maartenmiriam/index.html
>
>
> C Crane Company
> They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
> http://www.ccrane.com
>
> Kiwa Electronics
> Kwia makes the best products for you and your radio equipment, and
also improves things that needed improvement a long time ago.
> http://www.kiwa.com
>
> Stormwise Ferrite Rods
> Get some huge ferrite rods and a converter to go along with its,
heck it even comes with project book.
> http://www.stormwise.com
>
> Universal Radio Company
> They sell all sorts of loops big and small for LW/MW/SW and VLF also
10 kHz to 15 MHz
> http://www.rffun.com
>
>
> ALA-1530
> Find the best UK LF/MF antenna here.
> http://www.wellbrook.uk.com/

>
> AOR
> This is the site that sells the AOR loop
> http://www.aorja.com/ant-e.html
>
> Kiwa Electronics
> The maker of the air core loop antenna and other useful items that
you may want on your wish list.
> http://www.kiwa.com
>
> LF Engineering Company
> A group of engineers, who make products for VLF/LF listening even
ELF loops!
> http://www.lfengineering.com
>
> Select A Tenna by Intensitronics Corp
> The maker of the select A tenna, a great AM loop antenna that is a
little bigger than the terk
> http://www.selectatenna.com
>
> Terk Technolegies
> The maker of the best sold AM and I use also called the AM-1000 AM
loop antenna, there is also technical information on how it works.
> http://www.terk.com
>
> Torus Tuner Loop Company
> A very specially made loop that is almost as big as a hula hoop
> http://www.torustuner.com
>
>
> GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception
Contributed by radiohighfreq
> Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas.
Translated from the Gremany Language Webpages here is the "Grahn
Specialized Loop Antennas for MW and SW Reception" ULR Address:
http://www.grahn-spezialantennen.de/
> Use the Google Translate a web Page Tool
http://www.google.com/language_tools to convert these webpages to English.
> http://makeashorterlink.com/?Z5F025FE4
>
>
> When considering AM Loop Antennas . . .
> - - - It all comes down to Time? & Money?
>
> How much Time? Are you going to be 'using' the Loop Antenna for
> DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio
> Loop).
>
> How Much Money? Are you willing to spend for a Loop Antenna to get
> the kind of better reception you want.

>
> TBL: Time and Money translates to the AM Loop Antenna's Value to You.
>
>
> The average radio listener (97%), who wants better AM Radio
> Reception, can spend $100 or less and get an AM Loop Antenna that
> meets their needs.
>
> Here is a brief list of the more common AM Loop Antennas for $100 or
> less.
>
> * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>
> * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>
> * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>
> * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>
> * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)
>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> #1. * Justice AM Loop Antenna (Active)
> > - - - http://www.ccrane.com/justice_antenna.asp
> >
>
> #2. * Torus Tuner 27" Loop Antenna (Passive)
> > - - - http://www.torustuner.com/
> >
>
> #3. * Select-A-Tenna Model #541M (Passive)
> > - - - http://www.selectatenna.com/
> >
>
> #4. * Terk AM Advantage Loop Antenna (Passive)
> > - - - http://www.terk.com/pdfs/Advantage.pdf

> >
>
> #5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> > - - - Discontinued (Find 'used' on eBay)
>
>
> >
> > * MTM Scientific AM Radio Loop Antenna (Passive)
> > * http://www.mtmscientific.com/loop.html
> > - - - Starter Kit, Deluxe Kit or Finished Antenna!
> >
> > * * * Home made 'Box' AM Loop Antennas
> > - Usually 20" to 24" in size
> > - - Generally a simple Passive antenna
> > - - - Can be made Active with an add-on amplifier
> >
> >
> > NOTE: Beyond $100 in the $200 to $400 range are the
> >
>
> #1.a. Kiwa MW Air Loop Antenna
>
> #1.b. Quantum Loop Antennas
>
> . . . #3. Palomar Loop Antenna
>
>
> Basic Wire Back Yard Loop Antennas
> Full-wave loops are very popular antennas. They are especially
useful on 80 and 40 meters where they perform well at modest heights.
These are closed loops that are one full wavelength long. Horizontal
loops may be fed at any convenient spot. For best performance, make
your horizontal loop into a square, especially if it is to be used on
several bands.
> http://www.radioworks.com/nloop.html
>
> K9AY: How to Build the K9AY Loop Receiving Antenna
> AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave
Frequency DXing.
> http://www.aytechnologies.com/Products/products.htm
>
> Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
> A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop
Antenna using a Single Turn of Copper Tubing within a Plastic Hula
Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic +
Loop Pre-Amplifier ~ Presented by Nicolae Santean
> http://www.csd.uwo.ca/~nic/radio/radio.shtml
>
> Six Foot Square by Six Turn Loop Antenna
> New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced

Amplifier: Frequency Range 50KHz - 5000KHz.
> http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm
>
> Ten Foot Receiveing Loop for Low-Frequency DXing
> A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop
was originally designed and constructed for NDB DXing and now is used
for LOWFER DX work.
> http://www.imagenisp.ca/jsm/loop.html
>
>
> Dave's HomeMade Loop Antennas
> This is the loop antenna my dad built in 1958. Although I was only 8
years old at the time, I knew what this was for and how it worked.
WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
> http://www.schmarder.com/radios/misc-stuff/loops.htm
>
> Kowalski AM/MW Loop Antenna
> The Kowalski Loop is similar to the Radio West Loop in that it is an
amplified ferrite rod type loop. It only tunes the medium wave band.
It was built and sold on a very limited basis by former National Radio
Club member Paul Kowalski. Presented by Robert Kramer NV8V
> http://members.aol.com/RKDX/Kowalski-Loop.html
>
> Radio West LW/MW Loop Antenna
> Radio West Loop Antenna was the commercially available Low (LW) and
Medium AM/MW) Frequency Antenna available. It was a improvement over
the Space Magnet Loop Antenna, which was the rage among medium wave
DXers in the early-mid 70's. Presented by Robert Kramer NV8V
> http://members.aol.com/RKDX/Radio-West.html
>
> VEA MW-1812 Loop Antenna Users Guide
> High Performance Tunable Loop Antenna VEA MW-1812VE
> http://www.dobe.com/vea/Loops/1812Guide/index.htm
>
>
> 18-inch Box Loop for MW
> Relatively easy-to-build MW loop that is small enough to fit on a
desk, yet large enough to accommodate radios the size of a Sangean
ATS-803A or smaller. For best nulling, place antenna/radio combination
on a turntable/platter.
> http://www.clearsail.net/~n5wbi/radio/PonderLoop.html
>
> 4 Foot Box loop antenna
> Heres a 4 foot loop project by Bruce
> http://www.mindspring.com/~brucec/loop2.htm
>
> ATL-3 Loop Antenna by Graham Maynard (UK)
> Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five
26" Sided Spiral
> http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

>
> Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
> The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a
Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to
the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
> http://www.radiointel.com/anthooploop.htm
>
> DX zones results on loop antennas and projects
> Reference links on some loop antenna projects for you to build
> http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/
>
> DXers Tool Box - DIY - Tuned Loop Antenna
> The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you
vastly improve your Medium Wave reception? The antenna consists of an
LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
> http://www.geocities.com/SunsetStrip/Underground/8585/loop.html
>
> Embrodary Loops
> While these loop are for crafts, they can be a craft of art for
improved AM radio reception!
> http://www.craftking.com/crafthtml/embroidery_loops.htm
>
> Hard Core DXing
> Here's what nordic dx has to offer in their discription of loops in
this website
> http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html
>
> K5DKZ - Three Foot Box Loop Antenna Kit
> Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
> http://www.qsl.net/k5dkz/4loop.html
>
> KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
> KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//=
Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL
the Hardware for Building this AM/MW Radio DX Loop Antenna.
> http://www.mtmscientific.com/loop.html
>
> Long LoopStick Antenna for MW DXing
> Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick
Antenna" was an experiment to try to improve AM radio reception
without using a long wire or ground.
> http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm
>
> TL Loop Receiving Antenna 10 KHz - 30 MHz
> The principle of operation is that an rf voltage appears across the
terminals of a loop when it is placed in an electromagnetic field. The
voltage is proportional to frequency for a given field strength and so
at Very Low Frequencies the voltage is very small and requires greater
amplification but it is not quite as simple as that. The new TL Loop
uses a unique feedback system to optimise the amplification/noise

factor over a much wider range than has been possible hitherto.
> http://ecforster.netfirms.com/LpAnt/Doc1.html
>
> Very Low Frequency (VLF) Up-Converter
> STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
> http://www.stormwise.com/vlfconv.htm
>
>
> W2BRI Xmit Loops Contributed by n3hkn
> Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
> http://www.standpipe.com/w2bri/index.htm
>
>
> WHY? Use a Shielded Loop Antenna?
> Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
> http://www.greertech.com/hfloop/mymagloop.html
>
> "AM Loop Antenna Calculator" - by Bruce Carter
> Here is a Great Tool for those Loop Antenna => "What Ifs...."
> http://www.mindspring.com/~loop_antenna/amloop_calc4.htm
>
> "Loop Antennas 101" Read This First
> Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
> http://www.frontiernet.net/~jadale/Loop.htm
>
> * NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
> Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
> http://www.mindspring.com/~loop_antenna/
>
> Loop Antenna Modeling Software and more...
> Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
> http://www.btinternet.com/~g4fgq.regp/page3.html
>
> Loop Antennas at Hard Core DX
> TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.

> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Loops and Rods =&= The Ferrite Rod Antenna
> Theory / Formulas / Drawings = The use of a small Magnetic Loop as
an antenna. The ferrite has the effect of intensifying the magnetic
field inside the loop.
> http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html
>
> Modify the common AM Radio Loop Antenna
> Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix
External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect
it - Add an Amplifier. Presented by Bruce Carter
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Sensitivity of Multi Turn Receiving Loops
> LWCA - Multi turn wire loops are often used as low frequency
receiving antennas. Basic electromagnetic theory is developed here as
it relates to electrically small multi-turn loops at low frequencies.
- Presented by William E. Payne, N4YWK
> http://www.lwca.org/library/articles/ywk/looptheo.htm
>
> Using the Small Loop Antenna by Joe Carr
> DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF
Document provided by Universal-Radio.Com
> http://www.dxing.com/tnotes/tnote09.pdf
>
>
> How to Get Better AM Radio Reception
> Features Loop Antennas and much more. The Antenna is 90% of Your
Radio. Still Need More Signal? Try a Better Antenna.
> http://geocities.com/SunsetStrip/Towers/3332/amradio.html
>
> Introduction to Broadcast Band AM/BCB/MW DXing
> The International Radio Club of America (IRCA) WebPages
> http://www.geocities.com/Heartland/5792/bcbdx.htm
>
>
> ** Radio-Antenna-PRO ** H.Hertz-Forum
> Remember you may need some Russian Text software for this groupThe
international forum for radioengineers, scientists and hams. All about
radioelectronics, radiocommunications, radiophysics, electrodynamics.
About 250 members from 20 countries. In Russian language. Very active.
Lot of interesting researches and discussions.
> http://groups.yahoo.com/group/Hz/
>
> AM Radio Listening
> This is the group for the AM radio DXer, who wants to post logs and
talk about loop antennas for AM only
> http://groups.yahoo.com/group/amradiolistening
>

> Longwave Radio Listening
> This group is dedicated to members that are into longwave radio
listening and transmitting
> http://groups.yahoo.com/group/longwaveradiolistening/
>
> Magnetic Loop - German web site focuses on SW Loop Antennas.
Contributed by radiohighfreq
> Posting are in German and English. Claims to be Non-Commercial and
Pop-Up Add Free.
> http://www.magnetic-loop.de/main.html
>
> Radio DX World
> This groups cares about you and your DXing, and also can help you
with many resources of DX. Its by a radio group called the Global
Communications Commission that devotes the hobby of radio DXing
> http://groups.yahoo.com/group/RadioDxWorld/
>
> Radio DXing with The Interference Problem
> This is great for that annoying problem you have with your loop
antenna, and you may think its the loop, think again it could be that
messed up street light, next doors dimmer switch, and other something
else you can't probably solve with just a loop antenna.
> http://groups.yahoo.com/group/RadioDx/
>
> Radio Science Observing
> Are you curious like Art Bell,and into radio phenomica, and
propagation heres the place to come and join.
> http://groups.yahoo.com/group/radioscience/?yguid=74346996
>
>
> "3805er" 80-Meter balanced coax loop
> Small shielded rx only loop for 80 meters
>
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm
>
> Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
> Four interesting and nice looking Shielded SW Loop Antenna webpages:
* Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters *
Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of
Coax-Shielded Faraday Loop Antennas - Website presented by
"ProgMan22000" (GreerTech.Com)
> http://www.greertech.com/hfloop/mymagloop.html
>
> Magnetic Loop Antennas Receiving - by W8JI
> This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna
Fields - Dipole Antenna Fields - Radiation - Loop Shielding and
Balance - by W8JI
> http://www.w8ji.com/magnetic_receiving_loops.htm
>
> OctoLoop Antenna (Shielded)

> LWCA - The "OctoLoop" stands out in performance and ease of
construction. Description and Drawing of the OctoLoop Antenna -
Presented by William E. Payne, N4YWK
> http://www.lwca.org/library/articles/ywk/octoloop.htm
>
> Radiation and Fields (Magnetic Loop Antennas) - by W8JI
> This WebPage's Topic Are: - Electric Field - Magnetic Field -
ElectroMagnetic Field - Near the Antenna - Losses - Near Field -
Fresnel Zone - Farfield - Summary - by W8JI
> http://www.w8ji.com/radiation_and_fields.htm
>
> Shielded Loop Antenna WebPage presented by Doug "K8RFT"
> This personal webpage describes How To Make a Loop Antenna with
Seven Feet of Six-Conductor Shielded Cable formed into a Circle and
with the conductors connected in series to form a Six-Turn Loop
Antenna. Original "Plans" from BeRadio.Com
> http://user.netonecom.net/~swordman/Radio/shloopant.htm
>
> Shielded-Loop AM Antenna
> BeRadio.Com presents the "AM Loop Shielded Antenna for AM
Reception:The loop self resonates approximately in the middle of the
AM band, and by adding or subtracting turns it can be optimized higher
or lower in the band.
> http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm
>
> Shielded-Loop Receiving Antenna by N5FC
> Shielded-Loop antennas have some nice properties that make them
desirable as portable receiving antennas.
> http://www.io.com/~n5fc/loop_ant.html
>
>
> Justice AM Antenna a Review by RadioCorner.Com
> Developed by Chris Justice from the C. Crane Company, the Justice AM
antenna is the best solution for pulling in a weak or, in some cases a
station you never thought existed. The antenna uses a new patented
technology called "Twin Coil Ferrite" that uses a regular ferrite rod
antenna in a very unusual fashion.
> http://www.radiocorner.com/amradio/amantennas.html
>
>
> Antique Electronic Supply
> A sorts of older variable tuning capacitors for your loop antenna
that needs one bad.
> http://www.tubesandmore.com
>
> Fair Radio Sales
> A wide variety of electronic components, radios, and variable
capacitors for your loop antenna
> http://www.fairradio.com/airvar.htm
>

> Ocean State Electronics
> Rhode Island's best selection for a wide variety of the best tuning
capacitors for reasonable price, tell them that electronicdx (Adam
Ebel) sent you.
> http://www.oselectronics.com/ose_p96.htm
>
> The Crystal Set Society
> Here are some capacitor available from a club that devotes to
Crystal Set Radio
> http://www.midnightscience.com/catalog5.html
>
> The Surplus Sales of Nebraska
> This surplus store based in the state of Nebraska, has the one you
might need, but they have minumim order policy
> http://www.surplussales.com/Variables/AirVariables/AirVar1.html
>
>
> Dan Small Parts and Kits
> Dan's wide selection from Canada.
> http://www.danssmallpartsandkits.net/
>
>
> American Science and Surplus
> A big spool of wire here just about for AM
> http://www.sciplus.com/category.cfm?subsection=15&category=150
>
> DigiKey.com
> For ribbon cable and other sorts of wire.
> http://www.digikey.com
>
> Femco Magnet Wire
> Femco Magnet Wire is a joint venture company that has been supplying
round insulated copper magnet (winding) wire to the transplant market
since 1988.
> http://www.femcomagnetwire.com/
>
> Litz-Wire,com
> Welcome to Litz-Wire.com!
> http://www.litz-wire.com/
>
> MCM electronics
> They do sell wire and magnet wire here
> http://www.mcmelectronics.com
>
> MWS Industries
> A place for all sorts of wire for business and industry
> http://www.mwswire.com
>
> Magnet Wire from Radio Shack
> This is what I use often

>
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010
%5F004%5F000&product%5Fid=278%2D1345
>
> Mouser Electronics
> Mouser has the biggest spools here for a great price, that makes sense
> http://www.mouser.com
>
> Ocean State Electronics
> magnet wire at a good price
> http://www.oselectronics.com
>
> WIRE "Flex-Weave" Antenna Wire
> "Flex-Weave" is a hybrid aerial wire that consists of 168 strands of
woven #36 solid copper wires that provide high strength and extreme
flexibility. The most popular version of "Flex-Weave" is the
'equivalent' of #14 AWG wire size. It can be 'used' for unsupported
spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
> http://www.radio-ware.com/products/fw.htm
>
> WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong,
Flexible and Durable
> "QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG
Wire has more than 41 Strands tightly twisted together under its
Flexible Insulation making it both Strong, Flexible and Durable.
> http://www.antennasmore.com/wire&.htm
>
>
> Scanning, Ham Radio and Public Safety Resources
> - Links to the various webpages with resources for the Ham Radio
Operator and Scanning Enthusiast. Resources such as; Monitoring Police
and Fire Communications, What Antennas to use, Secret Scanner
Frequencies, Radio Programming Software, Radio Mods and Operating
Tips, Professional resources for Public Safety Management, Guidance
and Self-Help.
> http://myweb.accessus.net/~090/resources-ps.html
>
> "SW-Radio Galaxy International"
> Free Radio From The Netherlands
> http://www.swrgalaxy.tk
>
> 11 meter band
> rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
> http://rsn11meterbandtex2div.bravehost.com/
>
>
> Stormwise - Supplier of large VLF ferrite rods.
> http://www.stormwise.com/vlf.htm
> Amidon Ferrite rods, bars, plates, and tubes.
> http://www.amidoncorp.com/aai_ferriterods.htm

>
> Bytemark Ferrite rods, bars, plates, and tubes.
> http://www.bytemark.com/products/rod1.htm

6166. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 08:05:22 UTC
From: C. Beijersbergen
Topic: 6146 Message: 6166

Others like myself will be interested too, so could you put the article in the Files section?

Cor Beijersbergen

That is a very nice looking loop John. I use Teflon insulated wire on my loops and other antennas. It lasts forever.
If you can could you send that schematic and article to me? Many thanks.

Mike
WE0H

[Non-text portions of this message have been removed]

6167. Re: [loopantennas] Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 10:09:00 UTC
From: tsmithers@cix.co.uk
Topic: 6157 Message: 6167

>My feeling is that if signals from 2 orthogonal loops are
>added with a variable phase shift, the null direction may rotate with
>the phase change.

As well as the MFJ/Timewave units already mentioned the NCC-1 phaser from DX Engineering may be of interest
http://www.dxengineering.com/Parts.asp?ID=1227&PLID=215&SecID=114&DeptID=12&PartNo=DXE%2DNCC%2D1

73 to all
Trevor G0KTN

6168. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 14:02:02 UTC
From: John Hoopes
Topic: 6146 Message: 6168

Sam,

One more attachment of the Burhans preamp for you. I will be posting up some more pics in "John's Corner" of the link coupling I used on the BCB antenna later tonight.

John

[Non-text portions of this message have been removed]

6169. Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 14:27:40 UTC
From: John Hoopes
Topic: 6146 Message: 6169

That's a good idea. I should have done it earlier but didn't think there would be any interest.

John

--- On Wed, 1/7/09, C. Beijersbergen <c.beijersbergen@...> wrote:

From: C. Beijersbergen <c.beijersbergen@hccnet.nl>
Subject: Re: [loopantennas] First Loop Experience: Predicted Peformance vs. Actual
To: loopantennas@yahoogroups.com
Date: Wednesday, January 7, 2009, 3:05 AM

Others like myself will be interested too, so could you put the article in the Files section?

Cor Beijersbergen

That is a very nice looking loop John. I use Teflon insulated wire on my
loops and other antennas. It lasts forever.
If you can could you send that schematic and article to me? Many thanks.

Mike
WE0H

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6170. Re: [loopantennas] Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 14:56:50 UTC
From: Jim Dunstan
Topic: 6157 Message: 6170

At 03:13 PM 1/6/2009 +0000, you wrote:

>I plan to install a loop antenna on my backyard, receive only. The
>plan is to not tune it and to use a broadband preamp, for matching the
>impedance and for insulating the antenna from the common mode noise
>pickup on the feeder.
>But I still would like to be able to control the null direction
>remotely. My feeling is that if signals from 2 orthogonal loops are
>added with a variable phase shift, the null direction may rotate with
>the phase change.
>Did anybody experiment with a setup like this?

Hi,

This is how the crossed loops in shipboard LF directional antennas work .... the loops are mounted perpendicular to each other ... the feed lines (parallel) are brought down to the radio room and connected to a 'goniometer' .... crossed inductors .... with a rotating pickup loop inside. The effect is as if a single loop was being rotated.

Jim

>

[Non-text portions of this message have been removed]

6171. Re: First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 15:04:09 UTC
From: tenorman1952
Topic: 6146 Message: 6171

--- In loopantennas@yahoogroups.com, "sernstfortin"
<sernstfortin@...> wrote:

> It is composed of 26 turns of 24AWG uninsulated copper wire around
a
> square frame made primarily from wood dowels (spent a lot of time
and
> effort there). ;)
>
> Depth of loop was approx 5inches.
>
> Variable air-gap capacitor used was speced by the source that I
> purchased it from to be 16pF to 390pF.
>
> I used the 5/2003 version of Bruce Carter's AM Loop Calculator to
> predict performance.
>
> What I discovered through testing with my radio was a tuning range
of
> Freq(lo)= 200KHz, and Freq(hi) = 433KHz...
>

I've found Bruce Carter's calculators to be fairly accurate, or at
least, in the ballpark.

With your figures, 34" x 34", .19" wire spacing, 26 turns, and your
tuning cap figures, 16-390 pf, Bruce's calculator shows 165 khz - 815
khz.

http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

Paul C.

6172. Re: [loopantennas] Rotating the null direction without moving the antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 16:00:00 UTC
From: C. Beijersbergen
Topic: 6172 Message: 6172

Both loops are in the same location, so the incoming signal have the same or opposite phase depending on the direction the signal is coming from. A null is being achieved when the signals coming from both antennas have equal amplitude and opposite phase when being added to each other.
So IMHO the only thing one needs is a switching arrangement to be able to change the phase of one of the signals from the two antennas and a means to change the amplitude of the signals relative to each other. In its simplest form this could be a potmeter where both signals are the inputs to the end contacts and the output is from the moving contact.
My solution seems so simple, where do I go wrong?

Cor Beijersbergen van Henegouwen

>But I still would like to be able to control the null direction
>remotely. My feeling is that if signals from 2 orthogonal loops are
>added with a variable phase shift, the null direction may rotate with
>the phase change.
>Did anybody experiment with a setup like this?

Hi,

This is how the crossed loops in shipboard LF directional antennas work
.... the loops are mounted perpendicular to each other ... the feed lines
(parallel) are brought down to the radio room and connected to a
'goniometer' .... crossed inductors .... with a rotating pickup loop
inside. The effect is as if a single loop was being rotated.

Jim

[Non-text portions of this message have been removed]

6173. Re: [loopantennas] links !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 19:08:04 UTC
From: brian russell
Topic: 6173 Message: 6173

Dennis,
Thanks for the posting, almost like having a separate Internet for Loops hi!
I have saved it twice in case of ' accidents '
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Dennis Gibson
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 07, 2009 5:38 AM
Subject: [loopantennas] Re: File - Links.txt

[Non-text portions of this message have been removed]

6174. Added photos of my MF loop and schematic of LF preamp in photo section.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 22:57:19 UTC
From: jdh1812
Topic: 6174 Message: 6174

In case anyone is interested, you can see them in "John's Corner".

The preamp was designed by the late Ralph Burhans, an engineer and LF tinkerer/enthusiast. It worked very well on my LF loop. Frequency response was limited by the use of audio transformers for coupling but seemed pretty flat up to the antenna upper frequency of 400 kHz.

Everyone always asks me "What is a quarter turn link coupling?". It's easier to show then to explain, for me anyway.

BTW, the tuning on this antenna is sharp and I plan on making it sharper by winding it with Litz wire.

73
John

http://groups.yahoo.com/group/loopantennas/photos/album/227852299/pic/list?mode=tn&order=ordinal&start=1&&dir=asc

6175. Re: [loopantennas] Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-07 23:12:20 UTC
From: Samuel Ernst-Fortin
Topic: 6146 Message: 6175

I'm not an expert, but I know that the construction techniques used could throw a wrench into the predicted.

How does one measure the capacitance of a variable cap? Well, one could gen up some form of RC arrangement that is
either charged or discharged and from the time constant associated with the exponential waveform (oscilloscope or VOM),
with a known R, you estimate C.

Or, one could gen up some form of frequency generator (multistable / oscillator) who's freq and period depend on C, and measure
the frequency or period (oscope most likely, but a frequency meter perhaps) to estimate C, or one could use a suitable Capacitance
Meter (which ultimately I presume estimates the value of the capacitor under test by one of these methods).

For all I know, the VOM or oscope may skew the measurement, so I personally may just go out and get a capacitance meter myself.
They are relatively cheap (you have to make sure you get one that has a resolution of fractional pF if possible).

If you have a dua-l or tri- or quad-section vcap, I'm thinking you are referring to the number of tunable elements which are essentially
ganged on the same shaft right? In general, I believe you want to place the sections in parallel to have their individual capacitances sum
together to give you the widest possible tuning range / span.

I do not have your vcaps in my hand to look at them, but more than likely, since they share the same shaft, they probably already have
one leg in common, perhaps the outside shell / frame of the vcap... whatever is in common with the tuning shaft....

Therefore, to place them all in parallel, you simply tie the stationary portions together electrically (I suspect there would be a solder
lug for each section). I hope my description is clear.

OK, now the coils of your loop antenna form the resonant section and the inductance which must be paralleled with the capacitance of your
vcap to be placed into tunable resonance.

Your sensing coil: I suspect you either have something wound around the frame (right on top of the resonant windings), or you have
something smaller forming a loop inside the resonant windings. How many turns? I can't tell you that... like I said I'm a newbee myself.

If you have a portable shortwave radio, mearly placing your radio inside the resonant coil is enough to provide antenna coupling. No
sensing coil needed.

Otherwise, I believe, you have the two wires attached to the antenna plug (you go buy one to fit the radio) wired to the sensing coil.

Don't ask me what to do if you want to have just some form of aligator clip on with your telescoping antenna.

I hope others here will help you more as you've about tapped out my working knowledge of loop antennas.

More reading for me.

Good luck, and have fun!

From: Bill McGraw <mcgr3799@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 7, 2009 12:42:08 AM
Subject: [loopantennas] Re:First Loop Experience: Predicted Peformance vs. Actual

I sent two different loop calculators to sernstfortin@ yahoo.com plus my difficulties in dealing with any antenna and about my 8" loop that seems to work OK in the MW band. His narrow frequency range was unusual and makes me think to study this some more before making a loop.

How does one calculate the pf capacitance of a v-cap? I have 9 of them and one works well with a crude crystal radio and with 2 inexpensive AM radios using the 8" loop. I don't fully understand how to attach the dual v-caps to the antenna or loop, sensing coil or without the sensing coil.

I use my DX 398 to verify frequencies on the AM radios using the 8" loop; I have a scanner with an OCF wire taped to my office wall, a square loop around my office ceiling for the DX 398 (the regular telescoping antenna seems to work as well) and a single loop around a large photo frame that seems to work only on FM. All antennas are inside but I had an outside aerial at one time.

"First Loop Experience: Predicted Peformance vs. Actual
Posted by: "sernstfortin" sernstfortin@ yahoo.com sernstfortin
Mon Jan 5, 2009 5:08 am (PST)"

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

[Non-text portions of this message have been removed]

6176. Re: [loopantennas] Added photos of my MF loop and schematic of LF preamp in photo section.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-08 00:36:45 UTC
From: Tony Magon
Topic: 6174 Message: 6176

The quarter turn link coupling lowers the impedance going to the input of the amplifier.

From my experience a full turn loop is about 600 ohms. The quarter turn loop will probably be about 50 ohm, but to check this you would need a noise bridge

Regards

Tony Magon VK2IC

On Thu, Jan 8, 2009 at 9:57 AM, jdh1812 <jdh1812@...> wrote:

> In case anyone is interested, you can see them in "John's Corner".
>
> The preamp was designed by the late Ralph Burhans, an engineer and LF
> tinkerer/enthusiast. It worked very well on my LF loop. Frequency
> response was limited by the use of audio transformers for coupling but
> seemed pretty flat up to the antenna upper frequency of 400 kHz.
>
> Everyone always asks me "What is a quarter turn link coupling?". It's
> easier to show then to explain, for me anyway.
>
> BTW, the tuning on this antenna is sharp and I plan on making it
> sharper by winding it with Litz wire.
>
> 73
> John
>
> http://groups.yahoo.com/group/loopantennas/photos/album/227852299/pic/li
> st?mode=tn&order=ordinal&start=1&&dir=asc
>
>
>

[Non-text portions of this message have been removed]

6177. Re: Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-08 02:35:51 UTC
From: cank13cat
Topic: 6137 Message: 6177

Similar situation here, small apartment, no practical way to put up permanent outdoor antenna (tho' I'll sneak some random wire up a tree on weekends).

My best compromise solution so far is a homebrewed passive loop made from a hank of old TV coaxial cable rescued from the trash. It's about 25'-30' long. I wound it twice around a closet door - it's just long enough to leave a 12" space between each end. The feedline and finishing is too weird to describe so I'll try to attach a photo later in the week. No tuning capacitor. I use jumpers with alligator clips to adjust it for MW or SWL.

The closet door gives it some directionality. On MW it's fairly directional, tho' not as sharp as a typical portable's internal ferrite loopstick. On shortwave it's not directional at all, but pivoting the door can help null out household noise from my own computer.

On MW it works best for skywave propagation and it generally beats the internal loopsticks on my portables for low noise reception, especially at night above approx. 1000 kHz.

On shortwave it's not terribly sensitive but at least it cuts way back on the household RFI. Weak signals are actually more intelligible than on a bit of random wire up a tree. The random wire may pick up an S9 signal along with S8 noise. The homebrewed loop will pick up the same signal at around S1-S3 with negligible noise, so it's far more pleasant.

If I wanted to do without the minor advantage of being able to pivot the closet door I'd just fasten the coax inside a window frame - the window next to the closet door is about 3' wide and 6' high, so there's plenty of room.

It's really crude but it works and is much less noisy than a typical indoor random wire or telescoping whip on a portable.

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> I have heard of that in Cuba I remember his Name(sorry) anyway I believe had article once about laying wire in the ground outside.
> Would really work?
> Living a condo gives me very little space.
> and it has to outside I gave up on indoor one.
> JIM
>

6178. Re: [loopantennas] Added photos of my MF loop and schematic of LF preamp in photo section.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-08 14:06:14 UTC
From: John Hoopes
Topic: 6174 Message: 6178

I used a crude impedance bridge and it was somewhat closer to 200 ohms which was a close enough match for the preamp.

John

--- On Wed, 1/7/09, Tony Magon <temagon@...> wrote:

From: Tony Magon <temagon@...>
Subject: Re: [loopantennas] Added photos of my MF loop and schematic of LF preamp in photo section.
To: loopantennas@yahoogroups.com
Date: Wednesday, January 7, 2009, 7:36 PM

The quarter turn link coupling lowers the impedance going to the input of
the amplifier.

From my experience a full turn loop is about 600 ohms. The quarter turn loop
will probably be about 50 ohm, but to check this you would need a noise
bridge

Regards

Tony Magon VK2IC

On Thu, Jan 8, 2009 at 9:57 AM, jdh1812 <jdh1812@yahoo. com> wrote:

> In case anyone is interested, you can see them in "John's Corner".
>
> The preamp was designed by the late Ralph Burhans, an engineer and LF
> tinkerer/enthusiast . It worked very well on my LF loop. Frequency
> response was limited by the use of audio transformers for coupling but
> seemed pretty flat up to the antenna upper frequency of 400 kHz.
>
> Everyone always asks me "What is a quarter turn link coupling?". It's
> easier to show then to explain, for me anyway.
>
> BTW, the tuning on this antenna is sharp and I plan on making it
> sharper by winding it with Litz wire.
>
> 73
> John
>
> http://groups. yahoo.com/ group/loopantenn as/photos/ album/227852299/ pic/li
> st?mode=tn&order= ordinal&start= 1&&dir=asc
>
>

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6179. Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-08 17:18:26 UTC
From: tenorman1952
Topic: 6146 Message: 6179

--- In loopantennas@yahoogroups.com, Samuel Ernst-Fortin
<sernstfortin@...> wrote:
>
> I'm not an expert, but I know that the construction techniques used
could throw a wrench into the predicted.
>
> How does one measure the capacitance of a variable cap? Well, one
could gen up some form of RC arrangement that is
> either charged or discharged and from the time constant associated
with the exponential waveform (oscilloscope or VOM),
> with a known R, you estimate C.

I simply turn the seclector of my digital multimeter to measure
capacitance.

Paul C.

6180. Re: [loopantennas] Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-08 17:58:53 UTC
From: Samuel Ernst-Fortin
Topic: 6146 Message: 6180

Paul writes:
>>I simply turn the seclector of my digital multimeter to measure capacitance.

Right, that works. :)

In fact, I decided as an early birthday gift to myself, I would purchase one - so this morning I ordered an LCR meter off eBay for a reasonable price to complement my VOM.

Capacitance from .1pF to 20mF, and inductance from .1uH to 20H.
http://www.aidetek.com/New_products_info/Datasheet/Vichy/DM4070.doc

I'm aware the accuracy is not that of a more costly high-end meter, but it should be more than sufficient for my purposes.

A loop site I like:
http://www.mindspring.com/~loop_antenna/
Sam

6181. Wellbrook 1530+ and Quantum loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-08 18:40:00 UTC
From: enriqueeeeee2001
Topic: 6181 Message: 6181

I have seen plenty of post praising the Quantum loop antenna.
I would like to purchase one,but before buying one I would like to know how it is comapared with the Wellbrook 1530+ antenna.

I have already got a Wellbrook 1530+ and I am mainly interested in tropical,49mb and medium wave listening and since Quantum loop are mainly made for these bands I would be very pleased to hear some reviews whether the Quantum surpases the Wellbrook in these bands. Yes, the Wellbrook it is good but is worth buying a Quantum loop?

Any comments are very wellcomed. Thanks.

6182. Re: I Wonder if

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-08 09:30:21 UTC
From: leonardo_da_vinci_nz
Topic: 6155 Message: 6182

I had a small yeasu FT 817-ND and thought it was pretty bad on receive. I got myself an Elecraft K2 and that was when I found out how bad the ADSL modems actually were. But do not forget the switched mode power supplies; they throw out a lot of hash also. I have now replaced all the power supplies with old fashioned transformer power supplies andfor the high current I have a lead acid battery on an automatic charger and feed my transceiver with that.

Much improvement and it gets even better when i switch the computers off.

Leonardo

--- In loopantennas@yahoogroups.com, "jefeickert" <jefeickert@...> wrote:
>
> I wonder if this my problem and if anyone is?
> this come from SW Pirates.
> Dear shortwave radio user.
>
> This is an update from UKQRM the group trying to fight back against Power
> Line Technologies that are wiping out the radio spectrum.
> These devices (PLT) are used within a household to set up computer networks
> using the mains power cables of that house.
> If you want an example you need only go to our video page
> http://www.mikeandsniffy.co.uk/UKQRM/videos.htm
>
> Probably the main offender here is the Comtrend Power Line Ethernet adaptors
> supplied as part of BT's Vision package.
> But there are many other types that have nearly the same potential to
> destroy our hobbies and way of life.
> The interference extends up to 500 yards around the house using the devices!
> The cumulative effect of many hundreds of these devices is so bad that NATO
> has even raised concerns!
>

6183. Re: [loopantennas] Wellbrook 1530+ and Quantum loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-08 20:33:17 UTC
From: Jay Heyl
Topic: 6181 Message: 6183

On Thu, Jan 8, 2009 at 1:40 PM, enriqueeeeee2001
<enriqueeeeee2001@...>wrote:

>
> Yes, the Wellbrook it is good but is worth buying a Quantum loop?
>

Each of these antennas is designed for a specific purpose. The Wellbrook is for those who don't have room for a much larger antenna. It's very good, but in a quiet location a long run of wire is quite likely to outperform it. (Of course, I don't know where exactly one finds a RF quiet location these days.)

Similarly, the Quantum loop is primarily for those working the lower end of the spectrum who can't have an outdoor antenna. I have two Quantum loops, a QX Pro with a 15" head (no longer in production) and a QX v2.0 specifically tuned for LW. They are both excellent antennas and I wouldn't want to be without them, but they both suffer from the same problem -- they must be on your tabletop so you can work the controls and rotate the loop head. Unless you're sitting in the middle of your backyard (something I've done on occasion), the antennas are going to be indoors and suffer from all the problems inherent in that location.

If you live in a typical modern home, the Wellbrook with a rotator mounted outside in a good location is almost certain to outperform the Quantum. Almost any antenna mounted outside away from the noise envelope of the house and away from other noise sources will outperform almost any other antenna placed inside the house.

The one feature the Quantum has that might give it a slight edge in specific situations is the "QX" control. This uses regen to effectively narrow the receive bandwidth of the antenna. It can be the difference in cases where a strong station is masking a neighboring weak one.

You might also get some benefit from phasing the Quantum and the Wellbrook against each other, assuming you were willing to build or buy a phaser too. (There is a Quantum Phaser available.)

These last two things are kind of reaching. Frankly, if you've got the Wellbrook in a good location with a rotator, you're unlikely to get a better signal from a Quantum antenna in the house on your tabletop. I in no way mean this as a slam against the Quantum -- they're the best I've ever seen in a tabletop antenna -- but you can't get around the negative characteristics of being located inside the house.

I hope this helps.

-- Jay

[Non-text portions of this message have been removed]

6184. Re: Added photos of my MF loop and schematic of LF preamp in photo section.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 02:49:58 UTC
From: dhennig2
Topic: 6174 Message: 6184

Nice loop system, john!

thanks for sharing. I have a question regarding the MOSTFET amp. It looks in your scheatic like the drain is floating. I assume that the central connection is to ground? Just making sure.

Darren

--- In loopantennas@yahoogroups.com, John Hoopes <jdh1812@...> wrote:
>
> I used a crude impedance bridge and it was somewhat closer to 200 ohms which was a close enough match for the preamp.
>
> John
>
> --- On Wed, 1/7/09, Tony Magon <temagon@...> wrote:
>
> From: Tony Magon <temagon@...>
> Subject: Re: [loopantennas] Added photos of my MF loop and schematic of LF preamp in photo section.
> To: loopantennas@yahoogroups.com
> Date: Wednesday, January 7, 2009, 7:36 PM
>
>
>
>
>
>
>
> The quarter turn link coupling lowers the impedance going to the input of
> the amplifier.
>
> From my experience a full turn loop is about 600 ohms. The quarter turn loop
> will probably be about 50 ohm, but to check this you would need a noise
> bridge
>
> Regards
>
> Tony Magon VK2IC
>
> On Thu, Jan 8, 2009 at 9:57 AM, jdh1812 <jdh1812@yahoo. com> wrote:
>

> > In case anyone is interested, you can see them in "John's Corner".
> >
> > The preamp was designed by the late Ralph Burhans, an engineer
and LF
> > tinkerer/enthusiast . It worked very well on my LF loop. Frequency
> > response was limited by the use of audio transformers for
coupling but
> > seemed pretty flat up to the antenna upper frequency of 400 kHz.
> >
> > Everyone always asks me "What is a quarter turn link coupling?".
It's
> > easier to show then to explain, for me anyway.
> >
> > BTW, the tuning on this antenna is sharp and I plan on making it
> > sharper by winding it with Litz wire.
> >
> > 73
> > John
> >
> > http://groups. yahoo.com/ group/loopantenn as/photos/
album/227852299/ pic/li
> > st?mode=tn&order= ordinal&start= 1&&dir=asc
> >
> >
> >
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6185. Re: [loopantennas] Re: Added photos of my MF loop and schematic of LF preamp in photo section.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 04:25:03 UTC
From: John Hoopes
Topic: 6174 Message: 6185

Darren,

The actual device has a drain, source and gate. Don't worry about the drain floating. There are only three gates on the actual device.

John
--- On Thu, 1/8/09, dhennig2 <dhennig2@...> wrote:

From: dhennig2 <dhennig2@...>
Subject: [loopantennas] Re: Added photos of my MF loop and schematic of LF preamp in photo section.
To: loopantennas@yahoogroups.com
Date: Thursday, January 8, 2009, 9:49 PM

Nice loop system, john!

thanks for sharing. I have a question regarding the MOSTFET amp. It
looks in your scheatic like the drain is floating. I assume that the
central connection is to ground? Just making sure.

Darren

--- In loopantennas@ yahoogroups. com, John Hoopes <jdh1812@... > wrote:
>
> I used a crude impedance bridge and it was somewhat closer to 200
ohms which was a close enough match for the preamp.
>
> John
>
> --- On Wed, 1/7/09, Tony Magon <temagon@... > wrote:
>
> From: Tony Magon <temagon@... >
> Subject: Re: [loopantennas] Added photos of my MF loop and
schematic of LF preamp in photo section.
> To: loopantennas@ yahoogroups. com
> Date: Wednesday, January 7, 2009, 7:36 PM
>
>
>
>
>
>
>
> The quarter turn link coupling lowers the impedance going to the
input of
> the amplifier.

>
> From my experience a full turn loop is about 600 ohms. The quarter
turn loop
> will probably be about 50 ohm, but to check this you would need a
noise
> bridge
>
> Regards
>
> Tony Magon VK2IC
>
> On Thu, Jan 8, 2009 at 9:57 AM, jdh1812 <jdh1812@yahoo. com> wrote:
>
> > In case anyone is interested, you can see them in "John's Corner".
> >
> > The preamp was designed by the late Ralph Burhans, an engineer
and LF
> > tinkerer/enthusiast . It worked very well on my LF loop. Frequency
> > response was limited by the use of audio transformers for
coupling but
> > seemed pretty flat up to the antenna upper frequency of 400 kHz.
> >
> > Everyone always asks me "What is a quarter turn link coupling?".
It's
> > easier to show then to explain, for me anyway.
> >
> > BTW, the tuning on this antenna is sharp and I plan on making it
> > sharper by winding it with Litz wire.
> >
> > 73
> > John
> >
> > http://groups. yahoo.com/ group/loopantenn as/photos/
album/227852299/ pic/li
> > st?mode=tn&order= ordinal&start= 1&&dir=asc
> >
> >
> >
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
>
>
>

>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

6186. Re: [loopantennas] Re: Added photos of my MF loop and schematic of LF preamp in photo section.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 04:35:32 UTC
From: John Hoopes
Topic: 6174 Message: 6186

Darren,

Please forgive my last transmission. What I meant to say was, on the MOSFET VN2222L, there is only one gate, source and drain.

John
--- On Thu, 1/8/09, dhennig2 <dhennig2@...> wrote:

From: dhennig2 <dhennig2@...>
Subject: [loopantennas] Re: Added photos of my MF loop and schematic of LF preamp in photo section.
To: loopantennas@yahoogroups.com
Date: Thursday, January 8, 2009, 9:49 PM

Nice loop system, john!

thanks for sharing. I have a question regarding the MOSTFET amp. It
looks in your scheatic like the drain is floating. I assume that the
central connection is to ground? Just making sure.

Darren

--- In loopantennas@ yahoogroups. com, John Hoopes <jdh1812@... > wrote:
>
> I used a crude impedance bridge and it was somewhat closer to 200
ohms which was a close enough match for the preamp.
>
> John
>
> --- On Wed, 1/7/09, Tony Magon <temagon@... > wrote:
>
> From: Tony Magon <temagon@... >
> Subject: Re: [loopantennas] Added photos of my MF loop and
schematic of LF preamp in photo section.
> To: loopantennas@ yahoogroups. com
> Date: Wednesday, January 7, 2009, 7:36 PM
>
>
>
>
>
>
>
> The quarter turn link coupling lowers the impedance going to the
input of
> the amplifier.

>
> From my experience a full turn loop is about 600 ohms. The quarter
turn loop
> will probably be about 50 ohm, but to check this you would need a
noise
> bridge
>
> Regards
>
> Tony Magon VK2IC
>
> On Thu, Jan 8, 2009 at 9:57 AM, jdh1812 <jdh1812@yahoo. com> wrote:
>
> > In case anyone is interested, you can see them in "John's Corner".
> >
> > The preamp was designed by the late Ralph Burhans, an engineer
and LF
> > tinkerer/enthusiast . It worked very well on my LF loop. Frequency
> > response was limited by the use of audio transformers for
coupling but
> > seemed pretty flat up to the antenna upper frequency of 400 kHz.
> >
> > Everyone always asks me "What is a quarter turn link coupling?".
It's
> > easier to show then to explain, for me anyway.
> >
> > BTW, the tuning on this antenna is sharp and I plan on making it
> > sharper by winding it with Litz wire.
> >
> > 73
> > John
> >
> > http://groups. yahoo.com/ group/loopantenn as/photos/
album/227852299/ pic/li
> > st?mode=tn&order= ordinal&start= 1&&dir=asc
> >
> >
> >
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
>
>
>

>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

6187. Re: [loopantennas] Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 05:09:35 UTC
From: Gary Pewitt
Topic: 6146 Message: 6187

Sam, the C and L range you quoted for this model is way off on the lower end of the ranges. I checked it out on e-bay and bought one as the price was quite good ($50.29 with free shipping. The only ones with the range you quoted cost much more
and are probably worth it but more accuracy than I need. thanks for the tip. 73 Gary N9ZSV

Samuel Ernst-Fortin wrote:
>
> Paul writes:
> >>I simply turn the seclector of my digital multimeter to measure
> capacitance.
>
> Right, that works. :)
>
> In fact, I decided as an early birthday gift to myself, I would
> purchase one - so this morning I ordered an LCR meter off eBay for a
> reasonable price to complement my VOM.
>
> Capacitance from .1pF to 20mF, and inductance from .1uH to 20H.
> http://www.aidetek.com/New_products_info/Datasheet/Vichy/DM4070.doc
> <http://www.aidetek.com/New_products_info/Datasheet/Vichy/DM4070.doc>
>
> I'm aware the accuracy is not that of a more costly high-end meter,
> but it should be more than sufficient for my purposes.
>
> A loop site I like:
> http://www.mindspring.com/~loop_antenna/
> <http://www.mindspring.com/%7Eloop_antenna/>
> Sam
>
>
>

6188. Re: First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 11:37:35 UTC
From: Bill McGraw
Topic: 6146 Message: 6188

Thank you Sam as that was clear advice, you answered my questions and I will put your advice to work. I have asked local hams about the cap meter and got insufficient answers from them. From what I can tell you are not a newbie. I am definitely a newbie. I will begin to plan a multi loop antenna that will work for the MW BC band and perhaps higher as well. My inside horizontal loop and outside ground is attached to the stereo plug going into the radio external antenna input, ground to inside and antenna to tip. This subject is taking time away from taking the Technician License test as I have been a frustrated Ham for 50 years due to finding many other interests to pursue.
Bill

Sam at sernstfortin@... wrote: "so I personally may just go out and get a capacitance meter myself.
They are relatively cheap (you have to make sure you get one that has a resolution of fractional pF if possible)."
And, "Therefore, to place them all in parallel, you simply tie the stationary portions together electrically (I suspect there would be a solder

lug for each section). I hope my description is clear."

And, "OK, now the coils of your loop antenna form the resonant section and the inductance which must be paralleled with the capacitance of your vcap to be placed into tunable resonance.

Your sensing coil: I suspect you either have something wound around the frame (right on top of the resonant windings), or you have something smaller forming a loop inside the resonant windings. How many turns? I can't tell you that... like I said I'm a newbee myself.

If you have a portable shortwave radio, mearly placing your radio inside the resonant coil is enough to provide antenna coupling. No sensing coil needed.

Otherwise, I believe, you have the two wires attached to the antenna plug (you go buy one to fit the radio) wired to the sensing coil."

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

6189. indoor flag

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 11:57:48 UTC
From: david
Topic: 6146 Message: 6189

hi here is the past few weeks receptions here in scotland using a indoor flag antenna http://uk.youtube.com/profile?user=tvdxrools&view=videos also if anyone is interested we have a mw dx chat and cluster running on skype which is getting quite popular if interested search for me on skype tvdxrools many thanks david h scotland

[Non-text portions of this message have been removed]

6190. Re: Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 12:20:33 UTC
From: Bill McGraw
Topic: 6137 Message: 6190

How and where on the TV coax are the jumpers attached for MW and SW?

wa_jenkins@... wrote, "I use jumpers with alligator clips
to adjust it for MW or SWL."

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

6191. Inexpensive LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 13:28:50 UTC
From: Samuel Ernst-Fortin
Topic: 6191 Message: 6191

Gary Pewitt garypewitt@... wrote:

>>Sam, the C and L range you quoted for this model is way off on the lower end of the ranges.

Gary, this is true. Let me clarify.
First, it is a modest priced LCR meter, and if the accuracy is 2-4%, I'm not too troubled by that, it will be useful to determine the "C" and "L" when working wth these loops and accurate enough for what I need to do (as is the same for you).

Now then, the confusion over the numbers...

OK, when I stated 0.1pF on the low end for example for the device, the lowest Range setting on this particular unit is 0->2pF right? But, the resolution is 0.1pF... Therefore, if in theory you had a very (very very) small cap that had a capacitance which was less than 2pF, say close to 0.1pF (wow), while the range of the measured values on that setting would be 0->2pF, the smallest cap it could measure and present a value to us would be 0.1pF...

So when I stated it could read from 0.1pF to 20mF, I was merely indicating the span of capacitance values that it could provide a measurement to a user. And, no, I'm not expecting to rely on that fractional pF information at all.

We are talking about the same meter, but in a slightly differenent way.

And just because it possesses a 0.1pF resolution on the low end Range, I don't expect it's accuracy is going to be better than a device that doesn't provide that information.

Often when you are using a device to measure a quantity, the resolution and digits presented will be higher than you'd record on paper or use in subsequent calculations. I just like the fact this thing can read down below 5 to 20pF (I assume this would be the typical low-end on most variable caps).

Now this is important, I won't go using this thing to read the capacitance of a varactor diode (one of those devices that changes it's capacitance with a reverse bias voltage), because I'd ruin the meter... I'll just use it for variable and fixed capacitors and inductances. I write that because, well, I do plan on experimenting with remote tuning of a loop using a varactor diode arrangement... there you send a voltage down a wire and you affect the capacitance coupled to the loop's inductance... Then in theory with a rotor, you have a remotely tunable, steerable loop...

Yahoo.

6192. Re: [loopantennas] Inexpensive LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 13:38:35 UTC
From: John Hoopes
Topic: 6191 Message: 6192

Sam,

Just in case anyone is interested, this is one of the most accurate LCR meters for the money.

http://www.aade.com/lcmeter.htm

John

--- On Fri, 1/9/09, Samuel Ernst-Fortin <sernstfortin@...> wrote:

> From: Samuel Ernst-Fortin <sernstfortin@...>
> Subject: [loopantennas] Inexpensive LCR meter
> To: loopantennas@yahoogroups.com
> Date: Friday, January 9, 2009, 8:28 AM
> Gary Pewitt garypewitt@... wrote:
>
> >>Sam, the C and L range you quoted for this model is
> way off on the lower end of the ranges.
>
> Gary, this is true. Let me clarify.
> First, it is a modest priced LCR meter, and if the
> accuracy is 2-4%, I'm not too troubled by that, it will
> be useful to determine the "C" and "L"
> when working wth these loops and accurate enough for what I
> need to do (as is the same for you).
>
> Now then, the confusion over the numbers...
>
> OK, when I stated 0.1pF on the low end for example for the
> device, the lowest Range setting on this particular unit is
> 0->2pF right? But, the resolution is 0.1pF... Therefore,
> if in theory you had a very (very very) small cap that had a
> capacitance which was less than 2pF, say close to 0.1pF
> (wow), while the range of the measured values on that
> setting would be 0->2pF, the smallest cap it could
> measure and present a value to us would be 0.1pF...
>
> So when I stated it could read from 0.1pF to 20mF, I was
> merely indicating the span of capacitance values that it
> could provide a measurement to a user. And, no, I'm not
> expecting to rely on that fractional pF information at all.
>
> We are talking about the same meter, but in a slightly
> differenent way.
>

> And just because it possesses a 0.1pF resolution on the low
> end Range, I don't expect it's accuracy is going to
> be better than a device that doesn't provide that
> information.
>
> Often when you are using a device to measure a quantity,
> the resolution and digits presented will be higher than
> you'd record on paper or use in subsequent calculations.
> I just like the fact this thing can read down below 5 to
> 20pF (I assume this would be the typical low-end on most
> variable caps).
>
> Now this is important, I won't go using this thing to
> read the capacitance of a varactor diode (one of those
> devices that changes it's capacitance with a reverse
> bias voltage), because I'd ruin the meter... I'll
> just use it for variable and fixed capacitors and
> inductances. I write that because, well, I do plan on
> experimenting with remote tuning of a loop using a varactor
> diode arrangement... there you send a voltage down a wire
> and you affect the capacitance coupled to the loop's
> inductance... Then in theory with a rotor, you have a
> remotely tunable, steerable loop...
>
> Yahoo.

6193. Square loop experience and question

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 13:21:18 UTC
From: K_endre
Topic: 6193 Message: 6193

Hi All,

I've built a loop antenna wound on a wooden frame with a side lenght of 0.85m and a coil depth of 15cm. The tuned coil (primary) has 17 turns tuned with a variable cap of 20-400pF. I'm interested to receive an AM station around 550KHz. The results with my classic ferrite rod receiver it is quite convincing, vy sensitive and sellective.
But, my real intention is to connect to my father's FRG7700 with other words to match to 50R. As I calculated for transfering 50R I would need about 6 -7 turns as coupler coil or secondary (XL x 4 at 550 KHz). This is more than in any other description... how to build this coil to be able to cover the MW band?

Many thanks for reading, Endy/YO6OGJ

6194. Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 16:57:11 UTC
From: Steve
Topic: 6146 Message: 6194

I hook this up to my DMM, the ranges are 200.0pF to 20.00uF full
scale, using the 200mV scale on the meter for 200pF to 2uF, and 2V
full scale for 20uF.

<http://www.polyphoto.com/tutorials/Dual555CapMeter/Dual555CapMeter150dpi.jpg>

I have a 0.1% tolerance capacitor I keep around to calibrate projects
like this.

Steve Greenfield

> --- In loopantennas@yahoogroups.com, Samuel Ernst-Fortin
> <sernstfortin@> wrote:
> >
> > I'm not an expert, but I know that the construction techniques used
> could throw a wrench into the predicted.
> >
> > How does one measure the capacitance of a variable cap? Well, one
> could gen up some form of RC arrangement that is
> > either charged or discharged and from the time constant associated
> with the exponential waveform (oscilloscope or VOM),
> > with a known R, you estimate C.

6195. Re: [loopantennas] Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 17:36:00 UTC
From: Samuel Ernst-Fortin
Topic: 6146 Message: 6195

Steve,
you wrote:
>>I hook this up to my DMM, the ranges are 200.0pF to 20.00uF full
>>scale, using the 200mV scale on the meter for 200pF to 2uF, and 2V
>>full scale for 20uF.

I weighed the option of constructing a unit. I like that your design leverages a DVM,
That's really slick.;)
Where did you get the idea for it? From just the 555 application notes?
Thanks for sharing that.
Sam

6196. Re: [loopantennas] Square loop experience and question

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 17:48:58 UTC
From: Jim Dunstan
Topic: 6193 Message: 6196

At 01:21 PM 1/9/2009 +0000, you wrote:

>Hi All,
>
>I've built a loop antenna wound on a wooden frame with a side lenght
>of 0.85m and a coil depth of 15cm. The tuned coil (primary) has 17
>turns tuned with a variable cap of 20-400pF. I'm interested to receive
>an AM station around 550KHz. The results with my classic ferrite rod
>receiver it is quite convincing, vy sensitive and sellective.
>But, my real intention is to connect to my father's FRG7700 with other
>words to match to 50R. As I calculated for transfering 50R I would need
>about 6 -7 turns as coupler coil or secondary (XL x 4 at 550 KHz). This
>is more than in any other description... how to build this coil to be
>able to cover the MW band?
>
>Many thanks for reading, Endy/YO6OGJ

Hi Endy,

I have the exact need. I have a tuned loop for MW that works vy well through mutual induction with radios that incorporate a tuned ferrite antenna. However I have radios that require a separate antenna input .... as does your FRG7700. My solution was to use the small untuned loop that came with my Hi-Fi receiver ... e.g. 4 turns of insulated hook-up wire on light plastic form 8 inches in diameter with a twisted pair as the connecting cable. Light coax will also be suitable.

As you are aware, connecting through mutual inductance works best when the loop and radio orientation are adjusted for best performance. I found the same to be true using the link winding. Best performance requires the ability to adjust the orientation between the tuned loop and the untuned pickup loop. It is up to your imagination and mechanical aptitude to design the arrangement hi hi.

In my case I ended up with a simple 8 inch dowel along which i can slide the pickup loop to adjust the coupling. I am sure there are more sophisticated methods for this mechanical adjustment.

Jim

6197. Re: [loopantennas] Square loop experience and question

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 20:11:24 UTC
From: John Hoopes
Topic: 6193 Message: 6197

Endy,

I use less than a turn inductive coupling for a good match to 50 ohms.

Let's use my AM loop for example. I have 12 turns of 18 gauge wire on a square form of approximately 425mm X 425mm. The impedance across the loop at resonance is 313.7 kohms (I use a loop calculator for this measurement, much easier than doing the math). If I use a one turn link, the loop now becomes a transformer with a turns ratio is 12:1.

The turns ratio of a transformer is the square root of the impedance ratio. Conversely, the impedance ratio will be the turns ratio squared. So 12 squared = 144 thus 313.7kohms/144 = 2.17kohms as would be seen by the receiver.

To reduce this value to something close to 50 ohms we need to reduce the coupling coefficient. Coupling coefficient is a complex subject unto it's own but suffice it to say that by using the 1/4 turn method I used, the impedance as seen by the receiver is roughly 200 ohms. I measured this with a simple bridge but close enough for experimenting purposes.

Another nice feature of keeping the coupling loose, the loop has a higher Q and greater selectivity. In my early days of experimenting I noticed a double hump response while tuning across the band with a one turn link

You can see a picture of my AM loop here which shows how I coupled the secondary.

http://groups.yahoo.com/group/loopantennas/photos/album/227852299/pic/list

John

--- On Fri, 1/9/09, K_endre <k_endre@...> wrote:

From: K_endre <k_endre@...>
Subject: [loopantennas] Square loop experience and question
To: loopantennas@yahoogroups.com
Date: Friday, January 9, 2009, 8:21 AM

Hi All,

I've built a loop antenna wound on a wooden frame with a side lenght
of 0.85m and a coil depth of 15cm. The tuned coil (primary) has 17
turns tuned with a variable cap of 20-400pF. I'm interested to receive
an AM station around 550KHz. The results with my classic ferrite rod
receiver it is quite convincing, vy sensitive and sellective.
But, my real intention is to connect to my father's FRG7700 with other
words to match to 50R. As I calculated for transfering 50R I would need
about 6 -7 turns as coupler coil or secondary (XL x 4 at 550 KHz). This
is more than in any other description. .. how to build this coil to be
able to cover the MW band?

Many thanks for reading, Endy/YO6OGJ

[Non-text portions of this message have been removed]

6198. Antenna for Nursing Home Resident

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-09 22:37:06 UTC
From: tenorman1952
Topic: 6198 Message: 6198

There was a gentleman who posted on this and a few other yahoo groups wanting to know what antenna he could use for SWL in a nursing home he was in, something small and easy to put up, take down.

I have tried to contact him several times to no avail.

I have built him a SW loop that will be easy to put up and take down. It is his free of charge, I just need an address to send it to.

So, if he reads this, all he has to do is contact me.

Paul C.

6199. Re: [loopantennas] Inexpensive LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-10 00:12:02 UTC
From: Gary Pewitt
Topic: 6191 Message: 6199

Sam, thanks for the clarification. I am glad to hear it because I
ordered the same one last night.
My use will be checking values of junk box components and ham fest buys
before building regenerative receivers and small transmitters.
The accuracy will be all I need as I am not designing anything critical
and wouldn't know how to anyway. I just enjoy building and restoring
the old "boatanchors".
Thanks, 73, and a tip of the hat. Gary N9ZSV

Samuel Ernst-Fortin wrote:
>
> Gary Pewitt garypewitt@...
> <mailto:garypewitt%40centurytel.net> wrote:
>
> >>Sam, the C and L range you quoted for this model is way off on the
> lower end of the ranges.
>
> Gary, this is true. Let me clarify.
> First, it is a modest priced LCR meter, and if the accuracy is 2-4%,
> I'm not too troubled by that, it will be useful to determine the "C"
> and "L" when working wth these loops and accurate enough for what I
> need to do (as is the same for you).
>
> Now then, the confusion over the numbers...
>
> OK, when I stated 0.1pF on the low end for example for the device, the
> lowest Range setting on this particular unit is 0->2pF right? But, the
> resolution is 0.1pF... Therefore, if in theory you had a very (very
> very) small cap that had a capacitance which was less than 2pF, say
> close to 0.1pF (wow), while the range of the measured values on that
> setting would be 0->2pF, the smallest cap it could measure and present
> a value to us would be 0.1pF...
>
> So when I stated it could read from 0.1pF to 20mF, I was merely
> indicating the span of capacitance values that it could provide a
> measurement to a user. And, no, I'm not expecting to rely on that
> fractional pF information at all.
>
> We are talking about the same meter, but in a slightly differenent way.
>
> And just because it possesses a 0.1pF resolution on the low end Range,
> I don't expect it's accuracy is going to be better than a device that
> doesn't provide that information.
>
> Often when you are using a device to measure a quantity, the

> resolution and digits presented will be higher than you'd record on
> paper or use in subsequent calculations. I just like the fact this
> thing can read down below 5 to 20pF (I assume this would be the
> typical low-end on most variable caps).
>
> Now this is important, I won't go using this thing to read the
> capacitance of a varactor diode (one of those devices that changes
> it's capacitance with a reverse bias voltage), because I'd ruin the
> meter... I'll just use it for variable and fixed capacitors and
> inductances. I write that because, well, I do plan on experimenting
> with remote tuning of a loop using a varactor diode
> arrangement... there you send a voltage down a wire and you affect the
> capacitance coupled to the loop's inductance... Then in theory with a
> rotor, you have a remotely tunable, steerable loop...
>
> Yahoo.
>
>

6200. Interesting place to buy custom parts folks!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-10 09:06:52 UTC
From: dhennig2
Topic: 6200 Message: 6200

I recently came across this great company - they make air-variables,
and very interesting ferrite units for loop antennas:

www.stormwise.com

worth a look...

Darren

6201. Re: Condo Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-10 10:02:27 UTC
From: cank13cat
Topic: 6137 Message: 6201

I'll try to upload a photo this weekend. Gotta recharge the batteries for my digicam first. I'll give a shot at describing it, but probably won't make much sense.

Picture a double wrap of TV coax around the entire outer perimeter of the door. There's about 12" of space between the ends of the coax. The barrel or cannister type TV balun is threaded into the upper end. The two spade type connectors are hanging down.

The jumper is another short hank of old coax, maybe 18" long. No connectors or adapters on either end, just bare wire. Using only the outer shield, the upper end of this jumper is wrapped around the spade connectors of the TV balun. The lower end, again using the outer shield rather than center conductor, is attached to an alligator clip.

The lower end of the jumper is alligator clipped to the outer shell of the TV coax "F" type connector. In effect, connected to the outer shield of the long hank of coax looped around the door frame.

The feedline to the receiver is yet a third run of TV coax, this one only a few feet long with ordinary F type connectors. One end is connected, via a female-female adapter, to the lower end of the loop. The other end of the feedline runs through an adapter to suit the usual PL-239/PL-259 connectors.

It's quite a piece of junk and shouldn't work. But it does. I found it by accident. I was trying to use the tuning capacitor cannibalized from an older radio when my hand slipped and made contacts that woke up the radio on the MW spectrum. I realized I didn't actually need the tuning capacitor for satisfactory reception. It works great for nighttime skywave reception above 1000 kHz and is moderately directional on the lower end. Very low noise compared with the internal ferrite loopsticks on my Sony and Magnavox portables.

It also works okay - not great - on HF below 10 MHz. It'll pull in strong signals with very low interference from household RFI. Very handy this winter when every neighbor in my apartment complex has their electric heater on.

If I unclip the jumper between the upper and lower ends of the loop it'll pick up shortwave much stronger, but it's no longer really a loop. It's just a hank of random wire looped around the door frame and just as subject to noise as a bit of random wire strung along the ceiling.

Anyway, after I upload a photo you'll see why I call it the "fugly loop" or fugloop. It's just... fugly. But I gotta laugh because the

dang thing works.

BTW, it does need a ground, but not an especially good ground. My "ground" is probably closer to a counterpoise, since it's just 6' of household type insulated electrical cord buried in the dirt outside my 1st floor window. A pitiable excuse for a ground but, heck, it does the job.

--- In loopantennas@yahoogroups.com, "Bill McGraw" <mcgr3799@...> wrote:
>
> How and where on the TV coax are the jumpers attached for MW and SW?
>
> wa_jenkins@... wrote, "I use jumpers with alligator clips
> to adjust it for MW or SWL."
>
> William W."Bill" McGraw
> "Somewhere South of Chicago"
> Greenville, MS 38701
>

6202. Re: Square loop experience and question

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-10 18:10:31 UTC
From: tenorman1952
Topic: 6193 Message: 6202

There's no real need to match impedance for receive.

A single turn for a "sense coil" or "pickup loop" is usually sufficient, and it need not be as large as the loop. In fact, a pickup loop about half the diameter and offset works well. I have used a coax loop, curled around, with the center conductor soldered to the braid, 10" dia, and tie wrapped to the main loop inside one corner of the main loop with good results.

Here is a good calculator for loop antennas:

http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

Paul C.

6203. Re: Inexpensive LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-10 23:55:59 UTC
From: jr_dakota
Topic: 6191 Message: 6203

--- In loopantennas@yahoogroups.com, John Hoopes <jdh1812@...> wrote:
>
> Sam,
>
> Just in case anyone is interested, this is one of the most accurate LCR meters for the money.
>
> http://www.aade.com/lcmeter.htm
>
> John
>

And it can be rigged up to measure varactor diodes, which I have done on several occasions (The rig for measuring varactors is on the AADE website and should be applicable to other meters) ..... I've had the AADE meter for about 5 years now and I don't know how I ever got by without it

JR

6204. Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-11 19:31:54 UTC
From: sernstfortin
Topic: 6204 Message: 6204

FWIW,
I constructed a loop which is square, 34" on a side. The depth of my loops consisting of 26 turns of solid 24AWG exposed copper wire is 4.3125".

Predicted "L" is 1306uH = 1.306mH.

Measured "L" for the loop using my newly acquired LCR meter (I love this thing), is 1.365mH.

Measured "C" for the variable cap is 17 - 431pF.

Predicted tuning range is: 212KHz to 1.068MHz.

Actual tuning range is seemingly much smaller: 200 - 433KHz is where I could peak the noise on the receiver. On the low-end, predicted matches fairly well with actual. Not so on the high end, but then, I'm listening to the change in noise level to determine span of the antenna actual. There may be one source of error. ;)

Using the equation: F = 1 / [2*pi*SQRT(L*C)] with measured values...
I'm suppsed to have loop resonance between 6.6 and 33KHz.

I'm not doing something right.

Any pointers appreciated.

6205. Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-11 19:51:51 UTC
From: José
Topic: 6204 Message: 6205

May be there is a parasitic capacitance in parallel with the variable cap. Between the turns?

--- In loopantennas@yahoogroups.com, "sernstfortin" <sernstfortin@...> wrote:
>
> FWIW,
> I constructed a loop which is square, 34" on a side. The depth of my
> loops consisting of 26 turns of solid 24AWG exposed copper wire is
> 4.3125".
>
> Predicted "L" is 1306uH = 1.306mH.
>
> Measured "L" for the loop using my newly acquired LCR meter (I love
> this thing), is 1.365mH.
>
> Measured "C" for the variable cap is 17 - 431pF.
>
> Predicted tuning range is: 212KHz to 1.068MHz.
>
> Actual tuning range is seemingly much smaller: 200 - 433KHz is where I
> could peak the noise on the receiver. On the low-end, predicted matches
> fairly well with actual. Not so on the high end, but then, I'm
> listening to the change in noise level to determine span of the antenna
> actual. There may be one source of error. ;)
>
> Using the equation: F = 1 / [2*pi*SQRT(L*C)] with measured values...
> I'm suppsed to have loop resonance between 6.6 and 33KHz.
>
> I'm not doing something right.
>
> Any pointers appreciated.
>

6206. Re: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-11 22:16:22 UTC
From: Jim Dunstan
Topic: 6204 Message: 6206

At 07:51 PM 1/11/2009 +0000, you wrote:

>May be there is a parasitic capacitance in parallel with the variable
>cap. Between the turns?

Yes, any loop has some capacitance .... even a single turn loop. The smaller the amount of capacitance the more inductance is required to obtain resonance. Once you start making the loop multi-turn you increase the internal loop capacitance. This is why various techniques are used ... such as basket weave, wide spaced turns, etc ... to minimize the amount of internal loop capacitance.

If you are winding a loop which you want to resonate at x frequency it is theoretically possible to simply put enough turns on until the inductive reactance matches the internal loop capacitive reactance and voila the loop is self resonant without adding any additional capacitance. A single turn loop 140' in circumference is self resonant at 7 mhz.

If you want to make a loop for MW frequencies full size loops are out of the question and you must go multi-turn to provide sufficient inductance .... while at the same time adding in some additional capacitance (which you usually want to keep to minimum). There are some formulae ... or rules of thumb that can be used for winding such loops. In all cases, the capacitance that must be added to obtain resonance is in addition to the capacitance created in winding the loop. The more that is added in the winding the more the tuning range of the loop is limited.

For a MW loop I have found through experience that the greatest tuning range (with a standard 350 pfd variable capacitor) is obtained with a loop of substantial size ... eg 2 ft square or larger with wide spaced turns. the smaller you make the loop the more turns required, the closer the spacing, and the smaller the tuning range for a given variable.

Jim

6207. Re: [loopantennas] Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-11 22:27:45 UTC
From: John Hoopes
Topic: 6204 Message: 6207

Tuning becomes kind of broad near the upper limits so you are probably not hearing the "woosch" as you tune past the peak. Also, stray capacitance tends to lower the actual upper frequency limit. Plugging in your figures into my loop calculator turned up the same results as you, so the math is right.

John

--- On Sun, 1/11/09, sernstfortin <sernstfortin@...> wrote:

From: sernstfortin <sernstfortin@...>
Subject: [loopantennas] Square Loop Antenna; Predicted vs. Actual
To: loopantennas@yahoogroups.com
Date: Sunday, January 11, 2009, 2:31 PM

FWIW,
I constructed a loop which is square, 34" on a side. The depth of my loops consisting of 26 turns of solid 24AWG exposed copper wire is 4.3125".

Predicted "L" is 1306uH = 1.306mH.

Measured "L" for the loop using my newly acquired LCR meter (I love this thing), is 1.365mH.

Measured "C" for the variable cap is 17 - 431pF.

Predicted tuning range is: 212KHz to 1.068MHz.

Actual tuning range is seemingly much smaller: 200 - 433KHz is where I could peak the noise on the receiver. On the low-end, predicted matches fairly well with actual. Not so on the high end, but then, I'm listening to the change in noise level to determine span of the antenna actual. There may be one source of error. ;)

Using the equation: F = 1 / [2*pi*SQRT(L* C)] with measured values...
I'm suppsed to have loop resonance between 6.6 and 33KHz.

I'm not doing something right.

Any pointers appreciated.

[Non-text portions of this message have been removed]

6208. Re: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 02:52:31 UTC
From: Samuel Ernst-Fortin
Topic: 6208 Message: 6208

Jim,
I appreciate your response, that of Jose, and John. What you write, and you write it with clarity makes sense. Are some of the formula's which you mention in an easy to digest form? How interesting your treatment was, because, one knows for example the span of the tuning capacitance (upper and lower limits on a var cap or ganged variactor diodes), and one knows the preferred / desired range of tuned frequencies... Could one then pick an area for loop size, and determine the number of turns and turn spacing from that?

I envision codifying something in Excel and using goal-seek to solve for a realizable design that gets one close to their desired frequency span (if that is possible), with the minimum amount of wire, and the smallest practical loop.

Something like that I think would be helpful to the loop builder.
Sam

[Non-text portions of this message have been removed]

6209. Want better 621 Kz reception!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-10 07:43:38 UTC
From: Tony
Topic: 6209 Message: 6209

Hello all,

I'm located (Apollo Bay, Victoria, Australia) about 250km from a 621 KHz transmitter but the reception with a variety of domestic radios has loads of hiss, not much better outdoors than indoors. Not much local QRM and no adjacent-freq txers. Main application is to listen clearly to broadcasts from this tx in the kitchen and living room, not to DX or scan the bands. My receivers have no access to their inbuilt ferrite loop antenna. Car radio reception in the area is better than domestic radio reception of this Txer.

I'm considering whether to:

- making an external antenna by connecting to the roof guttering, terminating on a parallel LC circuit, perhaps using a ferrite rod, in physical proximity to the radio for inductive coupling to the inbuilt antenna, then earthing the cold end of the coil; or

- have a 'slave' type loop antenna sitting on the bench next to the radio, as described in several posts and websites.

I've no experience with loops and would value any suggestions/comments please.

kind regards

TonyW

6210. Re: [loopantennas] Want better 621 Kz reception!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 06:27:18 UTC
From: kevin asato
Topic: 6209 Message: 6210

For a small investment, give a passive loop a try. My Terk Advantage looks to be about 12 turns of wire with about 350uF tuning capacitor. I have used this with great success on my last outing to the middle of Lincoln County Nevada (90 minutes north of Las Vegas, 90 minutes west of St. George, UT in the middle of a valley). I was able to listen to KTAR (620) in Phoenix, AZ; KFI (640); KFWB (980) and KNX (1070), Los Angelese; and KIGS (620) in Hanford, CA. I was just casually tuning around listening for coverage of our past Presidential Elections last November and whatever else was happening. Had it set up nicely on a table in my room next to a northfacing window with an adjacent window airconditioner/heater blowing warm air.

Receiver was a Sangean ATS-909.

I haven't tried it, but if you have an old analog transistor radio, you might want to bring it up close to you other radio and give it a tune without power. You would essentially have a loop antenna with the addition of the ferrite loopstick core which may prove advantageous. You may have to shift the position of the two radios around to get proper coupling between radios. Just something off the wall to try.

73, kevin

--- On Fri, 1/9/09, Tony <tony_widdows@...> wrote:
From: Tony <tony_widdows@...>
Subject: [loopantennas] Want better 621 Kz reception!
To: loopantennas@yahoogroups.com
Date: Friday, January 9, 2009, 11:43 PM

Hello all,

I'm located (Apollo Bay, Victoria, Australia) about 250km from a 621

KHz transmitter but the reception with a variety of domestic radios

has loads of hiss, not much better outdoors than indoors. Not much

local QRM and no adjacent-freq txers. Main application is to listen

clearly to broadcasts from this tx in the kitchen and living room, not

to DX or scan the bands. My receivers have no access to their inbuilt

ferrite loop antenna. Car radio reception in the area is better than

domestic radio reception of this Txer.

I'm considering whether to:

- making an external antenna by connecting to the roof guttering,

terminating on a parallel LC circuit, perhaps using a ferrite rod, in

physical proximity to the radio for inductive coupling to the inbuilt antenna, then earthing the cold end of the coil; or

- have a 'slave' type loop antenna sitting on the bench next to the radio, as described in several posts and websites.

I've no experience with loops and would value any suggestions/ comments please.

kind regards

TonyW

[Non-text portions of this message have been removed]

6211. RE: [loopantennas] Want better 621 Kz reception!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 09:04:06 UTC
From: Tony
Topic: 6209 Message: 6211

Thanks Kevin,

I take it that your Terk simply sits next to the receiver and inductively couples to its internal ferrite antenna? Re your second suggestion I will try that next time I'm in Apollo Bay (vacation house).

Will definitely try both ideas and let forum know results

Kind regards

Tony

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of kevin asato
Sent: Monday, 12 January 2009 5:27 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Want better 621 Kz reception!

For a small investment, give a passive loop a try. My Terk Advantage looks to be about 12 turns of wire with about 350uF tuning capacitor. I have used this with great success on my last outing to the middle of Lincoln County Nevada (90 minutes north of Las Vegas, 90 minutes west of St. George, UT in the middle of a valley). I was able to listen to KTAR (620) in Phoenix, AZ; KFI (640); KFWB (980) and KNX (1070), Los Angelese; and KIGS (620) in Hanford, CA. I was just casually tuning around listening for coverage of our past Presidential Elections last November and whatever else was happening. Had it set up nicely on a table in my room next to a northfacing window with an adjacent window airconditioner/heater blowing warm air.

Receiver was a Sangean ATS-909.

I haven't tried it, but if you have an old analog transistor radio, you might want to bring it up close to you other radio and give it a tune without power. You would essentially have a loop antenna with the addition of the ferrite loopstick core which may prove advantageous. You may have to shift the position of the two radios around to get proper coupling between radios. Just something off the wall to try.

73, kevin

--- On Fri, 1/9/09, Tony <tony_widdows@ <mailto:tony_widdows%40yahoo.com.au> yahoo.com.au> wrote:
From: Tony <tony_widdows@ <mailto:tony_widdows%40yahoo.com.au> yahoo.com.au>
Subject: [loopantennas] Want better 621 Kz reception!
To: loopantennas@ <mailto:loopantennas%40yahoogroups.com> yahoogroups.com
Date: Friday, January 9, 2009, 11:43 PM

Hello all,

I'm located (Apollo Bay, Victoria, Australia) about 250km from a 621 KHz transmitter but the reception with a variety of domestic radios has loads of hiss, not much better outdoors than indoors. Not much local QRM and no adjacent-freq txers. Main application is to listen clearly to broadcasts from this tx in the kitchen and living room, not to DX or scan the bands. My receivers have no access to their inbuilt ferrite loop antenna. Car radio reception in the area is better than domestic radio reception of this Txer.

I'm considering whether to:

- making an external antenna by connecting to the roof guttering, terminating on a parallel LC circuit, perhaps using a ferrite rod, in physical proximity to the radio for inductive coupling to the inbuilt antenna, then earthing the cold end of the coil; or
- have a 'slave' type loop antenna sitting on the bench next to the radio, as described in several posts and websites.

I've no experience with loops and would value any suggestions/ comments please.

kind regards

TonyW

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6212. Another Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 13:27:54 UTC
From: march181959
Topic: 6209 Message: 6212

I was going through some old files and I dug up an ad in 2001 for the Spidercone antenna. The tests indicated that it had "outstanding results" in the AM through SW range. It may have been offered through Grove.

Does anyone remember this antenna or have any experience with it? From the ad it looks like two triangles 180 degrees apart. The base of each is 29 feet and the sides of each triangle 51 ft. It sits 14 -18 ft above the ground. Each triangle is fed into ladder line to the receiver.

It looks easy enough to build and I thought I might give it a try.

Regards,

Frank C
Boston

6213. Re: [loopantennas] Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 14:55:44 UTC
From: John Hoopes
Topic: 6146 Message: 6213

That's pretty cool Steve. Do you have anything for measuring L?

John

--- On Fri, 1/9/09, Steve <alienrelics@...> wrote:
From: Steve <alienrelics@...>
Subject: [loopantennas] Re:First Loop Experience: Predicted Peformance vs. Actual
To: loopantennas@yahoogroups.com
Date: Friday, January 9, 2009, 11:57 AM

I hook this up to my DMM, the ranges are 200.0pF to 20.00uF full

scale, using the 200mV scale on the meter for 200pF to 2uF, and 2V

full scale for 20uF.

<http://www.polyphot o.com/tutorials/ Dual555CapMeter/ Dual555CapMeter1 50dpi.jpg>

I have a 0.1% tolerance capacitor I keep around to calibrate projects

like this.

Steve Greenfield

> --- In loopantennas@ yahoogroups. com, Samuel Ernst-Fortin

> <sernstfortin@ > wrote:

> >

> > I'm not an expert, but I know that the construction techniques used

> could throw a wrench into the predicted.

> >

> > How does one measure the capacitance of a variable cap? Well, one

> could gen up some form of RC arrangement that is

> > either charged or discharged and from the time constant associated

> with the exponential waveform (oscilloscope or VOM),

> > with a known R, you estimate C.

[Non-text portions of this message have been removed]

6214. Re: Want better 621 Kz reception!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 20:54:46 UTC
From: Bruce Carter
Topic: 6209 Message: 6214

It might interest you to know that I have done splendid reception of a 5 kW station on 620 kHz from 330 miles away, which I think is in the realm of 500 to 600 km. So it is possible!

First of all - the pattern of that station was towards the West, where I was receiving it. Hopefully you are not in a null on your station, and it has enough power to go the 250 km.

I was using a GE Superadio 3, and this radio is legendary for its sensitivity. Just using its internal ferrite, it produced an almost clear signal, very listenable.

To soup it up a bit, I experimented with various loop antennas - the tuned type. These are curious contraptions, as they pack multiple dB's of gain passively! There is no free lunch, and they also have a null point, too, a bit higher in the tuning for my loop. Using a 1.5m (approximately) loop, I have been able to receive 50 kW AM / MW stations at distances up to 1600 km daytime. So loop antennas have plenty of gain to do what you are trying to do!

I've got construction articles if you are interested.

6215. Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 20:59:32 UTC
From: airchecklover
Topic: 6204 Message: 6215

What calculator are you guys using? I like this one the best since it works out for my 2 foot and 3.5 foot AM BCB loops ...

http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

I understand "square loop 34 inches on a side". I understand 26 turns and solid #24 wire. I do not understand "The depth of my loops consisting of 26 turns of solid 24AWG exposed copper wire is 4.3125".

What is 4.3125"??

The above calculator link show tuning from 135hz to 680hz with .o5" spacing between wires, if I understood you correctly.

Mark

==========

-- In loopantennas@yahoogroups.com, John Hoopes <jdh1812@...> wrote:
>
> Tuning becomes kind of broad near the upper limits so you are probably not hearing the "woosch" as you tune past the peak. Also, stray capacitance tends to lower the actual upper frequency limit. Plugging in your figures into my loop calculator turned up the same results as you, so the math is right.
>
> John
>
> --- On Sun, 1/11/09, sernstfortin <sernstfortin@...> wrote:
>
> From: sernstfortin <sernstfortin@...>
> Subject: [loopantennas] Square Loop Antenna; Predicted vs. Actual
> To: loopantennas@yahoogroups.com
> Date: Sunday, January 11, 2009, 2:31 PM
>
>
>
>
>
>
>
>
> FWIW,
> I constructed a loop which is square, 34" on a side. The depth of my
> loops consisting of 26 turns of solid 24AWG exposed copper wire is
> 4.3125".
>
> Predicted "L" is 1306uH = 1.306mH.
>

> Measured "L" for the loop using my newly acquired LCR meter (I love
> this thing), is 1.365mH.
>
> Measured "C" for the variable cap is 17 - 431pF.
>
> Predicted tuning range is: 212KHz to 1.068MHz.
>
> Actual tuning range is seemingly much smaller: 200 - 433KHz is where I
> could peak the noise on the receiver. On the low-end, predicted matches
> fairly well with actual. Not so on the high end, but then, I'm
> listening to the change in noise level to determine span of the antenna
> actual. There may be one source of error. ;)
>
> Using the equation: F = 1 / [2*pi*SQRT(L* C)] with measured values...
> I'm suppsed to have loop resonance between 6.6 and 33KHz.
>
> I'm not doing something right.
>
> Any pointers appreciated.
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6216. Re: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 21:14:32 UTC
From: John Hoopes
Topic: 6204 Message: 6216

I use the Reg loop calculator designed and written by the late Reg G4FGQ.

Go to this link and look for "Download Programs from here". The program for multi-turn framed loops is "RJELOOP3". It's a DOS program but will run independently on your PC.

http://www.zerobeat.net/G4FGQ/

John

--- On Mon, 1/12/09, aircheckIover <mdh@...> wrote:

From: aircheckIover <mdh@...>
Subject: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual
To: loopantennas@yahoogroups.com
Date: Monday, January 12, 2009, 3:59 PM

What calculator are you guys using? I like this one the best since it
works out for my 2 foot and 3.5 foot AM BCB loops ...

[Non-text portions of this message have been removed]

6217. Re: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 21:18:32 UTC
From: John Hoopes
Topic: 6204 Message: 6217

I sent a reply to the group but it went into the SPAM folder. I guess I didn't write the characters down from the SPAM guard correctly. lol

John

--- On Mon, 1/12/09, aircheckIover <mdh@...> wrote:

From: aircheckIover <mdh@...>
Subject: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual
To: loopantennas@yahoogroups.com
Date: Monday, January 12, 2009, 3:59 PM

What calculator are you guys using? I like this one the best since it works out for my 2 foot and 3.5 foot AM BCB loops ...

http://www.mindspri ng.com/~loop_ antenna/umr_ emc_calc. htm

I understand "square loop 34 inches on a side". I understand 26 turns and solid #24 wire. I do not understand "The depth of my loops consisting of 26 turns of solid 24AWG exposed copper wire is 4.3125".

What is 4.3125"??

The above calculator link show tuning from 135hz to 680hz with .o5" spacing between wires, if I understood you correctly.

Mark

========== ========= ========= ========= =======

-- In loopantennas@ yahoogroups. com, John Hoopes <jdh1812@... > wrote:
>
> Tuning becomes kind of broad near the upper limits so you are probably not hearing the "woosch" as you tune past the peak. Also, stray capacitance tends to lower the actual upper frequency limit. Plugging in your figures into my loop calculator turned up the same results as you, so the math is right.
>
> John
>
> --- On Sun, 1/11/09, sernstfortin <sernstfortin@ ...> wrote:
>
> From: sernstfortin <sernstfortin@ ...>
> Subject: [loopantennas] Square Loop Antenna; Predicted vs. Actual
> To: loopantennas@ yahoogroups. com
> Date: Sunday, January 11, 2009, 2:31 PM
>
>

>
>
>
>
> FWIW,
> I constructed a loop which is square, 34" on a side. The depth of my
> loops consisting of 26 turns of solid 24AWG exposed copper wire is
> 4.3125".
>
> Predicted "L" is 1306uH = 1.306mH.
>
> Measured "L" for the loop using my newly acquired LCR meter (I love
> this thing), is 1.365mH.
>
> Measured "C" for the variable cap is 17 - 431pF.
>
> Predicted tuning range is: 212KHz to 1.068MHz.
>
> Actual tuning range is seemingly much smaller: 200 - 433KHz is where I
> could peak the noise on the receiver. On the low-end, predicted matches
> fairly well with actual. Not so on the high end, but then, I'm
> listening to the change in noise level to determine span of the antenna
> actual. There may be one source of error. ;)
>
> Using the equation: F = 1 / [2*pi*SQRT(L* C)] with measured values...
> I'm suppsed to have loop resonance between 6.6 and 33KHz.
>
> I'm not doing something right.
>
> Any pointers appreciated.
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

6218. Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 21:42:45 UTC
From: Bruce Carter
Topic: 6204 Message: 6218

> http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

There are three or four formulas out there, all of which work for some geometry better than others. Some are good for larger loops, some for smaller. None of them get closer than about 10% and there is a fair amount of "tweaking" involved. I've discovered that closer spacing raises the Q dramatically without affecting the tuning - much. But you can expect to add or subtract turns of wire until you get it right. And counter intuitive - smaller values of tuning capacitor and more turns of wire are easier to make a loop covering the entire band.

6219. Re: Want better 621 Kz reception!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-12 22:38:59 UTC
From: Tony
Topic: 6209 Message: 6219

Bruce,

Thanks for the response. I would appreciate these details and I've sent you my email address separately. I take it that your passive loop just sits behind the radio?

cheers

Tony

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> It might interest you to know that I have done splendid reception of
> a 5 kW station on 620 kHz f<<SNIP>>

6220. 555 cap meter Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 01:46:34 UTC
From: Steve
Topic: 6146 Message: 6220

--- In loopantennas@yahoogroups.com, Samuel Ernst-Fortin
<sernstfortin@...> wrote:
>
> Steve,
> you wrote:
> >>I hook this up to my DMM, the ranges are 200.0pF to 20.00uF full
> >>scale, using the 200mV scale on the meter for 200pF to 2uF, and 2V
> >>full scale for 20uF.
>
> I weighed the option of constructing a unit. I like that your design
leverages a DVM, That's really slick.;)
> Where did you get the idea for it? From just the 555 application notes?
> Thanks for sharing that.

I saw a project for one in a magazine long ago that used logic gates.
It drifted badly with temp and voltage changes and was sensitive to
which revision of gate used. Since the 555 is very stable, I designed
it using a couple 555 gates. It is solid enough, after all my DMM is
only rated at 3% accuracy.

I do have the LCR meter from AADE, too. It works great, although I'm
not that please with the physical design of it. I worry about the
banana jacks getting broken in my toolbox.

Steve Greenfield

6221. Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 01:55:30 UTC
From: Steve
Topic: 6146 Message: 6221

I drew up a design for a double 555 inductance meter, but haven't
built one yet.

Steve Greenfield

--- In loopantennas@yahoogroups.com, John Hoopes <jdh1812@...> wrote:
>
> That's pretty cool Steve. Do you have anything for measuring L?
>
> John
>
> --- On Fri, 1/9/09, Steve <alienrelics@...> wrote:
> From: Steve <alienrelics@...>
> Subject: [loopantennas] Re:First Loop Experience: Predicted
Peformance vs. Actual
> To: loopantennas@yahoogroups.com
> Date: Friday, January 9, 2009, 11:57 AM
>
>
>
>
>
>
>
>
>
>
>
> I hook this up to my DMM, the ranges are 200.0pF to
20.00uF full
>
> scale, using the 200mV scale on the meter for 200pF to 2uF, and 2V
>
> full scale for 20uF.
>
>
>
> <http://www.polyphot o.com/tutorials/ Dual555CapMeter/
Dual555CapMeter1 50dpi.jpg>
>
>
>
> I have a 0.1% tolerance capacitor I keep around to calibrate projects
>
> like this.

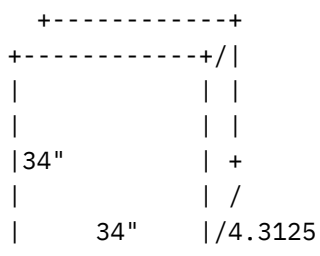
```
>
>
>
> Steve Greenfield
>
>
>
> > --- In loopantennas@ yahoogroups. com, Samuel Ernst-Fortin
>
> > <sernstfortin@ > wrote:
>
> > >
>
> > > I'm not an expert, but I know that the construction techniques used
>
> > could throw a wrench into the predicted.
>
> > >
>
> > > How does one measure the capacitance of a variable cap? Well, one
>
> > could gen up some form of RC arrangement that is
>
> > > either charged or discharged and from the time constant associated
>
> > with the exponential waveform (oscilloscope or VOM),
>
> > > with a known R, you estimate C.
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
```

>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6222. Re: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 02:08:50 UTC
From: Samuel Ernst-Fortin
Topic: 6204 Message: 6222

Mark.
If you had a cube, there would be three dimensions: looking head on, my loop has equal length sides of 34inches. However, the pitch of the windings, or the winding depth, or the dimension over which the resonant windings stack up is 4.3125inches.



That is what I meant by depth.
Sam

From: aircheckIover <mdh@...>
To: loopantennas@yahoogroups.com
Sent: Monday, January 12, 2009 3:59:32 PM
Subject: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

What calculator are you guys using? I like this one the best since it works out for my 2 foot and 3.5 foot AM BCB loops ...

http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm

I understand "square loop 34 inches on a side". I understand 26 turns and solid #24 wire. I do not understand "The depth of my loops consisting of 26 turns of solid 24AWG exposed copper wire is 4.3125".

What is 4.3125"??

The above calculator link show tuning from 135hz to 680hz with .o5" spacing between wires, if I understood you correctly.

Mark

[Non-text portions of this message have been removed]

6223. Re: [loopantennas] 555 cap meter Re:First Loop Experience: Predicted Peformance vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 02:19:51 UTC
From: Samuel Ernst-Fortin
Topic: 6146 Message: 6223

Steve, you wrote:
>>
>>I do have the LCR meter from AADE, too. It works great, although I'm
>>not that please with the physical design of it. I worry about the
>>banana jacks getting broken in my toolbox.

I like and appreciate very much the large LCD display. Yes, the banana jacks seem a little marginal, but you can pull them out and attach the measured cap or inductor to the metal clips. This isn't practical with a var cap nor the windings, specially if the gauge of the wire is small.

But, for a $40, i'm not complaining. When I started adding everything up for making one, and putting it in a case, etc, powering it, paying for shipping of parts, the purchase off eBay made absolute sense.
Sam

6224. 621 Kz reception

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 00:12:15 UTC
From: Graeme
Topic: 6224 Message: 6224

Hello Bruce and the group.
I also would like the construction details of your loop
Tnx in advance 73
Graeme

6225. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 14:19:53 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6225

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /UsefulTestEquipment/555InductanceMeter03.gif
Uploaded by : alienrelics <alienrelics@...>
Description : Dual 555 timer inductance meter. Preliminary schematic, not tested yet.
Critique?

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/UsefulTestEquipment/555InductanceMeter03.
gif

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

alienrelics <alienrelics@...>

6226. Re: [loopantennas] New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 15:42:36 UTC
From: Chris Trask
Topic: 238 Message: 6226

```
>
> File : /UsefulTestEquipment/555InductanceMeter03.gif
> Uploaded by : alienrelics <alienrelics@...>
> Description : Dual 555 timer inductance meter. Preliminary schematic,
> not tested yet. Critique?
>
```

I recall seeing a similar instrument for testing capacitors that appeared in Popular Electronics or some other magazine about 30-35 years ago. It used the same 555 format where the first one was a clock oscillator and the second was a pulse width modulator. They work fairly well given their simplicity. I made one and used it for years until I obtained a cheap LCR meter.

They can be a bit more accurate if the zero pot is replaced with a third 555 of the same circuit as the second, where a fixed reference inductor (or inductors) is used. This will cancel out the unavoidable errors from the finite switching time of the 555.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

6227. Re: New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 17:53:47 UTC
From: Steve
Topic: 238 Message: 6227

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
>
> >
> > File : /UsefulTestEquipment/555InductanceMeter03.gif
> > Uploaded by : alienrelics <alienrelics@...>
> > Description : Dual 555 timer inductance meter. Preliminary schematic,
> > not tested yet. Critique?
> >
>
> I recall seeing a similar instrument for testing capacitors
that appeared in Popular Electronics or some other magazine about
30-35 years ago. It used the same 555 format where the first one was
a clock oscillator and the second was a pulse width modulator. They
work fairly well given their simplicity. I made one and used it for
years until I obtained a cheap LCR meter.
>

My wife tried to convince me to patent these, I explained to her that
these are quite obvious to those "skilled in the arts", which is one
of the tests something must pass to get a patent. Of course, recent
history shows that -isn't- true. Patents on using a mousewheel, on
scrolling, storing documents on websites, etc. Ugh.

> They can be a bit more accurate if the zero pot is replaced
with a third 555 of the same circuit as the second, where a fixed
reference inductor (or inductors) is used. This will cancel out the
unavoidable errors from the finite switching time of the 555.
>

I'm not sure how that is more accurate unless you mean to avoid
checking the zero set when you use it. On my 555 cap meter, the zero
set is a front panel control. Calibration is an internal 20 turn pot.

Would you then adjust the reference inductor for zero? It seems to me
that temperature induced drift in an adjustable inductor would be
greater than that of a potentiometer and the 555 timer itself.

One of the uses I have for the cap meter is a fairly sensitive
differential capacitance sensor that does use a third 555 just as you
describe. In that situation, zero set isn't performed regularly and
this way drift due to the 555 is canceled out.

Steve Greenfield

6228. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 18:16:04 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6228

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /tiny SCR Preselector/tiny_SCR_Preselector_kit_Assembly_Manual_revW.pdf
Uploaded by : juanm0wwa <groups@...>
Description : tiny SCR Preselector assembly manual.

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/tiny%20SCR%20Preselector/tiny_SCR_Preselector_kit_Assembly_Manual_revW.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

juanm0wwa <groups@...>

6229. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 18:16:50 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6229

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /tiny SCR Preselector/tiny_SCR_Preselector_manual_revw.pdf
Uploaded by : juanm0wwa <groups@...>
Description : tiny SCR Preselector user manual.

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/tiny%20SCR%20Preselector/tiny_SCR_Preselector_manual_revw.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

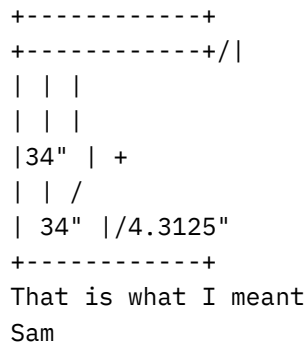
Regards,

juanm0wwa <groups@...>

6230. Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 16:24:27 UTC
From: brian russell
Topic: 6204 Message: 6230

Hi All,
I have been following this thread with interest, well done to all for the comments.
One question I have is, does the ' shape ' of the loop winding width have any
effect on performance ????
Most loop photos I have seen show the width as flat but I have seen the odd variation
like a triangle, circle and I was given a sample of a former which
is ' heart ' shaped, the inductive turn being in the ' V' of the heart.
Hope this makes sense, a sketch would easily show the idea.
72, Brian, G0NSL-QRP.



That is what I meant by depth.
Sam

[Non-text portions of this message have been removed]

6231. The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 17:14:27 UTC
From: brian russell
Topic: 6231 Message: 6231

Hi All,
Having a wander around the Internet on the ' Antennas for AM ' theme
I came across a plan (very simple) for the Carver Ultimate AM antenna
(Carver Corporation, Lynnwood, Washington, USA).
Since that is a pretty sweeping statement to make I wonder if anyone ever
made one and found it to be true ????
72, Brian, G0NSL-QRP.

6232. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 19:25:15 UTC
From: dean_0_way
Topic: 6231 Message: 6232

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...>
wrote:
> (Carver Corporation, Lynnwood, Washington, USA).
> Since that is a pretty sweeping statement to make I wonder if anyone
ever
> made one and found it to be true ????
> 72, Brian, G0NSL-QRP.
>I have two of them, while they are good they are'nt the ultimate
antenna ,what they do well ! is turn one of those cheap radio boom box
type from the discount store, from deaf to a modest reciever, one I
made is in the basement on my office radio ,it get's a station from 75
miles away ,no probs ,and they are very easy to build . Also a vast
improvment over the plastic loops they pack with these cheap radio's .

Dean_0

6233. Re: [loopantennas] Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 23:14:21 UTC
From: kevin asato
Topic: 6231 Message: 6233

http://members.cox.net/rwagoner/columns/am_antenna.html

this claims to be the specifications for the Carver antenna

73,
kevin
kc6pob

--- On Tue, 1/13/09, dean_0_way <dean_0_way@...> wrote:
From: dean_0_way <dean_0_way@...>
Subject: [loopantennas] Re: The Ultimate AM antenna !!!!
To: loopantennas@yahoogroups.com
Date: Tuesday, January 13, 2009, 11:25 AM

--- In loopantennas@ yahoogroups. com, "brian russell" <brian-nsl@. ..>

wrote:

> (Carver Corporation, Lynnwood, Washington, USA).

> Since that is a pretty sweeping statement to make I wonder if anyone

ever

> made one and found it to be true ????

> 72, Brian, G0NSL-QRP.

>I have two of them, while they are good they are'nt the ultimate

antenna ,what they do well ! is turn one of those cheap radio boom box

type from the discount store, from deaf to a modest reciever, one I

made is in the basement on my office radio ,it get's a station from 75

miles away ,no probs ,and they are very easy to build . Also a vast

improvment over the plastic loops they pack with these cheap radio's .

Dean_0

[Non-text portions of this message have been removed]

6234. Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-14 00:50:25 UTC
From: aircheckIover
Topic: 6204 Message: 6234

Understood. And thanks. Getting back to your original question ...
Tuning range? Any developments?

==========

--- In loopantennas@yahoogroups.com, Samuel Ernst-Fortin
<sernstfortin@...> wrote:
>
> Mark.
> If you had a cube, there would be three dimensions: looking head on,
my loop has equal length sides of 34inches. However, the pitch of the
windings, or the winding depth, or the dimension over which the
resonant windings stack up is 4.3125inches.
>
>   +------------+
> +------------+/|
> | | |
> | | |
> |34" | +
> | | /
> | 34" |/ 4.3125"
> +------------+
> That is what I meant by depth.
> Sam
>
> _____
> From: aircheckIover <mdh@...>
> To: loopantennas@yahoogroups.com
> Sent: Monday, January 12, 2009 3:59:32 PM
> Subject: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual
>
>
> What calculator are you guys using? I like this one the best since it
> works out for my 2 foot and 3.5 foot AM BCB loops ...
>
> http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm
>
> I understand "square loop 34 inches on a side". I understand 26 turns
> and solid #24 wire. I do not understand "The depth of my loops
> consisting of 26 turns of solid 24AWG exposed copper wire is 4.3125".
>
> What is 4.3125"??
>
> The above calculator link show tuning from 135hz to 680hz with .o5"
> spacing between wires, if I understood you correctly.

>
> Mark
>
>
>
>
> [Non-text portions of this message have been removed]
>

6235. Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-14 01:14:37 UTC
From: airchecklover
Topic: 6204 Message: 6235

Hi Bruce;

Just realized I am championing your on-line calculators. Thanks for sharing your handy work. I built a 6-sided 3.5ft effective diameter loop using v2 of your AM Loop Antenna Calculator - UMR EMC Lab Formula. I got lucky, it tuned perfectly first try. Built it for the AM BCB but it tuned down to abt. 450 khz. Ha - I quickly realized the slight signal gain w/ respect to a 2 ft loop did not outweigh the antenna's bulk factor, so it's being rebuilt to a smaller dimension. Since I've been thinking about the rebuild lately, what you just wrote made my head spin. You said "I've discovered that closer spacing raises the Q dramatically without affecting the tuning - much". Oops, now i'm really confused. Haven't I been reading wider spacing, use of interleaving techniques & premium Litz wire are design considerations for minimizing internal capacitance and that is the main consideration when going for highest Q?

Can you straighten me out?

Thanks,

Mark

==========

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> > http://www.mindspring.com/~loop_antenna/umr_emc_calc.htm
>
> There are three or four formulas out there, all of which work for some
> geometry better than others. Some are good for larger loops, some for
> smaller. None of them get closer than about 10% and there is a fair
> amount of "tweaking" involved. I've discovered that closer spacing
> raises the Q dramatically without affecting the tuning - much. But
> you can expect to add or subtract turns of wire until you get it
> right. And counter intuitive - smaller values of tuning capacitor and
> more turns of wire are easier to make a loop covering the entire
> band.
>

6236. Re: [loopantennas] The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-14 03:31:41 UTC
From: Jim Dunstan
Topic: 6231 Message: 6236

At 05:14 PM 1/13/2009 +0000, you wrote:
>Hi All,
> Having a wander around the Internet on the ' Antennas for AM ' theme
>I came across a plan (very simple) for the Carver Ultimate AM antenna
>(Carver Corporation, Lynnwood, Washington, USA).
>Since that is a pretty sweeping statement to make I wonder if anyone ever
>made one and found it to be true ????
> 72, Brian, G0NSL-QRP.

Hi,

The "Carver Ultimate AM antenna" is indeed a sweeping statement hi. It is simply 4 turns on a 1ft square frame. Most Hi Fi am receivers which don't have a built in ferrite antenna supply such a simple antenna .... several turns on a light form 8" to 12" in diameter with a twisted pair of wires for a feed line which connects to the AM antenna input.

I have several of them .... I would hardly call them an ultimate antenna hi hi. They are adequate for strong local stations. I have found them useful as a pickup loop when used with a larger tuned loop.

Jim, VE3CI

6237. shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-13 21:59:45 UTC
From: vfair6
Topic: 6237 Message: 6237

I am new to this group and need help. I did a search for my needs but came up empty.

I wish to build a 1 to 2 meter diam shielded loop antenna using 72 ohm hardline. I have all the info I need from a mechanical point of view but I am looking for a differential input amplifier design that is broadbanded and will cover 160 thru 40 meters. I will place it in the base of the loop and connect it directly to the two center conductor ends of the coax.

I have found several amp designs but they are all for very low freq loops. Can anyone point me in the direction of an amplifier that will meet this need. Many thanks in advance for anything you have to offer.
Van W4GIW

6238. Re: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-14 12:21:33 UTC
From: Samuel Ernst-Fortin
Topic: 6204 Message: 6238

Well,
In order to get the very fine wire to stay in place on the all wood frame I built out of wooden dowels, I applied some contact adhesive to strips cut from a bicycle wheel inner-tube. I then used an exacto knife to cut slits at regular intervals to hold the corners of the wire turns. Works great...

But, at the moment I am hesitant to re-wrap it with a deeper depth (less loops per inch), or remove a number of loops.

I received from ebay a really nice variable capacitor from Lithuania. When on eBay, search for:
4-GANG AIR VARIABLE CAPACITOR with reduction

I really like this capacitor.

I put all the sections in parallel and built myself a "hoola hoop loop" (say that 4 times quickly). That tunes from about 300KHz to 600KHz. I want to see if a circular loop formula gets close to predicting my results. More details later in another thread specific to the hoola-hoop which I mangled.

Anyhow, I plan to take the variable capacitors from the square antenna and hoola-hoop loop antennas and switch them and see what I get... On one test I did last night, the gain from the square loop is much higher than the hoola-hoop loop.

What was so nice is both easily pick up a NDB out of Charleston SC on 329KHz and make it clearly audible... and I'm in my basement below grade! Love it. And, there's a very strong NDB on 366KHz local from the ATL airport, just turning either of these loops and the nulling effect is dramatic.

This is fun. What I want to relate to everyone... if you're subscribed to this group and *thinking* about building a loop, get yourself a variable capacitor and build one. I can't believe I waited this long to construct one.

From: aircheckIover <mdh@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 13, 2009 7:50:25 PM
Subject: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Understood. And thanks. Getting back to your original question ...
Tuning range? Any developments?

========== ========= ========= ========

--- In loopantennas@ yahoogroups. com, Samuel Ernst-Fortin
<sernstfortin@ ...> wrote:
>
> Mark.

> If you had a cube, there would be three dimensions: looking head on,
my loop has equal length sides of 34inches. However, the pitch of the
windings, or the winding depth, or the dimension over which the
resonant windings stack up is 4.3125inches.
>
>   +----------- -+
> +----------- -+/|
> | | |
> | | |
> |34" | +
> | | /
> | 34" |/ 4.3125"
> +----------- -+
> That is what I meant by depth.
> Sam

[Non-text portions of this message have been removed]

6239. Re: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-14 17:25:42 UTC
From: Samuel Ernst-Fortin
Topic: 6204 Message: 6239

This is the 2nd time replying with this response. First isn't showing up in the list... If it does show up twice, my apologies.

Well,
In order to get the very fine wire to stay in place on the all wood frame I built out of wooden dowels, I applied some contact adhesive to strips cut from a bicycle wheel inner-tube and applied them over the 4 corners of the antenna frame. I then used an exacto knife to cut slits at regular intervals to hold the corners of the wire turns. Works great...

But, at the moment I am hesitant to re-wrap it with a deeper depth (less loops per inch), or remove a number of loops.

I received from ebay a really nice variable capacitor from Lithuania. When on eBay, search for:
4-GANG AIR VARIABLE CAPACITOR with reduction

I really like this capacitor.

I put all the sections in parallel and built myself a "hoola hoop loop" (say that 4 times quickly). That tunes from about 300KHz to 600KHz. I want to see if a circular loop formula gets close to predicting my results. More details later in another thread specific to the hoola-hoop which I mangled.

Anyhow, I plan to take the variable capacitors from the square antenna and hoola-hoop loop antennas and switch them and see what I get... On one test I did last night, the gain from the square loop is much higher than the hoola-hoop loop.

What was so nice is both easily pick up a NDB out of Charleston SC on 329KHz and make it clearly audible... and I'm in my basement below grade! Love it. And, there's a very strong NDB on 366KHz local from the ATL airport, just turning either of these loops and the nulling effect is dramatic.

This is fun. What I want to relate to everyone... if you're subscribed to this group and *thinking* about building a loop, get yourself a variable capacitor and build one. I can't believe I waited this long to construct one.

From: aircheckIover <mdh@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 13, 2009 7:50:25 PM
Subject: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual

Understood. And thanks. Getting back to your original question ...
Tuning range? Any developments?

========== ========= ========= ========

--- In loopantennas@ yahoogroups.. com, Samuel Ernst-Fortin
<sernstfortin@ ...> wrote:
>
> Mark.
> If you had a cube, there would be three dimensions: looking head on,
my loop has equal length sides of 34inches. However, the pitch of the
windings, or the winding depth, or the dimension over which the
resonant windings stack up is 4.3125inches.
>
>   +----------- -+
> +----------- -+/|
> | | |
> | | |
> |34" | +
> | | /
> | 34" |/ 4.3125"
> +----------- -+
> That is what I meant by depth.
> Sam
>
> __________ _________ _________ __
> From: aircheckIover <mdh@...>
> To: loopantennas@ yahoogroups. com
> Sent: Monday, January 12, 2009 3:59:32 PM
> Subject: [loopantennas] Re: Square Loop Antenna; Predicted vs. Actual
>
>
> What calculator are you guys using? I like this one the best since it
> works out for my 2 foot and 3.5 foot AM BCB loops ....
>
> http://www.mindspri ng.com/~loop_ antenna/umr_ emc_calc. htm
>
> I understand "square loop 34 inches on a side". I understand 26 turns
> and solid #24 wire. I do not understand "The depth of my loops
> consisting of 26 turns of solid 24AWG exposed copper wire is 4.3125".
>
> What is 4.3125"??
>
> The above calculator link show tuning from 135hz to 680hz with .o5"
> spacing between wires, if I understood you correctly.
>
> Mark
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

6240. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-14 19:46:25 UTC
From: tenorman1952
Topic: 6231 Message: 6240

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 05:14 PM 1/13/2009 +0000, you wrote:
> >Hi All,
> > > Having a wander around the Internet on the ' Antennas for
AM ' theme
> >I came across a plan (very simple) for the Carver Ultimate AM
antenna
> >(Carver Corporation, Lynnwood, Washington, USA).
> >Since that is a pretty sweeping statement to make I wonder if anyone
ever
> >made one and found it to be true ????
> > > 72, Brian, G0NSL-QRP.
>

The name derives from the "Carver Ultimate Tuner" for which the antenna design was intended. It does work well with nearly all tuners and receivers which do not have built in ferrite core loop antennas.

Naturally, it does not have the gain of a tuned loop, but it's advantage is that it requires no tuning.

And it works quite well. I've built a number of them for myself (1 for the shop system, one for the bedroom system, one for the main livingroom system, as well as for friends and family.

Many knock it because it is not a tuned loop. It is what it is, and works well.

Paul C.

6241. Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-15 07:29:06 UTC
From: jr_dakota
Topic: 6237 Message: 6241

--- In loopantennas@yahoogroups.com, "vfair6" <giw@...> wrote:
>
> I am new to this group and need help. I did a search for my needs but
> came up empty.
>
> I wish to build a 1 to 2 meter diam shielded loop antenna using 72 ohm
> hardline. I have all the info I need from a mechanical point of view
> but I am looking for a differential input amplifier design that is
> broadbanded and will cover 160 thru 40 meters. I will place it in the
> base of the loop and connect it directly to the two center conductor
> ends of the coax.
>
> I have found several amp designs but they are all for very low freq
> loops. Can anyone point me in the direction of an amplifier that will
> meet this need. Many thanks in advance for anything you have to offer.
> Van W4GIW
>

There is one in the photo section under AA7U that works pretty good
but could stand to be tweaked, the IP2 isn't as good as the Lankford
push pull active whip I also have but it's still decent and more
suited to very low impedance broadband loops than the ones with the
high input impedance FET transistors

JR

JR

6242. Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-15 12:41:15 UTC
From: sernstfortin
Topic: 6237 Message: 6242

Van W4GIW wrote:
>I am looking for a differential input amplifier design that is
> broadbanded and will cover 160 thru 40 meters. I will place it in the
> base of the loop and connect it directly to the two center conductor
> ends of the coax.
>
You might consider posting this also to the ActiveAntennas group.
Sam

6243. Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-15 12:45:01 UTC
From: sernstfortin
Topic: 6237 Message: 6243

I wrote:
> You might consider posting this also to the ActiveAntennas group.
> Sam
>
Apologies. The ActiveAntennaHobbyGroup group. Posting frequency /
volume is very low, but someone there may see the request.

6244. Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-15 16:30:18 UTC
From: aimo ruoho
Topic: 6237 Message: 6244

Sam, please,

Could you give us the exact URL (email-address)
of the Active Antenna Hobby Group?

I tried many versions, but failed.

Thanks and Best Regards,

Aimo

De: sernstfortin <sernstfortin@...>
Para: loopantennas@yahoogroups.com
Enviado: jueves, 15 de enero, 2009 13:41:15
Asunto: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Van W4GIW wrote:
>I am looking for a differential input amplifier design that is
> broadbanded and will cover 160 thru 40 meters. I will place it in the
> base of the loop and connect it directly to the two center conductor
> ends of the coax.
>
You might consider posting this also to the ActiveAntennas group.
Sam

[Non-text portions of this message have been removed]

6245. Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-15 21:31:21 UTC
From: aimo ruoho
Topic: 6237 Message: 6245

Oh, OH, Sam!

The right form of URL is http://www.activeantennahobbyroup@yahoogroups.com

Thanks anyway and 73...

Aimo

De: sernstfortin <sernstfortin@...>
Para: loopantennas@yahoogroups.com
Enviado: jueves, 15 de enero, 2009 13:45:01
Asunto: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

I wrote:
> You might consider posting this also to the ActiveAntennas group.
> Sam
>
Apologies. The ActiveAntennaHobbyG roup group. Posting frequency /
volume is very low, but someone there may see the request.

[Non-text portions of this message have been removed]

6246. Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-15 22:06:26 UTC
From: Chris Trask
Topic: 6237 Message: 6246

```
>
> Oh, OH, Sam!
>
> The right form of URL is http://www.activeantennahobbyroup@yahoogroups.com
>
> Thanks anyway and 73...
>
```

That certainly is a small group. I feel like a charter member.

Chris

```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```

Graphics by Loek Frederiks

6247. The loop coupling positioning

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-15 23:10:04 UTC
From: stargate438
Topic: 6247 Message: 6247

I made a loop of 1 mt in diameter for the receiving the short-wave with a loop, 1/5 in diameter, in RG 213 to limit more the noise. I ask you, it is important the positioning of the loop coupling? And if so, where it should be positioned at the top or bottom of the main loop? Why?

Thank you

6248. Re: The loop coupling positioning

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-16 02:11:30 UTC
From: bobby_047
Topic: 6247 Message: 6248

Hello, I am a new to the group, and was going to ask the same
question. From what I understand from others most are on bottom.
I will wait along with you for an answer.

Thanks
Bobby

--- In loopantennas@yahoogroups.com, "stargate438" <stargate19@...> wrote:
>
> I made a loop of 1 mt in diameter for the receiving the short-wave with
> a loop, 1/5 in diameter, in RG 213 to limit more the noise. I ask you,
> it is important the positioning of the loop coupling? And if so, where
> it should be positioned at the top or bottom of the main loop? Why?
>
> Thank you
>

6249. Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-16 04:22:38 UTC
From: Samuel Ernst-Fortin
Topic: 6237 Message: 6249

From: Chris Trask <christrask@...>
>> That certainly is a small group. I feel like a charter member.

OK, if someone decides to replace a variable capacitor with varactor diode(s), does it then qualify as an "active" loop? ;)

[Non-text portions of this message have been removed]

6250. Re: [loopantennas] Re: The loop coupling positioning

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-16 14:14:27 UTC
From: Chris Trask
Topic: 6247 Message: 6250

>
> > I made a loop of 1 mt in diameter for the receiving the short-wave with
> > a loop, 1/5 in diameter, in RG 213 to limit more the noise. I ask you,
> > it is important the positioning of the loop coupling? And if so, where
> > it should be positioned at the top or bottom of the main loop? Why?
>
>
> Hello, I am a new to the group, and was going to ask the same
> question. From what I understand from others most are on bottom.
> I will wait along with you for an answer.
>

Positioning the Faraday coupling loop has never been easy, and my only experience with it has been listening to people complain about it. At the same time, I also listened to others complaining about the cost and effort needed in the loops that have the motor-operated vacuum vaiable capacitor at the far end.

Those were the primary incentives that prompted me to look at the manner in which loop antennas were matched to the feedline, and the result was two relatively simple and inexpensive designs. The first one is a receive-only loop matching that uses a pair of varactors and three wideband transformers:

http://www.home.earthlink.net/~christrask/Paper011.html

The second design is a transmitting version good for up to 100W using the same matching topology, but uses a relatively inexpensive dual variable capacitor driven by a small gearhead motor:

http://www.home.earthlink.net/~christrask/Paper012.html

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6251. Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-16 14:26:20 UTC
From: Chris Trask
Topic: 6237 Message: 6251

>
>OK, if someone decides to replace a variable capacitor with varactor diode(s), does it then qualify as an "active" loop? ;)
>

Barely, and probably not. Active antennas are usually small with respect to wavelength and include amplifiers to make up for the smaller size. The loop that I made with the varactor tuning is still full-sized, just a lot less expensive than using a motor-driven capacitor.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6252. Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-16 15:45:07 UTC
From: aimo ruoho
Topic: 6237 Message: 6252

Sorry!
"g" omits... should have written:
http://www.activeantennahobbygroup@yahoogroups.com
Ami

_____
De: aimo ruoho <aimounto@...>
Para: loopantennas@yahoogroups.com
Enviado: jueves, 15 de enero, 2009 22:31:21
Asunto: Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Oh, OH, Sam!

The right form of URL is http://www.activean tennahobbyroup@ yahoogroups. com

Thanks anyway and 73...

Aimo

_____
De: sernstfortin <sernstfortin@ yahoo.com>
Para: loopantennas@ yahoogroups. com
Enviado: jueves, 15 de enero, 2009 13:45:01
Asunto: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

I wrote:
> You might consider posting this also to the ActiveAntennas group.
> Sam
>
Apologies. The ActiveAntennaHobbyG roup group. Posting frequency /
volume is very low, but someone there may see the request.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6253. Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-16 16:06:14 UTC
From: C. Beijersbergen
Topic: 6237 Message: 6253

Try:

http://groups.yahoo.com/group/activeantennahobbygroup

Cor Beijersbergen

Sorry!
"g" omits... should have written:
http://www.activeantennahobbygroup@yahoogroups.com
Ami

[Non-text portions of this message have been removed]

6254. Re: [loopantennas] The loop coupling positioning

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-16 16:07:49 UTC
From: John Hoopes
Topic: 6247 Message: 6254

From an electrical standpoint it really doesn't matter since current distribution is equal around a small loop. With that in mind, couple the pickup loop wherever is convenient from a mechanical standpoint.

Here is a link to give you an idea.

http://www.kr1st.com/magloop.htm

John

--- On Thu, 1/15/09, stargate438 <stargate19@...> wrote:
From: stargate438 <stargate19@...>
Subject: [loopantennas] The loop coupling positioning
To: loopantennas@yahoogroups.com
Date: Thursday, January 15, 2009, 6:10 PM

I made a loop of 1 mt in diameter for the receiving the short-wave with

a loop, 1/5 in diameter, in RG 213 to limit more the noise. I ask you,

it is important the positioning of the loop coupling? And if so, where

it should be positioned at the top or bottom of the main loop? Why?

Thank you

[Non-text portions of this message have been removed]

6255. Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-16 18:49:16 UTC
From: aimo ruoho
Topic: 6237 Message: 6255

THANK YOU Cor!
Ami

_____
De: C. Beijersbergen <c.beijersbergen@...>
Para: loopantennas@yahoogroups.com
Enviado: viernes, 16 de enero, 2009 17:06:14
Asunto: Re: [loopantennas] Re: shielded loop antenna for 160 and 80 meters, including 40 would be a big bonus

Try:

http://groups. yahoo.com/ group/activeante nnahobbygroup

Cor Beijersbergen

Sorry!
"g" omits... should have written:
http://www.activean tennahobbygroup@ yahoogroups. com
Ami

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6256. Loop antenna performance comparative

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-17 09:43:08 UTC
From: siamcreative@ymail.com
Topic: 6256 Message: 6256

Hello all,
I have some question ...,I would like to know the performance comparative between Circular design , Rectangular design and trapezoid design for loop antenna. Could you help advise ? :)
Thank you,

6257. Re: [loopantennas] Loop antenna performance comparative

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-17 13:30:58 UTC
From: John Hoopes
Topic: 6256 Message: 6257

There is a lot of math involved with that question. But in a nutshell, the aperture, or size of the antenna is the main determining factor in loop performance. This is the case where bigger is better.

There is an excellent article that deals with the theory that can be found here.

http://www.vlf.it/octoloop/rlt-n4ywk.htm

John

--- On Sat, 1/17/09, siamcreative@ymail.com <siamcreative@...> wrote:

From: siamcreative@... <siamcreative@...>
Subject: [loopantennas] Loop antenna performance comparative
To: loopantennas@yahoogroups.com
Date: Saturday, January 17, 2009, 4:43 AM

Hello all,
I have some question ...,I would like to know the performance
comparative between Circular design , Rectangular design and trapezoid
design for loop antenna. Could you help advise ? :)
Thank you,

[Non-text portions of this message have been removed]

6258. Re: Loop antenna performance comparative

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-18 17:29:18 UTC
From: Hiram
Topic: 6256 Message: 6258

This question has come up a number of times, and when the dust settles, the general answer seems to be that the shape is negligible, square, circular, rectangular, or octagonal all work more or less the same, the differences being so slight as to be nearly impossible to measure objectively. There are other factors that have greater influence, height above ground, interaction with other antennas or nearby objects, etc...

Pappy Hiram

--- In loopantennas@yahoogroups.com, "siamcreative@..." <siamcreative@...> wrote:
>
> Hello all,
> I have some question ...,I would like to know the performance
> comparative between Circular design , Rectangular design and trapezoid
> design for loop antenna. Could you help advise ? :)
> Thank you,
>

6259. Re: [loopantennas] The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-20 01:57:23 UTC
From: robert baker
Topic: 6231 Message: 6259

Link added

--- On Tue, 1/13/09, brian russell <brian-nsl@...> wrote:
From: brian russell <brian-nsl@...>
Subject: [loopantennas] The Ultimate AM antenna !!!!
To: loopantennas@yahoogroups.com
Date: Tuesday, January 13, 2009, 12:14 PM

Hi All,
Having a wander around the Internet on the ' Antennas for AM '
theme
I came across a plan (very simple) for the Carver Ultimate AM antenna
(Carver Corporation, Lynnwood, Washington, USA).
Since that is a pretty sweeping statement to make I wonder if anyone ever
made one and found it to be true ????
72, Brian, G0NSL-QRP.

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links
rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into
Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6260. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-20 14:55:32 UTC
From: gmcjetpilot
Topic: 6231 Message: 6260

"brian russell" <brian-nsl@...> wrote:
>
> Hi All,
>Having a wander around the Internet on the ' Antennas for AM ' theme
> I came across a plan (very simple) for the Carver Ultimate AM
antenna
> made one and found it to be true ????
> 72, Brian, G0NSL-QRP.

Yep I made one with a pizza box and some 22awg stranded teflon insulated wire. It worked so well I re-did it on a USPS packing box. The pizza box was a perfect 12" x 12" (17" diagonal) but was narrow. It worked as well as the packing box. However the packing box is wider, more sturdy and easier to loop. Also wider wire space changes the charicterists of the antenna (good/bad not sure you have to try it). The both worked well and I have pictures of both below.

The ULT AM antenna carver shows is 1 foot sides, with 4 turns and twisted lead. I copied it except with out the wood frame. My box was not perfect, like 13" x 12" sided. I also went 5 turns not 4. No particular reason, only the length of wire I had, giving me 5 turns or about 20 feet of loop with a nice 12" twisted lead-in, verse the carvers 16 feet loop length (4 turns x 4'). I also figure all my local stations of interest are down in the sub 850 khz range, so an extra turn wouldn't hurt.

The ULT AM BOX ANT (packing box) drives my mini Awia radio/CD stereo on my dresser. The Awia has a metal case and does not have an internal AM or FM antennas. The Awia I recall (and from the owners manual) came with a loop antenna on a plastic frame, much smaller than the 1 x 1 antenna. I must of lost or misplaced it long ago. The ultimate antenna works well with some caveat's.

SEE PICTURES BELOW

The ultimate AM antenna is really just like bigger version of the ubiquitous AM loops you get with some many consumer radios, that clip on the back of the radio. That does not mean they perform well. Also the Awia mini stereo (at least on AM) is off par when compared to "real" SW radios or portable radios with large internal loop sticks. The FM radio circuit is digital and actually pretty good for a basic consumer radio. The Awia is 12 yrs old btw.

Also like the loop antennas you get with radios the ULT AM ANT has no tuning but very directional. I have compaired it to three popular (on eBay and retail) AM antennas I own.

- Terk AM advantage
- Tecsun AN-200
- Kaito/Degen DE31/KA33

The first two are passive 9" loops with a tuning cap.
The second is a portable amplified sw/mw antenna with tuning and a single loop of wire on a frame you fold out and hang up.
The three above all work well but the amplified loop does a little better. (more below)

SEE PICS BELOW

The ULTIMATE AM ANTENNA, I made does OK. It is directional and has gain with good noise rejection (for my installation). Holding it I can totally block out the nearby stations turning the loop to the null side. Trying to get DX AM BCB stations with this antenna, radio and in my 1st floor bedroom with many outside walls in 4 directions is pointless.

Compared to the other antennas use as a bench mark it is not a true DX MW antenna. However for local stations it's awesome and cheap. The pizza box was free and the wire I had is worth say $5. A little time and tape, done. This way I don't tie up any of my good antennas for the bedroom radio.

BTW I tried a random wire for AM on the Awia stereo, about 20 feet long, tacked on the wall and ceiling. It was awful and noisy.

For my ULT AM Ant installation the loop is tacked on a N-S wall. The 2 or 3 'big' AM stations worth listing to are only 5-15 miles south. So I have it pinned up behind the dresser out if sight aligned with the stations to the south. With out the antenna, the AM radio does nothing, there is no internal antenna, AM or FM. I don't really listen to AM radio for entertainment, but if I want to listen to the Fox radio propaganda shows or local sports in Raleigh it's there.

FM (you can see it in some of the PICS) is a 1/2 wave FM dipole antenna out of some coax, balun and wire. It works well out to 50-60 miles. The FM antenna is directional like the AM antenna, limiting to some stations due to mounting it on an interior N-S wall.

I receive and have store 6 AM and 20 FM stored stations. With out any antenna its zero. For an hour or two of fun and stuff I had in the drawer I'm happy with my AM/FM antennas. They are not real visible and work. Best of all I didn't have to spend $100 on antennas.

The only disappointment is not the AM, but a local FM college radio station only 10-12 miles away, comes in with static. I need a directional antenna with more gain. AM wise, if I want to do some DX'ing, I fire up the TenTex RX320D, connected to an outdoor random wire about 60' long and 15' off the ground. It does well. A Wellbrook would be nice but the neighborhood has anti-antenna rules.

YOU WON'T KNOW TILL YOU MAKE ONE.

Ult AM antenna packing box version
http://img517.imageshack.us/img517/8027/amfnslide2yo2.jpg
http://img213.imageshack.us/img213/6140/loopantennaoy0.jpg
http://img249.imageshack.us/img249/7051/amfmslide1pk6.jpg

Ult AM antenna pizza box version
http://img443.imageshack.us/img443/2949/pizzabox2cw1.jpg

AM Loop antennas for bench marks
http://img525.imageshack.us/img525/7522/slide3copymh0.jpg
http://img522.imageshack.us/img522/1176/slide1fx3.jpg

I am building a 2 foot X 2 foot loop with two tuning capacitors on a large wood frame with about 20 turn wraps around the frame (with a 4 turn tap for higher freqs). It should out perform all my loops in the below 3000 Khz and BCB range. It is just larger.

THE WINNER.....

The Kaito/Degen DE31/KA33/TC34 (they come in different names and models, see eBay) does VERY well, with a broader range from MW to SW. Over all for the money the amplified AM/SW antenna is pretty good, but ugly and not easy to handle. It hangs up like a coat hanger. The amplifier unit is the size of a pack of gum with a tiny thumb nail tuning dial. It is battery powered with 2xAAA. Not bad if you have rechargable batteries, but I estimate if using alkaline you are going to need to replace them every 15 hours or less? It is not real practical for permanent installation and messing with the amplifier box is a tad of a pain. You have to remember to turn it off when not in use.

Middle of the road and WORK VERY WELL are the passive 9" loops. However they take up some room, which they need so you can aim them and tune them. If you are using the PASSIVE sympathetic / repeater / proximity method of boosting the a radios internal antenna you need a table to position the antenna and radio optimally. Both the Terk and Tecsun have a jack for direct connection to the radio. The great part is they work with out jacks* and no battery power. (* The amplifed Kaito/Degen has a repeater loop stick for proximity boost of internal antenns)

BOTTOM LINE The Ultimate AM Antenna is a WINNER for a local radio station you want to get and want a dedicated antenna for that radio. It can be made for almost nothing and should do better than the cheap loop/wire antennas you buy off of ebay for $10 which are usally much smaller.

6261. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-20 16:46:48 UTC
From: tenorman1952
Topic: 6231 Message: 6261

--- In loopantennas@yahoogroups.com, robert baker <sparkman386@...>
wrote:
>
> Link added
>
> --- On Tue, 1/13/09, brian russell <brian-nsl@...> wrote:
> From: brian russell <brian-nsl@...>
> Subject: [loopantennas] The Ultimate AM antenna !!!!
> To: loopantennas@yahoogroups.com
> Date: Tuesday, January 13, 2009, 12:14 PM
>
> Hi All,
> Having a wander around the Internet on the ' Antennas for
AM '
> theme
> I came across a plan (very simple) for the Carver Ultimate AM
antenna
> (Carver Corporation, Lynnwood, Washington, USA).
> Since that is a pretty sweeping statement to make I wonder if
anyone ever
> made one and found it to be true ????
> 72, Brian, G0NSL-QRP.

You can find photos of mine in the Photos section in my Loop Kits
folder.

The name derives from the antenna being designed to be used with the
Carver "Ultimate" tuner.

I've built a number of these loops for my own use and for friends.
They work very well. They will not produce as strong a signal as a
tuned loop, but require no tuning. Very simple.

Paul
tenorman1952

6262. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-21 16:40:08 UTC
From: tenorman1952
Topic: 6231 Message: 6262

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:

> BOTTOM LINE The Ultimate AM Antenna is a WINNER for a local radio
> station you want to get

Excellent writeup on these antennas!

I have the Kaito/Degen 31 that I used inside my METAL workshop
building after Gustav for SWL, before I put my main SW antenna back
up. I was able to listen to a net in the next state, and most of the
hams checking in, using the Kaito 31 and Icom R75 receiver.

With the "Ultimate AM Antenna" during the day I can easily pick up a
5000 watt station about 200 miles away. At night, from the Louisiana
Gulf Coast, I can usually hear WOAI in San Antionio, WSB in Atlanta,
KMOX in St. Louis, MO, WLW in Cinncinnati, OH, and both WLS and WGN
in Chicago.

Not as strong a signal as the MTM Scientific tuned loop, but still
quite directional.

Paul
tenorman1952

6263. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-22 11:39:27 UTC
From: Bill McGraw
Topic: 6231 Message: 6263

Is there a way to build one of these?

Paul wrote, "1a. Re: The Ultimate AM antenna !!!!
Posted by: "tenorman1952" tenorman1952@... tenorman1952
Wed Jan 21, 2009 8:40 am (PST)
--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:

> BOTTOM LINE The Ultimate AM Antenna is a WINNER for a local radio
> station you want to get

Excellent writeup on these antennas!

I have the Kaito/Degen 31 that I used inside my METAL workshop
building after Gustav for SWL, before I put my main SW antenna back
up. I was able to listen to a net in the next state, and most of the
hams checking in, using the Kaito 31 and Icom R75 receiver.

With the "Ultimate AM Antenna" during the day I can easily pick up a
5000 watt station about 200 miles away. At night, from the Louisiana
Gulf Coast, I can usually hear WOAI in San Antionio, WSB in Atlanta,
KMOX in St. Louis, MO, WLW in Cinncinnati, OH, and both WLS and WGN
in Chicago.

Not as strong a signal as the MTM Scientific tuned loop, but still
quite directional.

Paul
tenorman1952"

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

6264. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-23 16:26:14 UTC
From: tenorman1952
Topic: 6231 Message: 6264

--- In loopantennas@yahoogroups.com, "Bill McGraw" <mcgr3799@...> wrote:
>
> Is there a way to build one of these?
>
> Paul wrote, "1a. Re: The Ultimate AM antenna !!!!

Bill: Go here...

http://members.cox.net/rwagoner/columns/am_antenna.html

Paul

6265. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-24 20:08:14 UTC
From: Hue Miller
Topic: 6231 Message: 6265

Oh- i see now. "Ultimate" as in it's for the "Ultimate Receiver", not that this basic untuned loop is anything special. -Hue Miller

6266. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-24 20:14:28 UTC
From: Hue Miller
Topic: 6231 Message: 6266

Still, the topic of "Carver" audio products is an interesting one, and after Googling some Carver info after reading this antenna article, i think i will have to read up more on Carver. I had always felt their products were over-hyped but maybe the quality is really there. I have a few Carver car radios, those were built by Eton in Germany, but Carver lost about $1 Million in 1983 dollars when the cassette drive on them proved too problem prone and the unsold and unreturned radios were just warehoused for several years until they were finally sold to a surplus dealer. Those car radios do have a pretty good AM section, seem to have fine selectivity but good audio quality at the same time. The also have the LW band - useless in N America - and the European 49 meter shortwave band, as well as FM. -Hue Miller

6267. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-25 11:18:30 UTC
From: Bill McGraw
Topic: 6231 Message: 6267

Paul,
I did go there and thanks for the other info. I now understand the reason
for no v-cap.

Posted by: "tenorman1952" tenorman1952@... tenorman1952
Fri Jan 23, 2009 8:26 am (PST)
--- In loopantennas@yahoogroups.com, "Bill McGraw" <mcgr3799@...> wrote:
>
> Is there a way to build one of these?
>
> Paul wrote, "1a. Re: The Ultimate AM antenna !!!!

Bill: Go here...

http://members.cox.net/rwagoner/columns/am_antenna.html

Paul

William W."Bill" McGraw
"Somewhere South of Chicago"
Greenville, MS 38701

6268. Re: The Ultimate AM antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-25 23:32:16 UTC
From: gmcjetpilot@yahoo.com
Topic: 6231 Message: 6268

I think you are painting Bob Carver and his gear a little on the negative side. I know a little about Carver since I lived in Seattle in the mid 80's, Carvers prime. My friends company did contract work and painted the black lacquer paint on Carver cabinets.

Wikipedia has a good detailed write ups. Bob Carver is physicist and electronic inventor. He did some amazing things and still does with his new company.

http://en.wikipedia.org/wiki/Robert_W._Carver

His high end stereos where state of the art and he holds a boat load of patents. He could emulate any amplifier and had what he called holographic sound and speaker patents (ribbon speakers).

He never was known for his radio receivers, but amplification and speakers. He did have patents on FM radio for Asymmetrical Charge Coupled FM Detector design. I am not sure he had any thing special for AM radio. I am pretty sure he was an early adapter of synthesized digital tuning for both AM/FM (I don't recall any analog tuning radios but could be wrong.)

Wiki: "In 1985, Audiophile magazine challenged Bob Copy to copy a Conrad-Johnson Premier Five (the make and model was not named in the challenge but revealed later) amplifier at their offices in New Mexico within 48 hours. The Conrad Johnson amplifier was one of the most highly regarded amplifiers of its day, costing in excess of $12,000 (in 1985 money). Nevertheless, Carver, using null difference testing, successfully copied the sound of the target amplifier and won the challenge." He made and marked some amps based on these challenge that sold for $600-$1,200. He also sued the magazine for bias.

Many old Carver products are collector items now by audio enthusiast.

SUNFIRE high end audiophile and theater sound systems, is the company that came out of Carver consumer electronics. They are highly regarded.

Cheers

[Non-text portions of this message have been removed]

6269. Icom R75 NIB with DSP and Sync-AM

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-26 16:52:24 UTC
From: tenorman1952
Topic: 6269 Message: 6269

I have available one Icom IC-R75-02. This receiver is about 3 year old New In Box. The -02 refers to an earlier version with DSP and Synchronous-AM factory installed.

It was removed from the box only to turn on and confirm that it does have:

UT-106 DSP Module installed (DSP is indicated on LCD)

Synchronous-AM (S-AM is indicated on LCD)

(These will not indicate on the LCD if the modules are not present.)

The Sync-AM is not on later versions of this receiver due to the chip used being out of production. But it is in this receiver.

$550.00 plus $30 shipping. I can accept Paypal or Credit Card processed through my business.

I can be reached at tenorman1952 at yahoo dot com.

Paul
AE5JU

6270. Horizontal HF (MF?) Loop for TX/RX at KW levels

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-26 20:15:57 UTC
From: chas
Topic: 6270 Message: 6270

I have a building out back, 24x30' and I am thinking about attaching a 3 or 4' piece of 1" ID PVC on each corner and wrapping the 108 linear feet with some 22 or 24ga wire... spaced about a foot apart. that would give me about 400' of wire going into some 450ohm ladderline, thence to a balun to drop it to 50ohms and then into the Dentron tuner. this is obviously going to be a cloud burner unless I can get it up into the air and away from the ground. but heck, unless I can stand it on a side AND up off the ground, it is going to be highly NVIS anyway.

I am really looking for a quiet, 2mhz antenna for 500W or so MARS work at night when the critical freq drops into the mid or low 2's.

suggestions??

chas, k5dam
AAR6TU

6271. Added new AM loop to my photo page

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-28 02:20:13 UTC
From: jdh1812
Topic: 6271 Message: 6271

Hi Guys,

Just finished a new loop. I had to improve on the old one so I made
the frame a little sturdier and used Litz 175/56 in place of magnet wire.

Basic design is the same, 12 turns with 1/4 turn inductive coupling on
a frame made with 4" X 2'. I find this loose coupling provides very
sharp tuning and less loading than if I was to use a full turn. I
experimented quite a bit before settling on this ratio.

The capacitor is a dual 365 pf in parallel (730 pF total) and tunes
the loop from 500 kHz to 2100 kHz.

I compared it to my 100' East/West antenna and it compares favorably.
I haven't had a chance to test it properly in a direct A/B comparison
but what little bit of tuning around I did, made me a believer! It
also plays well on the 160 meter ham band. Several stations were S9+
on my Icom R75, same as the wire!

So, if anyone's interested, I uploaded some new pics here.

http://groups.yahoo.com/group/loopantennas/photos/album/227852299/pic/list

It's the dark stained frame.

73
John

6272. Want to learn about shielded vs. unshielded and tuned vs untuned loop merits

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-29 16:11:50 UTC
From: David Feldman
Topic: 6272 Message: 6272

Have built the G8CQX untuned loop per URL
www.qrss.thersgb.net/active-loop-receiving-antenna.html

It is an unshielded, untuned loop antenna, and was built to improve on HF noise in my nearby environment (with underground utilities here, I believe mostly from nearby radiating electronic devices I don't control.) Improvement seen so far is modest, but I've done only a little testing.

Before building more experimental antennas for comparison, (there are many articles and designs available on the web), I'd like to get an idea of the merits of various options so I can spend my construction time most effectively. Advice or links to information would be gratefully appreciated.

73 Dave WB0GAZ wb0gaz@...

6273. Re: Want to learn about shielded vs. unshielded and tuned vs untuned loop merits

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-30 14:30:25 UTC
From: aircheckIover
Topic: 6272 Message: 6273

Dave; What options? I"ve had great fun w/a 2 ft square multi-turn loop tuned loop. Big enough to provide amazing gain, small enough to use and spin indoors. Don't know about non-resonant loops.

-Mark

==========

--- In loopantennas@yahoogroups.com, "David Feldman" <wb0gaz@...> wrote:
>
> Have built the G8CQX untuned loop per URL
> www.qrss.thersgb.net/active-loop-receiving-antenna.html
>
> It is an unshielded, untuned loop antenna, and was built to improve on HF
> noise in my nearby environment (with underground utilities here, I believe
> mostly from nearby radiating electronic devices I don't control.)
> Improvement seen so far is modest, but I've done only a little testing.
>
> Before building more experimental antennas for comparison, (there are many
> articles and designs available on the web), I'd like to get an idea of the
> merits of various options so I can spend my construction time most
> effectively. Advice or links to information would be gratefully appreciated.
>
> 73 Dave WB0GAZ wb0gaz@...
>

6274. Re: Want to learn about shielded vs. unshielded and tuned vs untuned loop merits

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-31 01:01:09 UTC
From: John
Topic: 6272 Message: 6274

--- David/wb0gaz wrote:
> ... I'd like to get an idea of the
> merits of various options so I can spend my construction time most
> effectively.

All loops resonate at some frequency, even without a cap, due to stray capacitance. So, an "untuned" loop is merely a loop operated away from its resonant frequency, usually below. The advantage of an untuned loop is wide bandwidth, with more-or-less linear response across the band (if you're far enough from the resonance). The disadvantage is many dB's loss of gain and lower SNR (since you're inviting in all those neighboring frequencies).

Untuned loops are very popular with ELF and VLF "natural radio" enthusiasts, since they like to monitor the entire VLF band with a spectrum analyzer instead of a receiver.

Tuned loops are better,IMO, for NDB, BC, SW and ham listening, especially for reception of DX stations, due to the extra gain and high SNR.

HTH,
John/AF4EX

6275. Early loop antenna --- 1925

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-31 03:17:03 UTC
From: Bruce Carter
Topic: 6275 Message: 6275

http://www.indianaradios.com/Super-Booster%20Wave%20Trap.htm

6276. Improving the Degen DE 31 Active Loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-01-31 14:51:19 UTC
From: Ian
Topic: 6276 Message: 6276

Hi All,
Having recently purchased a DE 31, I was a little disappinted
that it didn't tune up on the 80 Metre Ham band.
I have now extended it by 32" (80cm) and it tunes up really well on
80!
It has a nice sharp peak from 3.5 MHz up to 14.5 MHz. On MW, it peaks
from 500 KHz up to 2 MHz. This makes this little loop more useful to
me as I spend many hours listening to 80 Metres.

The loop wire consists of two multistranded conductors which are
enameled and shorted together at both ends. My junk box produced a
length of similar wire which is just as flexible and nice and light.
I decided to extend both ends of the loop to give it a more
symmetrical appearance. The loop was unoldered from the small PCB and
the new pieces added. A small length of heatshring tubing was
employed to tidy the joints. You will need to mve the knots, in the
loop wire, down a few inches to give you a symmetrical diamond shape
to your loop.

Because the loop is bigger than before, it also works better on
medium wave.

Try doing this modification to yours! You could replace all of the
loop wire, it's up to you.

73,
Ian G1DRP

6277. Okay, a new loop believer!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 04:34:10 UTC
From: Bill
Topic: 6277 Message: 6277

At my bedside I have a Degen 1103 radio, actually a really nice little radio that has MW and SW bands. You can actually 'fool' the radio into starting at 0 khz and working up in frequency using an easy software 'hack' but the lower khz segments below MW seem to have some 'overload' from local stations if using either a long wire or anything other than the internal ferrite antenna.

The neat thing about the radio is that IF you plug in an external antenna, both the AM ferrite antenna and the telescoping SW antenna are disconnected in favor of the external. Sooo, I decided to build a little loop antenna and see if it made a difference.

I had on hand a wire spool for some ham coax (I am a ham op - KC9CS) and took the spool apart because it had a nice sturdy 9" cardboard tube. I cut about 2" off the tube and used this for my loop form. I had some twin speaker line with tiny, probably 22 gauge wire which I split lengthwise. It is solid core wire. I wound 22 turns of this on the 9" tube. For a capacitor I had four small, identical 100pf variable capacitors that I wired together, not wanting to pirate my 365pf variables from either of my crystal sets. I wired up the input cable and tried the new loop this afternoon about 5 pm, the sun was still up here in west central Florida.

My first station I pulled in was in Atlanta! A full 500 miles distant and still daylight. WOW! Now that it is evening, I'm experimenting and listening with it starting at the low end of the MW band. WSM is an easy catch from Nashville at 650 khz, which is about at far as I've scanned yet. DX'ing from Florida is kind of tough because we get a LOT of spanish stations from who knows where. Mexico is just across the Gulf of Mexico, lots of spanish speaking Caribbean Islands too. What impresses me with this antenna is how well it is regarding directivity. Turn the antenna slowly and the signal drops out, another pops up. Turn it back and the noise disappears, the desired station jumps back in. I haven't noticed a lot of difference using the capacitors yet, but I've only played with this antenna for about an hour so far. I'm sure as I gain experience it will improve. Something else dawned on me too....I don't remember paying much attention to linking those 4 capacitors together -- whether they were all series linked or series-paralleled. That WOULD make a difference, but tomorrow will be time enough. In the meantime, I am amazed at the way this little loop works.

bill
KC9CS

6278. Re: [loopantennas] Okay, a new loop believer!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 16:04:31 UTC
From: Samuel Ernst-Fortin
Topic: 6277 Message: 6278

Bill wrote:
>>
>>I don't remember paying much attention to
>>linking those 4 capacitors together -- whether they were all series
>>linked or series-paralleled. That WOULD make a difference, but
>>tomorrow will be time enough. In the meantime, I am amazed at the way
>>this little loop works.
>>

Go loops!

Right, I believe that if the capacitors are wired in parallel, the equivalent capacitance is the sum of the individual capacitors,
i.e. Ceq = C1 + C2 + ... Cn

If the capacitors are wired in series, the reciprocal of the equivalent capacitance is equal to the sum of the reciprocals of each individual capacitor,
i.e. 1/Ceq = 1/C1 + 1/C2 +... 1/Cn

You are right, there should be a big difference in your results depending on how they are wired together.

6279. Re: Okay, a new loop believer!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 16:05:32 UTC
From: gmcjetpilot
Topic: 6277 Message: 6279

Not busting your chops Bill, you may be right, but....Are you sure BILL about the internal loop stick being cut out with the antenna input? I don't think so (I have a Degen 1103). On page 26 it says:

"If FM or SW reception is too weak, use supplied extra- long external antenna to improve reception."

I assume it does not mention MW. Here is the user manual. http://www.dpmega.com.hk/usermanual/e1103.pdf

The manual says SW is from 1710 to 29999 khz. You are correct you can trick it to go below MW, but I did not know it would go below 100 Khz. How do you do that.

Also your antenna sounds cool, nice, could you take some pics & draw a diagram and post it in the pictures section. Thanks George

> At my bedside I have a Degen 1103 radio, actually a really nice little
> radio that has MW and SW bands. You can actually 'fool' the radio into
> starting at 0 khz and working up in frequency using an easy software
> 'hack' but the lower khz segments below MW seem to have some
> 'overload' from local stations if using either a long wire or anything
> other than the internal ferrite antenna.
>
> The neat thing about the radio is that IF you plug in an external
> antenna, both the AM ferrite antenna and the telescoping SW antenna
> are disconnected in favor of the external.

6280. Sun affect on radio performance question?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 16:35:11 UTC
From: gmcjetpilot
Topic: 6280 Message: 6280

Could some one give me a brief tutorial on the Sun and Radio performance.

I know little about astronomy, ionosphere (time of day affect) and how a short 2 or 3 day solar storm affects HF communications. However what about the SUN CYCLE. I'm not grasping the big picture. Are there some good sites about the Sun "index" and how to read it. Thanks George

6281. Re:Okay, a new loop believer!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 17:35:39 UTC
From: Darren Hennig
Topic: 6277 Message: 6281

Bill:

My 1103 does not disconnect my MW ferrite internal antenna. What vintage is your radio?

Darren
VE6IZ

[Non-text portions of this message have been removed]

6282. Re: [loopantennas] Re: Okay, a new loop believer!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 18:45:23 UTC
From: Samuel Ernst-Fortin
Topic: 6277 Message: 6282

Trick to tune the Degen 1103 down below 100Khz:
http://www.rosestone.me.uk/Degen/VLF.txt

This suggests the unit does some auto-selection/de-selection of the Ferrite Rod Antenna based on what and how it is tuned. If someone had a schematic, one could determine if the external antenna input jack has a contact which opens or closes with the insertion of the plug.

From: gmcjetpilot <gmcjetpilot@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, February 1, 2009 11:05:32 AM
Subject: [loopantennas] Re: Okay, a new loop believer!

Not busting your chops Bill, you may be right, but....Are you sure
BILL about the internal loop stick being cut out with the antenna
input? I don't think so (I have a Degen 1103). On page 26 it says:

"If FM or SW reception is too weak, use supplied extra- long
external antenna to improve reception."

I assume it does not mention MW. Here is the user manual.
http://www.dpmega. com.hk/usermanua l/e1103.pdf

The manual says SW is from 1710 to 29999 khz. You are correct you can
trick it to go below MW, but I did not know it would go below 100
Khz. How do you do that.

Also your antenna sounds cool, nice, could you take some pics & draw
a diagram and post it in the pictures section. Thanks George

> At my bedside I have a Degen 1103 radio, actually a really nice
little
> radio that has MW and SW bands. You can actually 'fool' the radio
into
> starting at 0 khz and working up in frequency using an easy software
> 'hack' but the lower khz segments below MW seem to have some
> 'overload' from local stations if using either a long wire or
anything
> other than the internal ferrite antenna.
>
> The neat thing about the radio is that IF you plug in an external
> antenna, both the AM ferrite antenna and the telescoping SW antenna
> are disconnected in favor of the external.

[Non-text portions of this message have been removed]

6283. Re: [loopantennas] Sun affect on radio performance question?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 18:57:04 UTC
From: Jim Dunstan
Topic: 6280 Message: 6283

At 04:35 PM 2/1/2009 +0000, you wrote:

>Could some one give me a brief tutorial on the Sun and Radio
>performance.
>
>I know little about astronomy, ionosphere (time of day affect) and how
>a short 2 or 3 day solar storm affects HF communications. However what
>about the SUN CYCLE. I'm not grasping the big picture. Are there some
>good sites about the Sun "index" and how to read it. Thanks George

Hi George,

The Sun, Earth's magnetic field, the ionosphere, and radio propagation is not a simple story. Having said that here is the simple story hi hi. Let's start with a hypothetical scenario in which there is no Ionosphere, layers of ionized molecules, at different heights and thicknesses, over various parts of the globe. In this scenario all electromagnetic radiation, regardless of frequency, will for all practical purposes propagate in exactly the same way. That is the transmitter and receiver must be in the line of sight. All radiation at an elevation above the line of site will simply continue on into space.

As it happens there is an Ionosphere, ionized gases that occur in layers (usually in 2, 3, or more layers at different heights) at different locations and different times around the globe. These layers, the Ionosphere, are the result of the interaction between cosmic rays that are emitted from the sun and the Earth's magnetic field. If the rate of the Sun's emissions and the Earth's magnetic field remained constant then the nature of the Ionosphere would remain predictable and would only vary as the Earth rotated exposing any particular area to the Sun on a 24 hour cycle. However, the Sun's emissions and the Earth's magnetic field are not constant and as a result there is a great variability in the nature of the ionospheric layers.

You need to understand how electromagnetic radiation interacts with ionospheric layers. When the radiation field hits an ionospheric layer the radiation may be reflected. how it is reflected will depend on 1. the frequency of the radiation, 2. the thickness and height of the layer, and the angle at which they interact. The radiation frequency is important ... generally speaking the lower the frequency the more it is absorbed by the layer .... as the frequency goes lower it reaches a point where all radiation is absorbed before any of it can be reflected. Conversely the higher the frequency the greater the penetration of the ionosphere .... with the result that very high frequencies may penetrate the layers again with no resultant reflections. (the result of the reflections of course allows propagation beyond the line of sight).

Addressing the original question concerning the Sun and Sun variability. First, 'storms'. Both the comic ray emissions from the Sun and the magnetic field of the Earth suffer 'storms' ... and not always independently. A Sun storm is due to some kind of solar 'flare' that will cause a sudden increase or pulse of cosmic ray emission. A very strong pulse can even cause power failures of various kinds ... certainly they cause a ripping apart of ionospheric layers which can literally 'black out' all HF propagation. These Sun storms also cause the Earth's magnetic field to whip around as well. The Earth's magnetic field can cause the storm as well ... it appears that some geologic phenomena can cause this .... it is known that in the past these magnetic storms have actually caused the field to reverse (north to south). Generally storms caused by the Earths magnetic field are minor in comparison to solar storms.

Aside from storms, the radiation from the Sun remains relatively constant with a slow drift up or down in apparent association with the number of sunspots visible on the surface of the sun. The greater the number of sun spots the greater radiation and the more effective the ionosphere for HF radio propagation. I mention HF frequencies as they are the most dependent on the ionosphere. This slow drift of radiation up and down follows a cycle that seems to be approximately 11 years long. Because of the association with sun spots and the average cycle being 11 years, it has come to be known as the 11 year Sunspot cycle.

Presently we are the bottom of what seems a protracted cycle. Everyone is looking for the sunspots to increase in number with a resultant increase in HF propagation.

There is a short ? version. there are many sites on Web that go to great lengths to predict a report all aspects of the phenomena. For most of us we simply become familiar with propagation as it affects our use ... whether as an Amateur operator or a SWL.

Jim, VE3CI

>

[Non-text portions of this message have been removed]

6284. Re: [loopantennas] Sun affect on radio performance question?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 20:04:47 UTC
From: Paul V Birke PEng
Topic: 6280 Message: 6284

I made a word doc and will study

thanks Paul VE3PVB

From: Jim Dunstan <jimdunstan@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, February 1, 2009 1:57:04 PM
Subject: Re: [loopantennas] Sun affect on radio performance question?

At 04:35 PM 2/1/2009 +0000, you wrote:

>Could some one give me a brief tutorial on the Sun and Radio
>performance.
>
>I know little about astronomy, ionosphere (time of day affect) and how
>a short 2 or 3 day solar storm affects HF communications. However what
>about the SUN CYCLE. I'm not grasping the big picture. Are there some
>good sites about the Sun "index" and how to read it. Thanks George

Hi George,

The Sun, Earth's magnetic field, the ionosphere, and radio propagation is not a simple story. Having said that here is the simple story hi hi. Let's start with a hypothetical scenario in which there is no Ionosphere, layers of ionized molecules, at different heights and thicknesses, over various parts of the globe. In this scenario all electromagnetic radiation, regardless of frequency, will for all practical purposes propagate in exactly the same way. That is the transmitter and receiver must be in the line of sight. All radiation at an elevation above the line of site will simply continue on into space.

As it happens there is an Ionosphere, ionized gases that occur in layers (usually in 2, 3, or more layers at different heights) at different locations and different times around the globe. These layers, the Ionosphere, are the result of the interaction between cosmic rays that are emitted from the sun and the Earth's magnetic field. If the rate of the Sun's emissions and the Earth's magnetic field remained constant then the nature of the Ionosphere would remain predictable and would only vary as the Earth rotated exposing any particular area to the Sun on a 24 hour cycle. However, the Sun's emissions and the Earth's magnetic field are not constant and as a result there is a great variability in the nature of the ionospheric layers.

You need to understand how electromagnetic radiation interacts with ionospheric layers. When the radiation field hits an ionospheric layer the radiation may be reflected. how it is reflected will depend on 1. the

frequency of the radiation, 2. the thickness and height of the layer, and the angle at which they interact. The radiation frequency is important ... generally speaking the lower the frequency the more it is absorbed by the layer .... as the frequency goes lower it reaches a point where all radiation is absorbed before any of it can be reflected. Conversely the higher the frequency the greater the penetration of the ionosphere .... with the result that very high frequencies may penetrate the layers again with no resultant reflections. (the result of the reflections of course allows propagation beyond the line of sight).

Addressing the original question concerning the Sun and Sun variability. First, 'storms'. Both the comic ray emissions from the Sun and the magnetic field of the Earth suffer 'storms' ... and not always independently. A Sun storm is due to some kind of solar 'flare' that will cause a sudden increase or pulse of cosmic ray emission. A very strong pulse can even cause power failures of various kinds ... certainly they cause a ripping apart of ionospheric layers which can literally 'black out' all HF propagation. These Sun storms also cause the Earth's magnetic field to whip around as well. The Earth's magnetic field can cause the storm as well ... it appears that some geologic phenomena can cause this .... it is known that in the past these magnetic storms have actually caused the field to reverse (north to south). Generally storms caused by the Earths magnetic field are minor in comparison to solar storms.

Aside from storms, the radiation from the Sun remains relatively constant with a slow drift up or down in apparent association with the number of sunspots visible on the surface of the sun. The greater the number of sun spots the greater radiation and the more effective the ionosphere for HF radio propagation. I mention HF frequencies as they are the most dependent on the ionosphere. This slow drift of radiation up and down follows a cycle that seems to be approximately 11 years long. Because of the association with sun spots and the average cycle being 11 years, it has come to be known as the 11 year Sunspot cycle.

Presently we are the bottom of what seems a protracted cycle. Everyone is looking for the sunspots to increase in number with a resultant increase in HF propagation.

There is a short ? version. there are many sites on Web that go to great lengths to predict a report all aspects of the phenomena. For most of us we simply become familiar with propagation as it affects our use ... whether as an Amateur operator or a SWL.

Jim, VE3CI

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6285. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 21:34:18 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6285

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6286. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 21:34:18 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6286

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6287. Re: Improving the Degen DE 31 Active Loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 22:06:23 UTC
From: tenorman1952
Topic: 6276 Message: 6287

--- In loopantennas@yahoogroups.com, "Ian" <i.m.hand@...> wrote:
>
> Hi All,
> Having recently purchased a DE 31, I was a little disappinted
> that it didn't tune up on the 80 Metre Ham band.
> I have now extended it by 32" (80cm) and it tunes up really well on
> 80!

I simply tuned it, in the SW setting, to the lowest frequency, and it would the receiver would turn the entire 80 meter band with no difficult. I made no modifications.

Paul C.

6288. Change-mail address?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-01 23:48:36 UTC
From: WA1IBN
Topic: 6288 Message: 6288

My ISP sold out to another outfit, now I've got to
change my e-mail address for this forum.
Do I have to un-subscride and re-subscribe?
I don't seem to come up with another solution.
Thanks, Herb Dean

[Non-text portions of this message have been removed]

6289. Re: [loopantennas] Change-mail address?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-02 00:45:27 UTC
From: Jim Dunstan
Topic: 6288 Message: 6289

At 06:48 PM 2/1/2009 -0500, you wrote:

>My ISP sold out to another outfit, now I've got to
>change my e-mail address for this forum.
>Do I have to un-subscride and re-subscribe?
>I don't seem to come up with another solution.
>Thanks, Herb Dean

Hi Dean,

I don't think you need to do that. log into Yahoo groups and you will be able to modify the Email address for your particular groups. I have several Email addresses and I recall I went into my groups and modified the Email address to be used. You can register a number of different addresses and then specify which one to use for any of your groupsl

Jim

6290. Re: Okay, a new loop believer! (DE1103)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-02 01:50:23 UTC
From: gmcjetpilot
Topic: 6277 Message: 6290

Bill I double checked and I was right, the Antenna plug is for SW (and FM) only on the Degan 1103, however you can boost the internal MW loop stick by a repeater or proximity loop boost.

I have tired it with the Tecsun AN-200 and Terk AM advantage (simular 9" loops). It works well. However the stock loop stick with out help is pretty amazing.

The Degen DE31 or similar portable amplified loop has a loop stick booster. It works pretty well with the DE 1103. I found the loop stick to be on the back near the base of the telescoping antenna.

When I use the loop stick booster of the Degen DE31 portable antenna (or similar), I fold the telescopic antenna up and lay the booster in that little recess near the base of the telescopic antenna.

What I found is the the existing loop stick does pretty well on its own on MW. Of all the portable radios the DE 1103 gets the least benefit of an external LOOP booster. The DE 1103 with built in antennas is a great performer with out help. The design is pretty solid as is. I have compared it in stock form to other radios with an external loop and the DE 1103 holds it own. Cheers

--- In loopantennas@yahoogroups.com, "Bill" <harpman54@...> wrote:
>
> At my bedside I have a Degen 1103 radio, actually a really nice
little
> radio that has MW and SW bands. You can actually 'fool' the radio
into
> starting at 0 khz and working up in frequency using an easy software
> 'hack' but the lower khz segments below MW seem to have some
> 'overload' from local stations if using either a long wire or
anything
> other than the internal ferrite antenna.
>
> The neat thing about the radio is that IF you plug in an external
> antenna, both the AM ferrite antenna and the telescoping SW antenna
> are disconnected in favor of the external. Sooo, I decided to build
a
> little loop antenna and see if it made a difference.
>> bill
> KC9CS
>

6291. Re: Okay, a new loop believer! (DE1103)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-02 04:49:31 UTC
From: Bill
Topic: 6277 Message: 6291

gmcjet pilot,
Here's a bit from over on the Kaito 1103 group (still applies to the Degen 1103: QUOTE: Re: Question About 1103 (message number 337)

I've had the 1103 and the 1102 for several years - I recall that there was at one time, early in this group and "programmable" mode that changed that external antenna input so that as an example if you plugged an external antenna in while the radio was in the AM mode, it would disconnect the internal antenna and function off that external hookup.

Mine operates that way and it is very evident when tuning in DX AM stations. While I did that mod I also did the program mod that allowed for using those frequencies just above the normal AM band, because I was interested in the listening to 160 meters in SSB.

Don /Unquote

Having said that, HERE is the programming 'hack' I mentioned that allows tuning below 530khz and above 1700khz AND bypasses the AM ferrite antenna for the external antennna. This information is from http://www.rosestone.me.uk/Degen/VLF.txt :

Quote: It is possible to tune the 1103 receivers below 100kHz, and to disconnect the internal ferrite rod antenna on MW + LW, by using this simple procedure with the SCAN function.

Normally, a 'scan' will remain within the selected band, with the tuning scale showing progress through the band. If you start a scan from outside a band, the scan will become 'trapped' within the next band that is reached. However, starting between 1 & 9kHz above any band upper edge and scanning down, will bypass the 'band' system, and will not switch to the ferrite rod in the range 1710 - 100kHz. The tuning will also continue below 100kHz.

So, select 1711 by direct entry:
[1] [7] [1] [1] [band+/AM]
and scan down: hold [BAND-] for 2 seconds.
As soon as the frequency is below 1710kHz you can stop the scan and use the rotary control, or you can let the scan continue below 100kHz.
The antenna is now switched for the telescopic or external antenna.
I suggest you tune it down to zero and store this in preset 0, or store 99kHz in preset 99. Also store any frequencies for which you wish to use the external antenna input. You can store any frequency with the [SSB] mode 'on' for CW reception.
Once you tune above 1710 again, the system will revert to the normal tuning range with the ferrite rod for MW + LW. (my note: this is NOT

true IF you start the radio using the preset memory channel and tune with the thumbwheel. IF you punch in a direct entry frequency it reverts back to the ferrite rod however. If I start in memory 99 channel and start tuning with the jogwheel tuning (thumbwheel) I can tune ALL the way to 30Mhz non-stop.)
==========
There has been a suggestion that you must start the scan at 21951kHz because that was the designer's employee number, but that story is apocryphal!
==========
There is another procedure at http://mods.radioscanner.ru/degen/mod29/ for tuning above 30MHz (AM), possibly up to 35 - 37MHz depending on hardware alignment. UNQUOTE.

So, it IS possible to use the Degen/Kaito 1103's with a loop antenna for LW and MW modes. With a simple software hack performed once and stored, you can tune below or above the 'listed or advertised' ranges of the radio. By the way, there is a spreadsheet out there that shows all 22 (10 hidden) bands the 1103 radio will cover. I also have the Degen 1102, the hack worked on very early models, and the software was apparently changed. But the 1103's definitely will use this hack. Both are remarkable radios.
Regards,
Bill
KC9CS

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> Bill I double checked and I was right, the Antenna plug is for SW
> (and FM) only on the Degan 1103, however you can boost the internal
> MW loop stick by a repeater or proximity loop boost.
>
> I have tired it with the Tecsun AN-200 and Terk AM advantage (simular
> 9" loops). It works well. However the stock loop stick with out help
> is pretty amazing.
>
> The Degen DE31 or similar portable amplified loop has a loop stick
> booster. It works pretty well with the DE 1103. I found the loop
> stick to be on the back near the base of the telescoping antenna.
>
> When I use the loop stick booster of the Degen DE31 portable antenna
> (or similar), I fold the telescopic antenna up and lay the booster in
> that little recess near the base of the telescopic antenna.
>
> What I found is the the existing loop stick does pretty well on its
> own on MW. Of all the portable radios the DE 1103 gets the least
> benefit of an external LOOP booster. The DE 1103 with built in
> antennas is a great performer with out help. The design is pretty
> solid as is. I have compared it in stock form to other radios with an
> external loop and the DE 1103 holds it own. Cheers

>
>
>
> --- In loopantennas@yahoogroups.com, "Bill" <harpman54@> wrote:
> >
> > At my bedside I have a Degen 1103 radio, actually a really nice
> little
> > radio that has MW and SW bands. You can actually 'fool' the radio
> into
> > starting at 0 khz and working up in frequency using an easy software
> > 'hack' but the lower khz segments below MW seem to have some
> > 'overload' from local stations if using either a long wire or
> anything
> > other than the internal ferrite antenna.
> >
> > The neat thing about the radio is that IF you plug in an external
> > antenna, both the AM ferrite antenna and the telescoping SW antenna
> > are disconnected in favor of the external. Sooo, I decided to build
> a
> > little loop antenna and see if it made a difference.
> >> bill
> > KC9CS
> >
>

6292. Re: Want to learn about shielded vs. unshielded and tuned vs untuned loop merits

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-02 13:42:22 UTC
From: cank13cat
Topic: 6272 Message: 6292

My main goal has been to minimize noise from the usual sources in any residential environment, such as my own computer, neighbors' TVs, etc. Being in an apartment without a patio or balcony I'm limited to indoor antennas (tho' occasionally on weekends and holidays I'll sneak a random wire up a nearby tree).

I tried a few unshielded wire loops in my apartment, all variations of the many-turns-of-wire loops. All were noisier than the internal ferrite loopsticks in my portables and offered no advantages for my purposes.

On a lark I tried a shielded loop. Hadn't planned to but rescued a long hank of TV coaxial cable the maintenance crew were disposing of after remodeling another apartment. I just followed the basic outlines in Joe Carr's "Receiving Antenna Handbook" and seen elsewhere all around the web. However, being lazy I first tried it without hooking up the air-core tuning cap I'd planned to cannibalize from an old radio.

Darn thing worked! Moderately directional on MW, but mostly it really reduces the local noise problem without merely sacrificing signal strength. It even works reasonably well on HF up to 10 MHz with strong signals, enough so that I can use it for Radio New Zealand on 9765 in the wee hours. I use it fairly routinely for listening to broadcasts in the 49m band at night, where signals are typically strong. Much less noise than my portables on a whip. Above 10 MHz it's pretty much deaf.

The coax is just wrapped around a closet door as a sort of frame. The coax was long enough for two complete wraps around the outer edge of the door, with a 12" gap between the ends. The door can be opened or closed (partway) to make it somewhat directional. On MW it's reasonably directional below around 1200 kHz. Above there the directional advantage is mostly confined to reduction of locally generated noise, which varies depending on time of day and how many neighbors are watching TV. As you can imagine the racket kicked up by hundreds of TVs in my building and the nearby complex was fierce throughout Super Bowl Sunday, with that distinctive buzz emitted by TVs, DVD players, converter boxes, etc. Not even the shielded loop could help there!

Eventually I'll rig up a more refined version with the air core tuning cap. But this untuned version works surprisingly well as-is.

6293. Re: [loopantennas] Change-mail address?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-02 19:18:58 UTC
From: Andy
Topic: 6288 Message: 6293

> My ISP sold out to another outfit, now I've got to
> change my e-mail address for this forum.
> Do I have to un-subscride and re-subscribe?
> I don't seem to come up with another solution.

If you have ever only used email to subscribe and access this Yahoogroup, then it might be slightly complicated and an unsub/re-sub may be the easiest way. However, if you have ever used the web to access this group (say, to download from the Files area), do this:

1. Go to the group's main webpage, which you can find at the bottom of every group email:
2. Click on "My Groups" which is a couple inches down from the upper right corner. You may need to "login" at this point.

3. Click on "My Email Preferences" which is about 3 inches down from the upper right.

4. Click on "Add/Remove Email Address". Again, it may check for your password again.

5. Click on "Add Another".

Andy

6294. Re: Okay, a new loop believer! (DE1103)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-02 20:00:09 UTC
From: gmcjetpilot
Topic: 6277 Message: 6294

Bill, I tried it and it worked! It did allow external antenna connection on MW, awesome. Thanks. For $80 the Kaito/Degen 1103 is an amazing deal, thanks George

> So, select 1711 by direct entry:
> [1] [7] [1] [1] [band+/AM]
> and scan down: hold [BAND-] for 2 seconds.
> As soon as the frequency is below 1710kHz you can stop the scan and
> use the rotary control, or you can let the scan continue below
> 100kHz. The antenna is now switched for the telescopic or external
> antenna.
> > >> bill
> > > KC9CS

6295. Re: Okay, a new loop believer!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-03 01:56:15 UTC
From: aircheckclover
Topic: 6277 Message: 6295

Hey Bill - SOunds like you are having fun. I've had great results w/ a multi-turn loop on BCB w/ the 1103. Even barefoot it is an amazing performer. BTW, it still throws me for a 'loop' (sorry:) to see a 9 callsign from Florida.

-Mark (former WB9AQI - licensed in the 60s-70s)

-============================

--- In loopantennas@yahoogroups.com, "Bill" <harpman54@...> wrote:
>
> At my bedside I have a Degen 1103 radio, actually a really nice little
> radio that has MW and SW bands. You can actually 'fool' the radio into
> starting at 0 khz and working up in frequency using an easy software
> 'hack' but the lower khz segments below MW seem to have some
> 'overload' from local stations if using either a long wire or anything
> other than the internal ferrite antenna.
>
> The neat thing about the radio is that IF you plug in an external
> antenna, both the AM ferrite antenna and the telescoping SW antenna
> are disconnected in favor of the external. Sooo, I decided to build a
> little loop antenna and see if it made a difference.
>
> I had on hand a wire spool for some ham coax (I am a ham op - KC9CS)
> and took the spool apart because it had a nice sturdy 9" cardboard
> tube. I cut about 2" off the tube and used this for my loop form. I
> had some twin speaker line with tiny, probably 22 gauge wire which I
> split lengthwise. It is solid core wire. I wound 22 turns of this on
> the 9" tube. For a capacitor I had four small, identical 100pf
> variable capacitors that I wired together, not wanting to pirate my
> 365pf variables from either of my crystal sets. I wired up the input
> cable and tried the new loop this afternoon about 5 pm, the sun was
> still up here in west central Florida.
>
> My first station I pulled in was in Atlanta! A full 500 miles distant
> and still daylight. WOW! Now that it is evening, I'm experimenting and
> listening with it starting at the low end of the MW band. WSM is an
> easy catch from Nashville at 650 khz, which is about at far as I've
> scanned yet. DX'ing from Florida is kind of tough because we get a LOT
> of spanish stations from who knows where. Mexico is just across the
> Gulf of Mexico, lots of spanish speaking Caribbean Islands too. What
> impresses me with this antenna is how well it is regarding
> directivity. Turn the antenna slowly and the signal drops out, another
> pops up. Turn it back and the noise disappears, the desired station
> jumps back in. I haven't noticed a lot of difference using the
> capacitors yet, but I've only played with this antenna for about an

> hour so far. I'm sure as I gain experience it will improve. Something
> else dawned on me too....I don't remember paying much attention to
> linking those 4 capacitors together -- whether they were all series
> linked or series-paralleled. That WOULD make a difference, but
> tomorrow will be time enough. In the meantime, I am amazed at the way
> this little loop works.
>
> bill
> KC9CS
>

6296. SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 05:38:06 UTC
From: blacklabpupp
Topic: 6296 Message: 6296

Hi
Since I joined the group I have poured over the Files page and gathered quite a bit of info. My goal is for a loop antenna for SWLing from 3-30 meg. Everything I have built has not come up to the promised results. I am in the process of constructing another loop, but I want something that is not so lousy on higher bands. Does anyone have any ideas what I should do? All the best Curtis

6297. Re: [loopantennas] SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 08:17:36 UTC
From: kevin asato
Topic: 6296 Message: 6297

What type of receiver are you using? How are you coupling to the radio?
What type of signals are you expecting to receive?
What higher bands?
Indoor loop? Outdoor loop?

Just trying to find out why "it does not work" means. I'm not the expert but this is how I go about trying to resolve problems during my day job.

73,
kevin
kc6pob

--- On Wed, 2/4/09, blacklabpupp <blacklabpupp@...> wrote:
From: blacklabpupp <blacklabpupp@...>
Subject: [loopantennas] SWL Loop
To: loopantennas@yahoogroups.com
Date: Wednesday, February 4, 2009, 9:38 PM

Hi

Since I joined the group I have poured over the Files page and gathered

quite a bit of info. My goal is for a loop antenna for SWLing from 3-30

meg. Everything I have built has not come up to the promised results. I

am in the process of constructing another loop, but I want something

that is not so lousy on higher bands. Does anyone have any ideas what I

should do? All the best Curtis

[Non-text portions of this message have been removed]

6298. Re: SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 09:02:24 UTC
From: blacklabpupp
Topic: 6296 Message: 6298

I am using a Palstar 30A. There is nothing wrong with the radio as far as I can tell. I also have and older Yaesu FRG 7 recently checked out and claimed it was in fine shape. I made a small 24" loop and was not impressed by the performance. I dont know if I am in a poor area for reception, but things were alot better before I moved. I have tried a longwire and the noise was to much. I placed a tuner in line, placed a balun in line, changed to a dipole. My former neighbor used a loop on 20 daily. He talked me into trying a loop. I am in the process of setting up a loop for contact on 20 as well. But some how I am not so sure this is going to work with such poor success of the receiving loop. I reall enjoy following SWL broadcast and CW on 20 but with the situation now I am not sure it can be over come. Curtis

6299. Re: SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 09:54:27 UTC
From: jr_dakota
Topic: 6296 Message: 6299

It will probably take two tuned loops to cover that range .... You can gain some low end range on a loop that will tune to 30Mhz by placing an equal or slightly smaller value cap in parallel with the existing tuning cap (A larger value cap could be used to go lower but your ranges won't overlap) Or you can put two variables in parallel which is slightly better because it doesn't spoil the Q as much

Another option would be to make a multi turn loop (maybe 2 or 3 turns) and switch turns in and out.. For example 2 turns for the low band and one turn for the upper ... again you have the same p[oblem with lower Q as the number of turns rise but it doesn't seem to be as bad as with the parallel cap option .... Extra turns and/or capacitance also affect the nulls but a loop's null isn't all that great at above 30 or 40 meters anyway

JR

--- In loopantennas@yahoogroups.com, "blacklabpupp" <blacklabpupp@...> wrote:
>
> Hi
> Since I joined the group I have poured over the Files page and gathered
> quite a bit of info. My goal is for a loop antenna for SWLing from 3-30
> meg. Everything I have built has not come up to the promised results. I
> am in the process of constructing another loop, but I want something
> that is not so lousy on higher bands. Does anyone have any ideas what I
> should do? All the best Curtis
>

6300. Re: [loopantennas] SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 12:25:40 UTC
From: tmartin831@aol.com
Topic: 6296 Message: 6300

Have you tried a Ray Moore tunable loop? They are tough to find now...I think Ray has long since passed on.

In a message dated 2/5/2009 12:52:31 A.M. Eastern Standard Time, blacklabpupp@... writes:

Since I joined the group I have poured over the Files page and gathered quite a bit of info. My goal is for a loop antenna for SWLing from 3-30 meg. Everything I have built has not come up to the promised results. I am in the process of constructing another loop, but I want something that is not so lousy on higher bands. Does anyone have any ideas what I should do?

**********Stay up to date on the latest news - from sports scores to stocks and so much more. (http://aol.com?ncid=emlcntaolcom00000022)

[Non-text portions of this message have been removed]

6301. Re: [loopantennas] Re: SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 14:52:31 UTC
From: John Hoopes
Topic: 6296 Message: 6301

May I suggest in your case to give up the loop idea and put up an active E-probe or active whip antenna as high and in the clear as you can get it, preferably on the roof above all the surrounding noise. If you can lay a chicken wire ground screen around it (10X10 square) and tie it to the shield of the coax, it would help in preventing near field noise from entering the probe from below.

Active whips are very broad banded. Usually from 100 kHz to 30 MHz and should satisfy your need.

John

--- On Thu, 2/5/09, blacklabpupp <blacklabpupp@...> wrote:
From: blacklabpupp <blacklabpupp@...>
Subject: [loopantennas] Re: SWL Loop
To: loopantennas@yahoogroups.com
Date: Thursday, February 5, 2009, 4:02 AM

I am using a Palstar 30A. There is nothing wrong with the radio as far

as I can tell. I also have and older Yaesu FRG 7 recently checked out

and claimed it was in fine shape. I made a small 24" loop and was not

impressed by the performance. I dont know if I am in a poor area for

reception, but things were alot better before I moved. I have tried a

longwire and the noise was to much. I placed a tuner in line, placed a

balun in line, changed to a dipole. My former neighbor used a loop on

20 daily. He talked me into trying a loop. I am in the process of

setting up a loop for contact on 20 as well. But some how I am not so

sure this is going to work with such poor success of the receiving

loop. I reall enjoy following SWL broadcast and CW on 20 but with the

situation now I am not sure it can be over come. Curtis

[Non-text portions of this message have been removed]

6302. Re: [loopantennas] SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 15:48:45 UTC
From: Jim Dunstan
Topic: 6296 Message: 6302

At 05:38 AM 2/5/2009 +0000, you wrote:

>Hi
>Since I joined the group I have poured over the Files page and gathered
>quite a bit of info. My goal is for a loop antenna for SWLing from 3-30
>meg. Everything I have built has not come up to the promised results. I
>am in the process of constructing another loop, but I want something
>that is not so lousy on higher bands. Does anyone have any ideas what I
>should do? All the best Curtis

Hi Curtis,

When I was in the big city for several years in an apartment situation I
used such a loop for SWL. I tried a number of different arrangements.

The criteria I required:

must be tuned to provide maximum Q and thus selectivity and noise reduction.
must be directional ... e.g. have a sharp null to reduce local noise.
must be able to be tuned from a small distance as I wanted to locate the
antenna out on the balcony.

Here's how it works:

I formed a loop with light copper tubing .. perhaps 1/4 in. The diameter
of the loop was approx. 2.5 to 3 ft. (not critical)
I supported the loop on wood sticks everything held together with
electrical tie wraps (great invention)
I fed the loop with balanced feed line (TV twin lead)

I used if from about 4 mhz tropical band up to 15mhz ... you should be able
to tune higher if you keep the feed line length short.

Jim

6303. Re: [loopantennas] SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 15:55:25 UTC
From: Jim Dunstan
Topic: 6296 Message: 6303

At 10:48 AM 2/5/2009 -0500, you wrote:

>Hi Curtis,
>
>When I was in the big city for several years in an apartment situation I
>used such a loop for SWL. I tried a number of different arrangements.
>
>The criteria I required:
>
>must be tuned to provide maximum Q and thus selectivity and noise reduction.
>must be directional ... e.g. have a sharp null to reduce local noise.
>must be able to be tuned from a small distance as I wanted to locate the
>antenna out on the balcony.
>
>Here's how it works:
>
>I formed a loop with light copper tubing .. perhaps 1/4 in. The diameter
>of the loop was approx. 2.5 to 3 ft. (not critical)
>I supported the loop on wood sticks everything held together with
>electrical tie wraps (great invention)
>I fed the loop with balanced feed line (TV twin lead)
>
>I used if from about 4 mhz tropical band up to 15mhz ... you should be able
>to tune higher if you keep the feed line length short.
>
>Jim

addendum hi

I terminated the 300 ohm TV twin lead in a balanced antenna tuner at the
listening position.

Jim

6304. SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 19:09:32 UTC
From: brian russell
Topic: 6296 Message: 6304

Curtis,
I myself used a 138ft perimeter diamond shape horizontal wire loop at 25ft
for over 25 years as an SWL, covering all bands 40m - 10m, it worked
exceptionally well.
Since 1985 I have used it on transmit with equal success.
Below 40m I just disconnect one side of the twin feeder and use it as a long wire.
Look on the Internet for ' Skywires ' or NVIS antennas.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: blacklabpupp
To: loopantennas@yahoogroups.com
Sent: Thursday, February 05, 2009 5:38 AM
Subject: [loopantennas] SWL Loop

[Non-text portions of this message have been removed]

6305. Re: SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-05 22:23:18 UTC
From: blacklabpupp
Topic: 6296 Message: 6305

Thanks for all the response. I have been busy this morning checking out all the work I had done. Thinking I had created a nice piece of work. It was little more than junk. Last week I ordered a Autek Analyst. It came this morning and quickly it showed that the cap I was using was bad. It was a new piece but not working. I took it apart and discovered that the insulation used to hold the shaft was bad. I cannot explain why. It looks fine, but when you remove it the Autek says it is ok. If you reinsert it, it fails the test. Shorted. I have worked with many caps and bought used ones at ham fests but I have never seen anything like this. So in the trash it goes. No way I could put all back together and make it work. I wrapped a piece of cardboard around the shaft and it worked and tested fine. It would have been a waste of time to make it work. I purchased another with a lower capacitance. It seems to not matter, because the radio now jumps to life on the AM BCB. I am surprised. I guess you don't need all the extra capacitance. I will replace it with a larger size. I am still not happy with the performance on the SW bands. I guess I am going to use some of the ideas you guy have given to see if I can get a better signal on SW. I plan on making a butterfly cap this weekend for a 20 meter loop. Two other questions Does the diameter of the tubing make a difference in bandwidth? If you use wire, is it neccessary to use mutiple turns say for 20 meters. If anyone has ideas on where not to make a
mistake please let me know. Also thanks for the friendly responses from all, as well for the advice. All the best Curtis

6306. Re: Okay, a new loop believer! (DE1103)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-06 00:47:17 UTC
From: Bill
Topic: 6277 Message: 6306

Hey George,
I'm glad you got it to work. Sharing these ideas is what this forum is all about. I learned a lot coming here, it's nice to be able to reciprocate. And you're right, it just makes that radio all the more versatile. Being able to connect an external antenna to the MW and LW frequencies brings a LOT of new listening available.

bill

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> Bill, I tried it and it worked! It did allow external antenna
> connection on MW, awesome. Thanks. For $80 the Kaito/Degen 1103 is an
> amazing deal, thanks George
>
>
> > So, select 1711 by direct entry:
> > [1] [7] [1] [1] [band+/AM]
> > and scan down: hold [BAND-] for 2 seconds.
> > As soon as the frequency is below 1710kHz you can stop the scan and
> > use the rotary control, or you can let the scan continue below
> > 100kHz. The antenna is now switched for the telescopic or external
> > antenna.
> > > >> bill
> > > > KC9CS
>

6307. Re:Okay, a new loop believer!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-06 00:51:02 UTC
From: Bill
Topic: 6277 Message: 6307

Vintage? I don't know other than to tell you that I've had it about 1 year. Couldn't find a serial number on it, it may be inside the battery compartment but I didnt' want to remove the batteries and then have to reset the clock and such, worried it'd remove my frequency memories.

bill

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> Bill:
>
> My 1103 does not disconnect my MW ferrite internal antenna. What vintage is your radio?
>
> Darren
> VE6IZ
>
> [Non-text portions of this message have been removed]
>

6308. Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-06 14:38:53 UTC
From: march181959
Topic: 6308 Message: 6308

I read somewhere, sometime, that the ground system in your house is an antenna. So yesterday I hooked a wire to the ground screw on a 115V outlet, and ran the wire into a 9:1 balun, then connected the balun to the antenna jack on the radio via coax. The balun is also used to connect my outside longwire. Well, I got just about the same performance boost as the longwire with just slightly more static, barely detectable.

Worth a try and worth playing around with, but be careful of the power side of the outlet..

Frank in

Boston

6309. Re: SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-06 16:06:35 UTC
From: Hiram
Topic: 6296 Message: 6309

Yes,
The diameter does make a difference. Some folks have made HF loops out of 2" diameter copper pipe(!), for transmitting, it does make a difference. For receiving, not so much.

Here's a page with a lot of info:
http://www.qsl.net/mnqrp/Loop/Mag_Loops.htm

Here's a page with a lot of loop links:
http://www.mindspring.com/~loop_antenna/
And another:
http://www.dxzone.com/catalog/Antennas/Loop/

Good luck,
Pappy Hiram

--- In loopantennas@yahoogroups.com, "blacklabpupp" <blacklabpupp@...> wrote:
.....Does the diameter of the
tubing make a difference in bandwidth? If you use wire, is it
neccessary to use mutiple turns say for 20 meters......

6310. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-06 21:47:58 UTC
From: blacklabpupp
Topic: 6308 Message: 6310

Frank in Boston
Ground is not always ground even if it is from the power company. Things are not always as they seem. I told this also on the Elecraft forum many years ago. When I lived in Florida I could not get a ground. Nearly every place is sand. Not a ground but and insulator. They make glass from it. ... I tried a long wire and so much rf feedback in the shack that it was dangerous. You could not touch certain pieces of equipment. A nasty bite. I placed a tuner in line of different types. T's, L's, modified, no luck. I even placed the tuner outside the shack trying to get the rf out but nothing worked. I went outside and put so many rods of various lengths in the ground thinking I had it fixed. Still, no ground. It was so bad that if someone turned on the faucet at another home you could get shocked. I got and ohm meter and measured the resistance from the white wire to the ground and it was above 20 on the scale. Notice I did not say the black wire that is a hot wire. The white is neutral. When testing it you should read around 5, 6, or7. If not and it is above 10 or 12 ohms you don't have sufficient ground. I am not sure of the correct number, I need to look it up again. To make a long story short the electric company come out and drove metal beams into the ground past the hard pan. It cured the problem and my shack became friendly again. I agree that there is enough wire in your home to make ground but if the power company is deficient in a proper ground you could make a big mistake. Just be careful.

--- In loopantennas@yahoogroups.com, "march181959" <march181959@...> wrote:
>
> I read somewhere, sometime, that the ground system in your house is an
> antenna. So yesterday I hooked a wire to the ground screw on a 115V
> outlet, and ran the wire into a 9:1 balun, then connected the balun to
> the antenna jack on the radio via coax. The balun is also used to
> connect my outside longwire. Well, I got just about the same
> performance boost as the longwire with just slightly more static,
> barely detectable.
>
> Worth a try and worth playing around with, but be careful of the power
> side of the outlet..
>
> Frank in
>
> Boston

>

6311. Re: SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-06 22:06:39 UTC
From: blacklabpupp
Topic: 6296 Message: 6311

Thanks Pappy

The links are very helpful. I should have done an internet scan but I have been so busy searching books at the library. The eneginnering books I have read through are poor on hf loops, but heavy on loops designed for satelite data used in the 60's. How much of it relates I dont know. When I moved I gave away most of the books I used never thinking I would need them again. Thanks for the links.

--- In loopantennas@yahoogroups.com, "Hiram" <daveleb55@...> wrote:
>
> Yes,
> The diameter does make a difference. Some folks have made HF loops
out
> of 2" diameter copper pipe(!), for transmitting, it does make a
> difference. For receiving, not so much.
>
> Here's a page with a lot of info:
> http://www.qsl.net/mnqrp/Loop/Mag_Loops.htm
>
> Here's a page with a lot of loop links:
> http://www.mindspring.com/~loop_antenna/
> And another:
> http://www.dxzone.com/catalog/Antennas/Loop/
>
> Good luck,
> Pappy Hiram
>
>
>
> --- In loopantennas@yahoogroups.com, "blacklabpupp" <blacklabpupp@>
> wrote:
> .....Does the diameter of the
> tubing make a difference in bandwidth? If you use wire, is it
> neccessary to use mutiple turns say for 20 meters......
>

6312. Re: SWL Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-07 11:46:33 UTC
From: cank13cat
Topic: 6296 Message: 6312

I've been getting good results with a homebrewed passive magnetic loop for my Palstar R30C. Assuming the new R30A is pretty similar (I think it has internal 9:1 impedance transformers inline with both antenna inputs), you might give it a try.

It's based on the design written up by Joe Carr in his Receiving Antenna Handbook and repeated in several places online with minor variations. Coaxial cable with an opening in the shield at one point. In my case I looped the coax around a handy closet door! Opening and closing the door makes it somewhat directional.

Most designs call for a tuning capacitor. I was in a hurry to try mine and omitted the air core tuning cap I'd cannibalized from an old radio. Turns out it works fine without the tuning cap from MW through approx. 10 MHz. Could be improved with a tuning cap, but I'm content since it works on the bands I listen to most (1000-1700 kHz on MW at night for skywave; 5000-7000 kHz shortwave). Very quiet, rejects most indoor noise generated by my own appliances and neighbors.

Perfect for my apartment since I can't put up a permanent outdoor antenna. Random wire up a tree gets stronger signals on HF, but with a lot more noise. The loop is quiet enough that I can leave the receiver on all day and not go nuts from the static. Signals that would be S9+10 or +20 on a random wire are S7-S9 on the loop, but with very low noise, so intelligibility is comparable.

6313. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-07 18:23:44 UTC
From: gmcjetpilot
Topic: 6308 Message: 6313

I will join the peanut gallery and say, DON'T use of house wiring for an antenna or ground. It is just too easy and cheap (and proper) to install a proper ground rod (in the ground). No sure of the Florida sand situation, but I think there are ways around that.

Using home grounds for antennas is a good way to get dead. 110V AC can kill you. At best I might kind of work may be? It could also fry you radio. Just my opinion. George NC

--- In loopantennas@yahoogroups.com, "march181959" <march181959@...> wrote:
>
> I read somewhere, sometime, that the ground system in your house is an
> antenna. So yesterday I hooked a wire to the ground screw on a 115V
> outlet, and ran the wire into a 9:1 balun, then connected the balun to
> the antenna jack on the radio via coax. The balun is also used to
> connect my outside longwire. Well, I got just about the same
> performance boost as the longwire with just slightly more static,
> barely detectable.
>
> Worth a try and worth playing around with, but be careful of the power
> side of the outlet..
>
> Frank in
>
> Boston
>

6314. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-07 20:30:13 UTC
From: Jim Dunstan
Topic: 6308 Message: 6314

At 06:23 PM 2/7/2009 +0000, you wrote:

>I will join the peanut gallery and say, DON'T use of house wiring for
>an antenna or ground. It is just too easy and cheap (and proper) to
>install a proper ground rod (in the ground). No sure of the Florida
>sand situation, but I think there are ways around that.
>
>Using home grounds for antennas is a good way to get dead. 110V AC
>can kill you. At best I might kind of work may be? It could also fry
>you radio. Just my opinion. George NC

I am not sure what the ground thing is all about ... If your radio or any other appliance has a 3 prong plug then it is already connected to your power distribution ground. If your radio or other appliance does not have a 3 prong plug then it is not connected to the power distribution ground. Now, if any other appliance you choose to name does not come with a 3 prong power connector I am sure the user does not then attempt to create a second ground .... e.g. goes outside and drives a copper stake into the ground (sounds like Vampire lore) Why then for a radio? Any radio manufacturer that specifies the necessity of 'a good ground' is simply anticipating many users will be using makeshift and inadequate antennas. In my 0pinion such directions borders on irresponsibiltiy.

I read where someone who was transmitting (different than receiving) had RF in the shack. The problem was not the lack of a ground ... the problem was the antenna was of a very inadequate design ..... period. NASA transmits all kinds of data from satellites ... small very small .... and they certainly don't depend on a 'good earth ground'.

Any antenna that requires the radio to have a good ground is not much of an antenna.

Jim, VE3CI

6315. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-07 21:42:49 UTC
From: gplynas
Topic: 6308 Message: 6315

George,
The home wiring can also work against you. I was testing a receiving loop at 300kHz attached to the side of our office. We had a precision receiver listening to an NDB beacon at a nearby airport. Every time the air conditioner condenser unit (which was located near the receiving antenna) turned on,the signal from the beacon would drop dramatically. We traced it to the ac wiring to the AC compressor which formed a shorted loop around our receiving loop antenna. Not something you have much control over, but we moved the receiving loop to another office wall, and the problem disappeared.
Regards,
Paul
WA5LFY

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> I will join the peanut gallery and say, DON'T use of house wiring for
> an antenna or ground. It is just too easy and cheap (and proper) to
> install a proper ground rod (in the ground). No sure of the Florida
> sand situation, but I think there are ways around that.
>
> Using home grounds for antennas is a good way to get dead. 110V AC
> can kill you. At best I might kind of work may be? It could also fry
> you radio. Just my opinion. George NC
>
>
>
> --- In loopantennas@yahoogroups.com, "march181959" <march181959@>
> wrote:
> >
> > I read somewhere, sometime, that the ground system in your house is
> an
> > antenna. So yesterday I hooked a wire to the ground screw on a 115V
> > outlet, and ran the wire into a 9:1 balun, then connected the balun
> to
> > the antenna jack on the radio via coax. The balun is also used to
> > connect my outside longwire. Well, I got just about the same
> > performance boost as the longwire with just slightly more static,
> > barely detectable.
> >
> > Worth a try and worth playing around with, but be careful of the
> power
> > side of the outlet..
> >

> > Frank in
> >
> > Boston
> >
>

6316. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-08 07:27:22 UTC
From: blacklabpupp
Topic: 6308 Message: 6316

Jim
I have to say I disagree with you completely on this matter. If you think that a three-prong plug is always grounded you are just wrong. The city when confronted with the problem agreed with me immediately. They suspected as much because of all the calls that keep coming in. They just did not know where. When I had the city engineer come out he thought about closing our street down until the next day because of fear of a lawsuit. There was no sure ground when the people in the neighborhood could get shocked at the faucet or washing the car. The system was floating. I would never as the city engineer told me depend completely on the ground in you outlet.
I used the antenna for years and never again had another problem. My antenna was very well built. It stayed up for another 7 years. Quality of construction was not the problem. Your gear manual clearly tell you to use a ground on your rig and it's not for lightening strikes alone. When RF is not properly grounded it will hunt for ground and you could be it. I just happens that my place was the worst of the situation, thankfully they fixed it before something serious happend.

6317. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-08 10:23:41 UTC
From: Jim Dunstan
Topic: 6308 Message: 6317

At 07:27 AM 2/8/2009 +0000, you wrote:

>Jim
>I have to say I disagree with you completely on this matter. If you
>think that a three-prong plug is always grounded you are just wrong.
>The city when confronted with the problem agreed with me immediately.
>They suspected as much because of all the calls that keep coming in.
>They just did not know where. When I had the city engineer come out he
>thought about closing our street down until the next day because of
>fear of a lawsuit. There was no sure ground when the people in the
>neighborhood could get shocked at the faucet or washing the car. The
>system was floating. I would never as the city engineer told me depend
>completely on the ground in you outlet.
>I used the antenna for years and never again had another problem. My
>antenna was very well built. It stayed up for another 7 years. Quality
>of construction was not the problem. Your gear manual clearly tell you
>to use a ground on your rig and it's not for lightening strikes alone.
>When RF is not properly grounded it will hunt for ground and you could
>be it. I just happens that my place was the worst of the situation,
>thankfully they fixed it before something serious happend.

Hi,

If your antenna needs to find ground through your radio then your antenna is not properly designed. Yes, the radios does clearly state the radio should be grounded ... that is the irresponsible statement I mentioned in my first post ... a (C.Y.A.) statement. I have operated with many different rigs home brew and commercial... with different power levels from QRP to QRO all modes ... and never has it been required to run a separate grounding wire to a separate ground stake out in the yard. No use arguing and trading anecdotes hi .... we can simply agree to disagree.

Jim, VE3CI

>

[Non-text portions of this message have been removed]

6318. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-08 11:08:50 UTC
From: blacklabpupp
Topic: 6308 Message: 6318

Jim
Yes we will have to agree to disagree. I lived it and learned from it. All my problems were solved by the city properly installing a ground system. I never again had an antenna problem or RF in the shack. Used the same TT Omni 6, TT tuner, and same antenna, until a hurricane took it all out. All the neighbors electrical problems cleared up as well. All the best to you anyway.

6319. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-08 17:34:16 UTC
From: Hiram
Topic: 6308 Message: 6319

Yup,
Absolutely right. RF ground is different than the ground in your breaker box. They SHOULD BE SEPARATE. As your engineer said, you can't depend on it, and shouldn't. The house wiring ground is for the house wiring, appliances, microwave ovens, toasters, etc. The newer homes have a GFI (Ground Fault Indicator) somewhere in the house, usually kitchen or bathroom, to protect the homeowners against accidental shorts, like dropping the toaster into a sink full of water. RF ground should be to the cold water pipe, or if that's too far a run, a stake or three in the ground. I had one outside the basement window back East when I was a novice. Bring a heavy wire or braid from the ground stake(s) into the shack area, and ground every piece of equipment to that ground. Some folks use a big copper plate and run SEPARATE ground wires to each item; Transmitter, Receiver, tuner, etc. The sand in Florida is a kind of extreme situation, and the solution was extreme as well. Most people aren't faced with that, and a few stakes in the garden soil should suffice. I currently have a cable going to the cold water line where it enters the house, there is a shutoff valve just outside my window, and I ran a heavy cable to the pipe, shined up the copper, and put a hose clamp on the cable. Connections to RF ground should be short as possible, and the ground should be as close as possible to the Radio equipment.

The wisdom of the ages passed down from my Elmer(s) to me, and then to you. Call it a rule of thumb, call it a 'good practice,' but just do it. Electricity can kill you, so be careful! Follow all the safety rules! Always treat a gun as if it were loaded, even if you "know" it isn't. ALWAYS ALWAYS ALWAYS unplug everything before taking the cover off. Turning the switch off isn't enough. PULL THE PLUG, every time! Your life could depend on it.

When leaving the shack, turn everything off, DISCONNECT the antenna from the radio and connect it to ground. You don't need a direct lightning strike to blow out your rig, a big static discharge could do it too.

Be Safe,

Pappy Hiram

--- In loopantennas@yahoogroups.com, "blacklabpupp" <blacklabpupp@...> wrote:
>
> Jim
> I have to say I disagree with you completely on this matter. If you
> think that a three-prong plug is always grounded you are just wrong.

> The city when confronted with the problem agreed with me immediately.
> They suspected as much because of all the calls that keep coming in.
> They just did not know where. When I had the city engineer come out he
> thought about closing our street down until the next day because of
> fear of a lawsuit. There was no sure ground when the people in the
> neighborhood could get shocked at the faucet or washing the car. The
> system was floating. I would never as the city engineer told me depend
> completely on the ground in you outlet.
> I used the antenna for years and never again had another problem. My
> antenna was very well built. It stayed up for another 7 years. Quality
> of construction was not the problem. Your gear manual clearly tell you
> to use a ground on your rig and it's not for lightening strikes alone.
> When RF is not properly grounded it will hunt for ground and you could
> be it. I just happens that my place was the worst of the situation,
> thankfully they fixed it before something serious happend.
>

6320. FERRITE LOOP QUESTIONS ???

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-08 15:51:23 UTC
From: challanger13041
Topic: 6320 Message: 6320

HELLO I AM NEW TO THE GROUP AND PLANNING A FERRITE ROD ANTENNA
STRICTLY FOR LF BEACON DXING IN THE 160KC-530KC RANGE.
I WILL BE USING A 125MU ROD.MY QUESTIONS ARE AS FOLLOWS.

1. LITZ WIRE IS PREFERRED FOR THE COIL BUT IS THE INDIVIDUAL STRAND
DIAMETER AND NUMBER OF STRANDS CRITICAL (FOR RECEIVING PURPOSES)?
IF SO I BELIEVE I SHOULD USE APROX. #40 GUAGE.ALSO WHAT BENNEFIT IS
THERE IN HAVING MORE STRANDS RATHER THAN FEWER? AND WHEN INCREASING
THE STRAND COUNT: AT WHAT POINT WILL THERE BE NO FURTHER BENNEFIT?
2. HAVE BEEN CONSULTING WITH OTHER HAMS ABOUT A SHIELD,THEY SAY TO
KEEP THE SHIELD LONGER THAN THE COIL BUT SHORTER THAN THE ROD...
WHAT IS A GOOD RULE OF THUMB...HOW DO YOU DETERMINE THE OPTIMUM LENGTH?
3. WHEN MAKING A SHIELD: I HAVE READ ABOUT MAKING IT LIKE A TROUGH (V
or U SHAPPED)...WHAT ABOUT IF YOU WERE TO USE A METAL TUBE SLIGHTLY
LARGER THAN THE COIL AND ROD DIA. AND SLOT IT ALONG ITS LENGTH (SO
THAT THE ENDS COME CLOSE BUT DO NOT TOUCH/SHORT ?

ALOT OF QUESTIONS!
THANKS VERY MUCH
DAVE

6321. Re: Homemade Loop, Literally (ground again)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-08 23:40:15 UTC
From: gmcjetpilot
Topic: 6308 Message: 6321

Dear Jim Dunstan:

I'm not going to get into the GROUND WAR's debate, but we disagree.

You said a few things that are off base, begging correction. Your arguments are off point or straw man arguments. I am not trying to convince you, but for the record I'll comment.

> I am not sure what the ground thing is all about .. If your radio
> or any other appliance has a 3 prong plug then it is already
> connected to your power distribution ground.

Most modern radios have isolated internal power supplies from the AC power or are battery powered portables. All my AC powered radios have no POWER ground. The issue we and I'm talking about ANTENNA GROUND by the way and not spacecraft. (I'll get to that)

> I read where someone who was transmitting (different than
> receiving) had RF in the shack. The problem was not the lack
> of a ground ... the problem was the antenna was of a very
> inadequate design ..... period.

This is a blatantly incorrect, a broad statement that has no real relevance and is propaganda. No one is arguing a radio can't "WORK", with out a dedicated ground for power and/or the antenna.

Many antennas are balanced and require no ground. Many radios are not grounded at all, totally isolated from the AC power or utility ground. This is not the issue. The issue is safety and performance, mostly safety of using UTILITIES for antenna ground.

The Ham radio literature, radio and antenna owners manuals all warn against using home wiring for the antenna circuits. I will admit I have tried it. IT IS LAME. There is nothing like a proper direct EARTH ground IMHO. Antenna design books agree.

> e.g. goes outside and drives a copper stake into the
> ground (sounds like Vampire lore)

It is not legend, lore or urban myth, it is real engineering by people who have long past-on, that knew more about radio than I ever will. The importance of a good EARTH ground on HF antenna systems and radio performance and safety is really not in question.

> Any radio manufacturer that specifies the necessity of
> 'a good ground' is simply anticipating many users will be using
> makeshift and inadequate antennas. In my 0pinion

> such directions borders on irresponsibility.

I don't know what to say. WHAT?

NOT ALL ANTENNAS NEED A GROUND, ie balanced antenna designs, dipoles and loops. 'Reciprocity' says good RECEPTION performance means good TRANSMISSION performance and vice a verse by antenna theory (with limits).

From my experience with "classic" random/long wire type antennas, my SNR goes from poor to very good with a proper earth grounding through a transformer/BALUN, just my experience. It has NOTHING to do with local RFI in the shack. It correlates well with technical documents and antenna design by experts, who know more than I do.

> "NASA transmits all kinds of data from satellites ... small very
> small, and they certainly don't depend on a 'good earth ground'"

How do you know what NASA does?

Also understand there are inherent differences from LF/MW/HF and VHF/UHF/Microwave? Also understand the difference of an earth base stations and space craft. Right.

Obviously an airplane or space craft is not grounded to earth but uses the airframe as a ground plane. BASE stations and mobile antenna designs are inherently different. Even the same ANTENNA used as a base station v. mobile may be installed differently and will operate differently. When you can avail yourself to a good Earth Ground for the front end of your radio its almost always a winning idea and worth the effort. Every thing else is 2nd best or make due.

You can install a MOBILE antenna design as a base station, aka NO EARTH GROUND, but why would you if you don't have to. Again UHF/VHF are NOT GROUND BASED (following) signals to start with.

NASA is irreverent, a red herring to the subject, using the house wiring for an antenna ground. It is just a poor idea, dubious at best, may be deadly to your radio or even you.

My opinion leave the home wall socket ground screws alone for certainly crappy performance is more likely than not, IMHO.

The safety issues like lighting strikes and noise issue of using home wiring ground on the RFI side of a radio's front end is not disputable IMHO. It's considered bad form, poor practice.

However I'm not the antenna Nazi. I'm a antenna libertarian, experiment and do what you want, just be careful.

Going on my personal experience a good GROUND (really truly a dedicated earth for the antenna) has made phenomenal difference

in my antenna designs (that needed a ground). The affect on large base rigs or portables is the same, night & day for the better. Some times the difference is nominal but some times spictacular.

You can get into 'circular logic' about 'ground-loops', what is a ground and how to properly ground, but on the RF end of the radio, GROUND is critical for many antenna system designs but not all.

Consider antenna and power grounds are different. Even if your radio's circuites has a common power, chassis and antenna RF ground, having a CLEAN GROUND with the preverbal stake in the EARTH ground is goodness. It sheilds and protects from outside the "shack".

WHY NOT give your self the best possible ground for you antenna?

> "Any antenna that requires the radio to have a good ground is not
> much of an antenna."

Your comment is irrelevant. What is the symbol of ARRL, Association of Radio Relay League?

http://www.arrl.org/news/images/arrl-c2.gif

Dead Sea Scrolls of radio going back to the 30's, 40's and 50's when radio was king, the "art" of antennas, design & analysis show a good EARTH GROUND is key. I mean GOOD. Many grounds are poor. The main reason for not installing a good ground I see is avaibility (appartment or mobile) or lazyness.

There is no need for me to repeat what you can google the topic. Here's a link of basics of ground and radio ("Grounding is key to good reception", is a good article):

http://www.hard-core-dx.com/nordicdx/antenna/ground/index.html

A portable radio with a plastic case and a whip antenna, it's not grounded in ANY WAY! (well its internally ground) Often just introducing a good ground to a portable radio improves the SNR. It's magic! Try it.

Have you made a crystal radio? In the old days all pipes where copper or steel and ground was easier to get. Now its all plastic.

A dipole antenna is not grounded and should not be grounded.

Most mobile antennas, Ex. airplanes are reflected 1/4 wave dipoles (1/2 wave effectively) requiring a ground plan or ground radials. Aircraft NAV antennas (VOR/LOC/GS) are true un-grounded dipoles. Radar is a paraboic microwave antenna.

Repeat an antenna ground is not always needed or called for AT ALL, but when it is, using home wiring is dangerous or not affective.

> Any antenna that requires the radio to have a good ground is not
> much of an antenna.

That is a confusing comment? The antenna is one thing & the radios power or ground is another. The ground can be common. The antenna and radio can have seperate grounds or no ground at all. There is no one common answer to all applications and designs.

NONE of my radios have a POWER GROUND (to the radio circuits, they float)!

All my RX radios are all powered by battery or have internal isolated DC-DC power supplies from AC-DC two prong converters. Large transmitters or TUBE rigs, even if they have AC heaters, even if they have a AC ground plug, are no different, the theory of radio has not changed since Guglielmo Marconi.

KEEP IN MIND the transmitter you are listening to LF, MW, HF is grounded. Don't you think having the TRANSMITTER and RECEIVER being in the same EARTH ground is goodness? Yes

Some military transmissions are sent through earth.

VHF is different and NOT ground/ionishpere based. VHF/UHF are line-O-sight and go through the ionosphere. Antenna EARTH ground is not as much a performance issue.

The ANTENNA SYSTEM and how radio propagation works, the importance of EARTH to the signal is not debatable in my opinion. It is not a myth or some wild idea akin to stakes in the heart of vampires.

This is not a flame just a serious subject safety, than second performance of antennas. We disagree clearly. Just from lightning concerns, outdoor antennas need a dedicated outside earth ground. You can kill your self or burn the house down.

Drive those dedicated GOOD ground stakes deep for best clean safe performance!

Cheers George

Advice is free and worth every penny.

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> > I will join the peanut gallery and say, DON'T use of house
>> wiring for an antenna or ground. It is just too easy and cheap
>> (and proper) to install a proper ground rod (in the ground). No
>> sure of the Florida sand situation, but I think there are ways
>> around that.
>>
>> Using home grounds for antennas is a good way to get dead.
>> 110V AC can kill you. At best I might kind of work may be? It

>> could also fry you radio. Just my opinion. George NC

> I am not sure what the ground thing is all about ... If your radio
> or any other appliance has a 3 prong plug then it is already
> connected to your power distribution ground. If your radio or
> other appliance does not have a 3 prong plug then it is not
> connected to the power distribution ground. Now, if any other
> appliance you choose to name does not come with a 3 prong
> power connector I am sure the user does not then attempt to
> create a second ground .... e.g. goes outside and drives a copper
> stake into the ground (sounds like Vampire lore) Why then for
> a radio? Any radio manufacturer that specifies the necessity of
> 'a good ground' is simply anticipating many users will be using
> makeshift and inadequate antennas. In my 0pinion
> such directions borders on irresponsibility.
>
> I read where someone who was transmitting (different than
> receiving) had RF in the shack. The problem was not the lack
> of a ground ... the problem was the antenna was of a very
> inadequate design ..... period. NASA transmits all kinds of data
> from satellites ... small very small .... and they certainly don't
> depend on a 'good earth ground'.
>
> Any antenna that requires the radio to have a good ground is not
> much of an antenna.
>
> Jim, VE3CI

6322. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-09 01:57:30 UTC
From: cank13cat
Topic: 6308 Message: 6322

At the risk of stirring a hornet's nest, I'm a former safety inspector. Over the years I've seen a lot of incorrectly wired homes, industrial facilities and machines: no grounds attached to the grounding socket on the outlets; cheater grounds, with the neutral and ground bonded inside the building; reversed polarity between hot and neutral; etc.

The worst is reversed hot and ground. Rarely happens but that's one you really need to watch out for. I encountered it twice in several years of inspections, once in a new construction site, once at a manufacturing facility. Shocked heck outta me both times, literally.

The main reason I avoid using a residential electrical system for anything other than providing power is the noise. My two receivers that do have ground provisions only pick up more noise from the usual well-intended advice to use the ground screw on an outlet, switch or junction box as a ground, or the water pipes.

The quietest reception I get on MW is with a homebrewed shielded magnetic loop and no separate ground. It's a compromise but works in my RFI-rich urban area.

--- In loopantennas@yahoogroups.com, "blacklabpupp" <blacklabpupp@...> wrote:
>If you think that a three-prong plug is always grounded you are just wrong...

6323. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-09 23:45:43 UTC
From: Gary Pewitt
Topic: 6308 Message: 6323

There are inexpensive outlet testers (2 to 4 dollars) on the market
that simply plug in and some lights tell you if you have a bad ground,
reversed hot and neutral etc.
A little money very well spent.
73 Gary N9ZSV

cank13cat wrote:
>
> At the risk of stirring a hornet's nest, I'm a former safety
> inspector. Over the years I've seen a lot of incorrectly wired homes,
> industrial facilities and machines: no grounds attached to the
> grounding socket on the outlets; cheater grounds, with the neutral and
> ground bonded inside the building; reversed polarity between hot and
> neutral; etc.
>
> The worst is reversed hot and ground. Rarely happens but that's one
> you really need to watch out for. I encountered it twice in several
> years of inspections, once in a new construction site, once at a
> manufacturing facility. Shocked heck outta me both times, literally.
>
> The main reason I avoid using a residential electrical system for
> anything other than providing power is the noise. My two receivers
> that do have ground provisions only pick up more noise from the usual
> well-intended advice to use the ground screw on an outlet, switch or
> junction box as a ground, or the water pipes.
>
> The quietest reception I get on MW is with a homebrewed shielded
> magnetic loop and no separate ground. It's a compromise but works in
> my RFI-rich urban area.
>
> --- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, "blacklabpupp" <blacklabpupp@...>
> wrote:
> >If you think that a three-prong plug is always grounded you are just
> wrong...
>
>

6324. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-10 00:11:18 UTC
From: kevin asato
Topic: 6308 Message: 6324

Alas, won't tell if ground is connected to neutral. You would have to physically inspect outlet and wiring to uncover this condition.

73,
kevin
kc6pob

--- On Mon, 2/9/09, Gary Pewitt <garypewitt@...> wrote:
From: Gary Pewitt <garypewitt@...>
Subject: Re: [loopantennas] Re: Homemade Loop, Literally
To: loopantennas@yahoogroups.com
Date: Monday, February 9, 2009, 3:45 PM

There are inexpensive outlet testers (2 to 4 dollars) on the market

that simply plug in and some lights tell you if you have a bad ground,

reversed hot and neutral etc.

A little money very well spent.

73 Gary N9ZSV

cank13cat wrote:

>

> At the risk of stirring a hornet's nest, I'm a former safety

> inspector. Over the years I've seen a lot of incorrectly wired homes,

> industrial facilities and machines: no grounds attached to the

> grounding socket on the outlets; cheater grounds, with the neutral and

> ground bonded inside the building; reversed polarity between hot and

> neutral; etc.

>

> The worst is reversed hot and ground. Rarely happens but that's one

> you really need to watch out for. I encountered it twice in several

> years of inspections, once in a new construction site, once at a

> manufacturing facility. Shocked heck outta me both times, literally.

>

> The main reason I avoid using a residential electrical system for

> anything other than providing power is the noise. My two receivers

> that do have ground provisions only pick up more noise from the usual

> well-intended advice to use the ground screw on an outlet, switch or

> junction box as a ground, or the water pipes.

>

> The quietest reception I get on MW is with a homebrewed shielded

> magnetic loop and no separate ground. It's a compromise but works in

> my RFI-rich urban area.

>

> --- In loopantennas@ yahoogroups. com

> <mailto:loopantenna s%40yahoogroups. com>, "blacklabpupp" <blacklabpupp@ ...>

> wrote:

> >If you think that a three-prong plug is always grounded you are just

> wrong...

>

>

[Non-text portions of this message have been removed]

6325. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-10 02:58:14 UTC
From: Jim Dunstan
Topic: 6308 Message: 6325

At 05:45 PM 2/9/2009 -0600, you wrote:

>There are inexpensive outlet testers (2 to 4 dollars) on the market
>that simply plug in and some lights tell you if you have a bad ground,
>reversed hot and neutral etc.
>A little money very well spent.
>73 Gary N9ZSV

Hi Gary,

Yes, I have a couple ... one in each tool box. I use them all the
time. As the other person suggested, you never can tell about power
outlets ... I am always checking and finding faults hi hi.

73 Jim VE3CI

6326. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-10 03:04:19 UTC
From: Jim Dunstan
Topic: 6308 Message: 6326

At 04:11 PM 2/9/2009 -0800, you wrote:

>Alas, won't tell if ground is connected to neutral. You would have to
>physically inspect outlet and wiring to uncover this condition.
>
>73,
>kevin
>kc6pob

Hi,

Do you mean the ground and neutral connected together in the outlet box
!!! They are of course connected to the same place in the main panel
(except for a few jurisdictions that have altered the code making it
necessary that they have separate and isolated buses.

73, Jim VE3CI

6327. Re: [loopantennas] Re: Homemade Loop, Literally - grounding

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-10 06:04:13 UTC
From: kevin asato
Topic: 6308 Message: 6327

But only in the main panel. I have seen conversions from 2 wire systems where the bond was made at the outlet. Picky point but normally a code violation.

For my portable radios, Sangean ATS-909 & Grundig G6 - 1) I run on batteries and 2) I leave the radios floating above earth. When using a 9:1 balun I will ground the high impedance side to earth on one side when using a single wire as an antenna lead. For portable operations, I tie one antenna lead to the ground side of the low impedance end of the balun. I leave the low impedance (50 Ohm?) side floating with respect to the radio. I don't like using the ground lug on the AC for safety and noise reasons. Safety has been discussed by others. From a noise perspective, I have too many things including a noisy transformer in my backyard to want to use electrical ground.

73,
kevin
kc6pob

--- On Mon, 2/9/09, Jim Dunstan <jimdunstan@rogers.com> wrote:
From: Jim Dunstan <jimdunstan@...>
Subject: Re: [loopantennas] Re: Homemade Loop, Literally
To: loopantennas@yahoogroups.com
Date: Monday, February 9, 2009, 7:04 PM

At 04:11 PM 2/9/2009 -0800, you wrote:

>Alas, won't tell if ground is connected to neutral. You would have to

>physically inspect outlet and wiring to uncover this condition.

>

>73,

>kevin

>kc6pob

Hi,

Do you mean the ground and neutral connected together in the outlet box

!!! They are of course connected to the same place in the main panel

(except for a few jurisdictions that have altered the code making it

necessary that they have separate and isolated buses.

73, Jim VE3CI

[Non-text portions of this message have been removed]

6328. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-10 13:23:52 UTC
From: march181959
Topic: 6308 Message: 6328

Somebody commented on a "homebrew shielded magnetic loop" Can you explain this one in detail or point to a place that has the design features? It's a bit difficult trying to figure out who is saying what without the thread being trimmed of past replies.

Thanks

Frank

6329. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-10 18:11:11 UTC
From: Jim Dunstan
Topic: 6308 Message: 6329

At 01:23 PM 2/10/2009 +0000, you wrote:

>Somebody commented on a "homebrew shielded magnetic loop" Can you
>explain this one in detail or point to a place that has the design
>features? It's a bit difficult trying to figure out who is saying what
>without the thread being trimmed of past replies.
>
>Thanks
>
>Frank

Hi,

I believe the person who has electrical background as an inspector mentioned he had a home brew shielded magnetic loop for MW. I would also appreciate a description of his loop. Years ago I experimented with shielded and unshielded magnetic loops and found no detectable difference between them. Since then I have done quite a bit of experimentation and reading on the subject and the key points I have found are as follows:

A 'magnetic loop' is simply a 'small' loop that is much less than a 1/2 wavelength in circumference ... often 1/10 wavelength and less. The magnetic loop can be 'tuned' or 'untuned' and has the characteristic that the current in the loop goes in the same direction at all points along it's circumference. It is also less responsive to the electrical component of the electromagnetic waves ... thus the name 'magnetic' loop. It is generally accepted that most local RF interference is more electrical than magnetic thus the small 'magnetic' loop less susceptible to this RFI than a random wire, dipole, or whip antenna. in a sense, the ferrite antenna in MW receivers are already 'magnetic' loops.

The magnetic loop has a radiation or receiving pattern that is roughly a figure eight with broad loops and narrow, sharp nulls (the nulls of the magnetic loop are perpendicular to the plane of the loop). I find that the most useful aspect of this pattern are the nulls ... which can be rotated towards the most offending RFI source ... thus further reducing 'noise'. It has been my experience that the tuned magnetic loop performs better than the untuned variety ... all things being equal. However this may be due to my inability to provide proper amplification to the unit.

The magnetic loop can be made even more immune to local RFI by placing a special shield around it. The theory is that the shield acts mostly against the electrical component than the magnetic component which further increases its noise reduction characteristic. The shield must be symmetrical with a narrow break. The feed point is usually 180 degrees across from the break.

As I mentioned above I have not been able to detect the difference between comparable loops shielded vs unshielded. However others swear by them. I feel that the added demands of shield construction is not really rewarded in added performance.

Jim

I

6330. Antenna Compendium or Handbook

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 11:49:30 UTC
From: blacklabpupp
Topic: 6330 Message: 6330

I see at hamfest an on eBay dozens of books on antennas. I have the ARRL Antenna Handbook, but are all the Copendiums worth the time to collect? I've looked through a couple of volumes, and seen a few antennas that might be something differnt but, generally alot of what I have seem is in the ARRL Handbook and Antenna Handbook. Has anyone read through all of them or a major portion? I thought about just collectin them for reference, and change my mind every time. I noticed one the other day that was almost all dipoles, longwires, etc.
I plan on going to the hamfest in Charlotte, NC in a few weeks. Really it is in Concord, and I know there will be masses of books. The best hamfest I've ever been to is Shelby on Labor Day. But I am wondering if they are worth getting. The Lord knows I dont have a need for another anything to do with radio. But sometime I think about it.

6331. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 14:02:38 UTC
From: cank13cat
Topic: 6308 Message: 6331

That was probably my post. I'd tried various "bare" wire multi-turn loops. They were just as noisy as a random wire or vertical in my area. The shielded loop solved that specific problem - an omnipresent cloud of white noise from RFI/EMI in my semi-urban area.

My homebrewed shielded loop is based on the various designs described and illustrated in Joe Carr's classic "Receiving Antennas Handbook." Since it's copyrighted I can't reproduce it here.

Fortunately, many folks arrived at similar schemes over the years and a very similar design can easily be found on dozens of websites by Googling "magnetic loop antenna" or "shielded magnetic loop antenna" - either seems to work, just varies the number of hits slightly.

The main differences I see now are more exotic loops illustrated online by hobbyists. Some of 'em are using copper or other metal tubing and making some designs that, at least externally, resemble the popular Wellbrook loops.

I simply used what I had handy: a hank of old TV coaxial cable, roughly 25'-30', scavenged from the dumpster after the maintenance in my apartment complex redid a vacant apartment and had new cable installed. I hadn't planned on building a loop, but the coax reminded me of something I'd seen in Carr's manual years earlier.

Mine's not pretty but it works just as described on other sites. The surprise was that it also works on HF below 10 MHz. I hadn't expected it to work at all above MW freqs.

Keep in mind that it's a compromise intended to fill a specific niche: a low noise indoor antenna for a receiver left to "static" pretty much 24/7. (I'm a pirate radio fan and since these transmissions adhere to no schedule, the only practical way to catch this eclectic entertainment is by dedicating a radio to that purpose.)

There's no practical way for me to put up a permanent outdoor antenna at my apartment complex (long story short, been there, done that, proved repeatedly that it ain't practical). And, frankly, I wasn't enjoying HF listening much because of the cloud of RFI that's inescapable in my semi-urban environment. I wanted an antenna that would permit strong signals but cut ambient noise down to a tolerable level so I could simply leave the receiver on 24/7 while listening for oddball signals.

The shielded loop cuts ambient noise to only S1-S2 on the frequencies I monitor most often. I can leave the receiver on all day and not go nuts from the noise. But signals reported at S5-S9 levels by other

DXers are still clearly audible at only S1-S3 on my receiver.

The downside is that I can't hear signals that others report at S1-S3 levels. But it's worth the compromise in order to be able to enjoy the radio more by leaving it on all day. In my environment a higher gain antenna would mean putting up with S7-S9 noise all day. No thanks. And using the attenuation switch doesn't accomplish the same thing as using a lower noise antenna.

This ugly loop has helped me catch hundreds of oddball signals during the past year: pirate radio from the US (including one claiming to be using only 50 milliwatts of power), Canada and even Europe; Brazilian outbanders using CBs modified to work on HF (during the wee hours in the US they can be heard chanting, goofing around, playing music and just cutting up and having fun on 7000 LSB); Gulf Coast fishermen chattering with their wives and families.

And it gets great skywave reception on MW after dark, especially between 1000-1700 kHz. It's just directional enough to screen out the local KRLD on 1080 so I can pick up other stations in the background; and to pick up that great jazz and other music on XEEP 1060 with minimal interference from WLNO; and classical on 1660 from KXTR in Kansas City rather than the tiresome sports talk from more local stations on 1660.

If you have space for an outdoor antenna - any outdoor antenna, even a random wire or CB vertical - you'll get better reception on HF. Even a passive shielded magnetic loop outdoors would beat my rig. But if you're in a very noisy urban or semi-urban environment and there is no practical means to put up a permanent outdoor antenna, it's a good compromise. And my design is nothing special - you can find a dozen variations illustrated online.

--- In loopantennas@yahoogroups.com, "march181959" <march181959@...> wrote:
>
> Somebody commented on a "homebrew shielded magnetic loop" Can you
> explain this one in detail or point to a place that has the design
> features? It's a bit difficult trying to figure out who is saying what
> without the thread being trimmed of past replies.
>
> Thanks
>
> Frank
>

6332. Use of Varactor diode in tuning loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 15:25:18 UTC
From: David Feldman
Topic: 6332 Message: 6332

Lookg to rework my receive loop antenna so it is tuned to receive frequency remotely. I've looked at several circuit designs that employ varactor diode with DC bias adjustment. One concern I have is the prospect that RF voltage in the loop unfavorably affects bias point of the diode or even drives the diode to conduction or reverse breakdown. Specifically, my loop diameter is 40 inches and I have a couple of AM BC stations nearby (1 and 5 miles away, up to 10 kW).

Comments?

Thanks,

Dave
wb0gaz@...

6333. Re: [loopantennas] Use of Varactor diode in tuning loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 15:43:34 UTC
From: Chris Trask
Topic: 6332 Message: 6333

>
>Lookg to rework my receive loop antenna so it is tuned to receive frequency
>remotely. I've looked at several circuit designs that employ varactor diode
>with DC bias adjustment. One concern I have is the prospect that RF voltage
>in the loop unfavorably affects bias point of the diode or even drives the
>diode to conduction or reverse breakdown. Specifically, my loop diameter is
>40 inches and I have a couple of AM BC stations nearby (1 and 5 miles away,
>up to 10 kW).
>
>Comments?
>

That can be a problem, and the overall solution may be that you'll need to accomplish the remote tuning with a motor-driven variable capacitor instead of varactor diodes. If you look at my 40m transmitting loop:

http://www.home.earthlink.net/~christrask/Paper012.html

you can replace the dual variable with a more appropriate dual 365pF variable and scale down the physical size of the transformers to the ones I used in the varactor-tuned receiving loop:

http://www.home.earthlink.net/~christrask/Paper011.html

I've been experimenting for the past few days with a similar arrangement for a manually-tuned indoor receiving loop.

In my varactor-tuned loop, I found that there was a high degree of immunity from nearby BCB AM stations, and I found no harmonics even from a 50kW station that's less than 10 miles away. That one sometimes shows up on my 'scope leads when making 10mV/div measurements, so I was a bit surprised when it did not cause problems with the varactor-tuned loop.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask

c__; c__; '-..'>.__

Graphics by Loek Frederiks

6334. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 16:20:15 UTC
From: gmcjetpilot
Topic: 6308 Message: 6334

Jim Dunstan:
Nice right up on E and M loops or Electromagnetic and Magnetic and shielded and unshielded loops. A little google I found this site and a great detailed write up. Go figure. I started to go though it. A little technical but there is something to that Shielding. I would have thought it counter productive but nay!

Bottom line is the shield is part of the antenna. It also does not necessarily make it less subject to E noise or separate it from the M signal. Interesting. It does have a use but the design of the loop and shield must be right or the results can add noise, even force the feed line into being part of the antenna. I gather done right it does have real advantages but by how much or little is debatable. Of course there are different shielded loop designs, with different pros and cons. Didn't know.

Here is the main shielded loop page:

http://www.w8ji.com/magnetic_receiving_loops.htm

These are some direct links referenced in hypertext in the above page:

http://www.w8ji.com/loop_text.htm
http://www.w8ji.com/skindepth.htm
http://www.w8ji.com/coaxial%
20currents/coaxial_line_and_shielded_wires.htm

Very nice. I want to make my own Mag loop. Shielded or not, yet to be decided.

Cheers

6335. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 17:22:37 UTC
From: Jim Dunstan
Topic: 6308 Message: 6335

At 04:20 PM 2/11/2009 +0000, you wrote:

>Jim Dunstan:
>Nice right up on E and M loops or Electromagnetic and Magnetic
>and shielded and unshielded loops. A little google I found this
>site and a great detailed write up. Go figure. I started to go
>though it. A little technical but there is something to that
>Shielding. I would have thought it counter productive but nay!
>
>Bottom line is the shield is part of the antenna. It also does
>not necessarily make it less subject to E noise or separate it
>from the M signal. Interesting. It does have a use but the design
>of the loop and shield must be right or the results can add noise,
>even force the feed line into being part of the antenna. I gather
>done right it does have real advantages but by how much or little
>is debatable. Of course there are different shielded loop designs,
>with different pros and cons. Didn't know.

Hi again,

Yes, the shield does become part of the antenna. the reason for the break in the shield is to allow the antenna currents on the shield to travel on the inside of the shield material as well as the outside .... given the 'skin effect' at RF. The loop inside the shield acts like a pickup loop. It may be because of this ... eg the RF connection between the shield and the inside loop is primarily due to induction rather than capacitive coupling (electric field energy is primarily coupled capacitively) ... don't quote me on this ... it is just my thought on the subject. The symmetry of the loop depends on the quality of the shield construction. There may be noise reduction .... from close in E radiation. The side opposite the break is also grounded ... providing a further path for E charges.

I have not seen many MW multi turn loops with shielding. It seems they are more common with single turn loops in the HF spectrum. Even in the HF spectrum the majority of the loops are unshielded and constructed of large rigid material ... especially if they are to be used for transmitting as well as reception.

I have had the opportunity to examine the construction of commercial direction finding loops and observed the shield is of a very large diameter approx. 3 in. with the inside loop carefully centered along the inside thus maintaining maximum distance from the shield. This would keep the capacitive coupling to a minimum and provide a very loose magnetic coupling .... the result being maximum shielding from local interference and maximum definition of the loop radiation pattern ... primarily the sharpness of the

null ... the key characteristic for determining direction. It is also interesting that the loops are not tuned .... but then they are not dxing ... but taking bearings on relatively close beacons. I believe tuning can affect the reception pattern ... the degree of which is negligible under normal circumstances ... but can make the null a little fuzzy for direction finding purposes.

Jim

6336. Re: [loopantennas] Re: Homemade Loop, Literally (Confused)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 17:44:53 UTC
From: Samuel Ernst-Fortin
Topic: 6336 Message: 6336

Jim writes:
>>the reason for the break
>>in the shield is to allow the antenna currents on the shield to travel on
>>the inside of the shield material as well as the outside .... given the
>>'skin effect' at RF. The loop inside the shield acts like a pickup
>>loop.

I think I'm missing something. The shield is grounded right? So how does any signal impinged and travelling on the shield (inside or outside part of the shield) make it into the radio? I just don't get past that point mentally.

Second problem I have is: if the coax's shield were not broken somewhere, how could RF signal energy make it onto the center conductor that does go to the radio's RF input stages with respect to that ground.

My mental picture is the break(s) allow admission of the transmitted energy onto the sensing coil.

In otherwords this question: take any antenna / any design. Build a conductive shield around it that completely encloses that antenna, and ground it. Does the antenna pick up anything?

Too simplistic? Wholey incorrect?
Sam

6337. Re: [loopantennas] Re: Homemade Loop, Literally (Confused)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 18:05:57 UTC
From: Chris Trask
Topic: 6336 Message: 6337

>
> > the reason for the break
> > in the shield is to allow the antenna currents on the shield to travel
on
> > the inside of the shield material as well as the outside .... given the
> > 'skin effect' at RF. The loop inside the shield acts like a pickup
> > loop.
>
> I think I'm missing something. The shield is grounded right? So how does
any
> signal impinged and travelling on the shield (inside or outside part of
the
> shield) make it into the radio? I just don't get past that point mentally.
>

The incident EM wavefront induces a current on the two shield halves,
and when the plane of the antenna is parallel with the direction of the EM
wavefront these two currents will be of equal magnitude opposite phase,
provided they are sufficiently far enough apart. At the common connection
of the two shields at the bottom the net current is zero. However, at the
gap the circuit is open and the currents then flow around the end of the gap
and onto the inner surface. When the shield is greater than a certain
thickness (usually 10-20 skin depths, depending on who you're talking to),
these two currents on the opposite shield surfaces are independent. The
current flowing on the inner shield surface induces a current on the inner
conductor by way of TEM coupling.

There's a very good discussion of this in:

Carobbi, C.F.M., L. M. Millanta, L. Chiosi, "The High-Frequency Behavior
of the Shield in the Magnetic-Field Probes," 2000 IEEE International
Symposium on Electro-Magnetic Compatibility, pp. 35-40.

>
> Second problem I have is: if the coax's shield were not broken somewhere,
how
> could RF signal energy make it onto the center conductor that does go to
the
> radio's RF input stages with respect to that ground.
>

Unless the shield is very thin or is less than 100% coverage, it can't.

>
> In otherwords this question: take any antenna / any design. Build a
conductive

> shield around it that completely encloses that antenna, and ground it.
Does
> the antenna pick up anything?
>

If the shield is sufficiently thick, no.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6338. Re: [loopantennas] Re: Homemade Loop, Literally (Confused)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 18:50:31 UTC
From: John Hoopes
Topic: 6336 Message: 6338

Sam,

Here is an explanation that can be accessed for free.

http://www.compliance-club.com/archive/old_archive/030718.htm

John

--- On Wed, 2/11/09, Samuel Ernst-Fortin <sernstfortin@...> wrote:
From: Samuel Ernst-Fortin <sernstfortin@...>
Subject: Re: [loopantennas] Re: Homemade Loop, Literally (Confused)
To: loopantennas@yahoogroups.com
Date: Wednesday, February 11, 2009, 12:44 PM

Jim writes:

>>the reason for the break

>>in the shield is to allow the antenna currents on the shield to travel on

>>the inside of the shield material as well as the outside .... given the

>>'skin effect' at RF. The loop inside the shield acts like a pickup

>>loop.

I think I'm missing something. The shield is grounded right? So how does any signal impinged and travelling on the shield (inside or outside part of the shield) make it into the radio? I just don't get past that point mentally.

Second problem I have is: if the coax's shield were not broken somewhere, how could RF signal energy make it onto the center conductor that does go to the radio's RF input stages with respect to that ground.

My mental picture is the break(s) allow admission of the transmitted energy onto the sensing coil.

In otherwords this question: take any antenna / any design. Build a conductive shield around it that completely encloses that antenna, and ground it. Does the antenna pick up anything?

Too simplistic? Wholey incorrect?

Sam

[Non-text portions of this message have been removed]

6339. How to use small loops for AM DX'ing with portable radios

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 19:27:51 UTC
From: gmcjetpilot
Topic: 6339 Message: 6339

The traditional method of coupling an external passive loop and a radios internal loop-stick is the "T" position, where the Loop antenna is leg of "T", aimed at the station (in plane with the loop) and the radio back or long top edge is at right angles. This puts the windings on both loops in-line.

Portable radio loop-sticks are usually along the top-back of the radio, at least the ones I have. Some times they are top-front or along the bottom.

This gives portables the best reception off back or front of the radio. The ends of the radio are usually the null ends, not ideal for reception since this puts the null end of the loop-stick facing the station. So the "T" puts the loops in line at the station.

QUESTION?

I FOUND THAT PUTTING THE LOOP RIGHT NEXT TO THE RADIO, IN PARALLEL WITH THE BACK OF THE RADIO UP AGAINST THE LOOP, WITH THE EXTERNAL LOOP POINTING AT THE STATION, STILL WORKS WELL ?!?!

WHY DOES THIS WORK?

With the radio standing up so the radios internal loop-stick is closest to loop, more or less near the middle of the external loop gives good gain, almost as good or better than the traditional "T" orientation. Even though the flux lines are at right angles the close proximity makes them couple. I have a good idea where the loop stick coil coil starts and stops. The best results are when the loop-stick coil is at the edge of the external loop either to the inside or out side.

TWO OR THREE LOOPS BETTER THAN ONE?
My three loop antennas:

http://img525.imageshack.us/img525/7522/slide3copymh0.jpg

Using two passive loops can be used to get more gain but putting the loops in series or even side by side.

Using one loop for gain and another to null out a conflicting station or noise with the second loop can be useful. Point the second loop at the offending station and using the tuning capacitor to null the signal out.

The article below is good:
http://www.am-dx.com/passiveloops.pdf

Comments, tricks, tips.

George Raleigh NC

6340. Re: [loopantennas] How to use small loops for AM DX'ing with portable radios

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 21:34:13 UTC
From: aimo ruoho
Topic: 6339 Message: 6340

Thank you very much, George!

I printed all the 8 pages of your (?) article to be able to later read and follow the (your) advice.

73 de Amigo /Aimo /Ami

De: gmcjetpilot <gmcjetpilot@yahoo.com>
Para: loopantennas@yahoogroups.com
Enviado: miércoles, 11 de febrero, 2009 20:27:51
Asunto: [loopantennas] How to use small loops for AM DX'ing with portable radios

The traditional method of coupling an external passive loop and a radios internal loop-stick is the "T" position, where the Loop antenna is leg of "T", aimed at the station (in plane with the loop) and the radio back or long top edge is at right angles. This puts the windings on both loops in-line.

Portable radio loop-sticks are usually along the top-back of the radio, at least the ones I have. Some times they are top-front or along the bottom.

This gives portables the best reception off back or front of the radio. The ends of the radio are usually the null ends, not ideal for reception since this puts the null end of the loop-stick facing the station. So the "T" puts the loops in line at the station.

QUESTION?

I FOUND THAT PUTTING THE LOOP RIGHT NEXT TO THE RADIO, IN PARALLEL WITH THE BACK OF THE RADIO UP AGAINST THE LOOP, WITH THE EXTERNAL LOOP POINTING AT THE STATION, STILL WORKS WELL ?!?!

WHY DOES THIS WORK?

With the radio standing up so the radios internal loop-stick is closest to loop, more or less near the middle of the external loop gives good gain, almost as good or better than the traditional "T" orientation. Even though the flux lines are at right angles the close proximity makes them couple. I have a good idea where the loop stick coil coil starts and stops. The best results are when the loop-stick coil is at the edge of the external loop either to the inside or out side.

TWO OR THREE LOOPS BETTER THAN ONE?
My three loop antennas:

http://img525. imageshack. us/img525/ 7522/slide3copym h0.jpg

Using two passive loops can be used to get more gain but putting the loops in series or even side by side.

Using one loop for gain and another to null out a conflicting station or noise with the second loop can be useful. Point the second loop at the offending station and using the tuning capacitor to null the signal out.

The article below is good:
http://www.am- dx.com/passivelo ops.pdf

Comments, tricks, tips.

George Raleigh NC

[Non-text portions of this message have been removed]

6341. Re: [loopantennas] Re: Homemade Loop, Literally (Confused)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-11 23:23:26 UTC
From: Jim Dunstan
Topic: 6336 Message: 6341

At 09:44 AM 2/11/2009 -0800, you wrote:

>Jim writes:
> >>the reason for the break
> >>in the shield is to allow the antenna currents on the shield to travel on
> >>the inside of the shield material as well as the outside .... given the
> >>'skin effect' at RF. The loop inside the shield acts like a pickup
> >>loop.
>
>I think I'm missing something. The shield is grounded right? So how does
>any signal impinged and travelling on the shield (inside or outside part
>of the shield) make it into the radio? I just don't get past that point
>mentally.
>
>Second problem I have is: if the coax's shield were not broken somewhere,
>how could RF signal energy make it onto the center conductor that does go
>to the radio's RF input stages with respect to that ground.
>
>My mental picture is the break(s) allow admission of the transmitted
>energy onto the sensing coil.
>
>In otherwords this question: take any antenna / any design. Build a
>conductive shield around it that completely encloses that antenna, and
>ground it. Does the antenna pick up anything?
>
>Too simplistic? Wholey incorrect?
>Sam

Hi Sam,

I am no expert on the subject ... but this is how I see it. If you form some metal tubing in a complete circle .... 2 in tubing in a loop say 3 ft in diameter for example ... and place a second loop around the inside center of the first loop you will have received antenna currents on the outside of the first loop and nothing around the inside of the first loop and no antenna currents induced into the second loop. The reason is that RF is conducted on the surface of the copper material and does not penetrate through the material .... what is referred to as skin effect.

The second step is to cut a small chunk out of the first loop leaving a gap of an inch or less. The second loop inside is left intact. What now happens is that some or all of the current now flows around the outside ... then to the inside via the opening at the gap ... and then around the inside back to the gap and then continues the rest of the way around the outside of the first loop. As a consequence antenna current is induced into the internal second loop.

The radio equipment is usually connected to the second internal loop element at a position directly opposite the position of the gap. In order to get access to the internal loop the first loop/shield is opened 180 degrees away from the gap. The access point is usually made with some kind of shield material ... It could be another copper tube carrying a balanced feed line. If coax is going to be used as the feed line then some effort has to be made to convert the balanced load of the loop to the unbalanced coax feed line. It is very important that the mechanical arrangement be symmetrical so the currents remain symmetrical in relation to the access point and the gap. The consequence of putting a shielded coupling at the feed point is that the outside of the first loop/shield is grounded 180 deg across from the gap.

Such small loops respond differentially to electromagnetic waves that are generated close to the loop which consist mostly of electric fields. The electric fields induce charges on the outside of the loop which are grounded to some degree at the feed point before they in turn induce further magnetic currents. This is I believe the reason for calling the first loop a shield.

So, to make your point ... if there was no gap ... there would indeed be no signal. Even though the outside of loop is grounded ... at the feed point .. there is uninterrupted antenna current flowing around the outside and inside of the loop/shield and around the inside loop (connected to the radio) as a consequence of induction.

Jim

6342. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-12 18:46:48 UTC
From: gmcjetpilot
Topic: 6308 Message: 6342

> Jim Dunstan <jimdunstan@...> wrote:
> Hi again,
>
> Yes, the shield does become part of the antenna.>
> Jim
>

Yes the shield is part of the antenna. I think your observation or what you read that shielding does not add a lot of value is for one reason, there are 15 ways to do a shield loop poorly. If not done just right it will make it worse. It is not complicated just requires attention to detail. The articles I listed show some of the does and don'ts and gotchas.

6343. LOOKING for plans on Wide Band Varactor tuned LOOP

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-12 18:49:01 UTC
From: gmcjetpilot
Topic: 6343 Message: 6343

Any one have some good plans or links for for a Varactor tuned
(receive only) Loop?

Thanks

6344. 1923 Popular Radio magazine articles

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-13 14:36:17 UTC
From: tenorman1952
Topic: 6344 Message: 6344

I sat for the tests and was licensed as an amateur radio operator this past October 2008. I joined the local club and began attending meetings. There I met an older gentleman, Grant, age 93, who is my new best friend. ;-) He lives just a few blocks from my house, I discovered, and due to his poor night vision (he can drive during the day) I have begun driving him to the club meetings.

Grant's body may be failing, but his mind is still sharp as a tack. When Grant speaks, everyone should shut up and listen. And those that know him do.

Last week he dropped four tiny circuit boards in my hand, the smallest about 1" square, the largest about 1.5" x 2". "Do you know what you have there? That's a 40 meter Single Side Band receiver. I just need to finish the case for it." And he proceeded to tell me exactly how it worked.

He showed me a magazine he found while looking for something else... a 1923 issue of Popular Radio. He let me borrow it and I scanned a few pages and posted them in a folder here, 1923 Popular Radio Articles. Take a look.

I did not press down hard when scanning, so there are a few out of focus spots, but you can still read it easily. I was afraid of breaking the spine of the magazine, and the pages were somewhat brittle. I only scanned a few pages for this reason.

The magazine was very well written, questions from readers section, various articles, how-tos, etc. Lots of schematics. What a piece of history!

Of course, Grant is a walking, talking book of ham history and radio knowledge himself.

You meet some great people in ham radio. I want to be just like Grant when I grow up.

Anyway, you may enjoy looking at the few scanned pages.

Paul
AE5JU

6345. Re: 1923 Popular Radio magazine articles

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-13 19:28:51 UTC
From: John
Topic: 6344 Message: 6345

--- Paul/AE5JU wrote:
>
> I sat for the tests and was licensed as an amateur radio operator
> this past October 2008.

<snip>

> .... and I scanned a
> few pages and posted them in a folder here, 1923 Popular Radio
> Articles. Take a look.
<snip>

> Paul
> AE5JU

Congratulations, Paul, on your "promotion" to the amateur ranks.

Those old magazine articles are terrific. I wish we had on-line access
to them all. Back issues from that era are selling for 20 bucks apiece
on EBay:

http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&item=200275707328&indexURL=\
#ebayphotohosting
<http://cgi.ebay.ca/ws/eBayISAPI.dll?ViewItem&item=200275707328&indexURL\
=#ebayphotohosting>

Content of Pop Radio seems to be on a much higher technical level than
"Radio News" a Gernsback "pop'tronics" magazine of the early 20th
century:

http://www.magazineart.org/main.php/v/technical/radionews/
<http://www.magazineart.org/main.php/v/technical/radionews/>

73,

John/AF4EX

[Non-text portions of this message have been removed]

6346. Indoor Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-13 21:22:48 UTC
From: Chris Trask
Topic: 6346 Message: 6346

There was a lot of interest recently on the subject of indoor antennas,
so I overhauled my earlier outdoor remotely tuned loop:

http://www.home.earthlink.net/~christrask/Paper011.html

and turned it into a less expensive indoor version using a pair of 9V
batteries for the supply rather than the earlier bias tee and external power
supply:

http://www.home.earthlink.net/~christrask/Paper018.html

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6347. RE:Help

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-13 22:33:21 UTC
From: Dirk
Topic: 4329 Message: 6347

I'm looking for plans for a full wave 160m loop for my back yard here in Illinois. I'd probably load it up for other bands but want to get into 160m. Any ideas?

6348. Re: 1923 Popular Radio magazine articles

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-14 04:40:31 UTC
From: tenorman1952
Topic: 6344 Message: 6348

> Congratulations, Paul, on your "promotion" to the amateur ranks.

Thank you, John!

And a whole new bunch of friends, too. ;-)

Paul
AE5JU

6349. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-14 08:05:42 UTC
From: jr_dakota
Topic: 6308 Message: 6349

Not necessarily .... Yes that is in fact true for the coax shielded loop (And some others not madde from coax). Technically it's a balanced loop because as you noted the coax shield (braid) is actually the receiving element .... The better the balance the better the nulls and the better the rejection of nearby noise sources placed in the null

But take the case of the ferrite loopstick mounted in a 'U' shaped trough of aluminum, here the shield truly is a shield and not the receiving element .... These are generally most useful for direction finding and RF leakage measuring but can work as receive antennas

JR

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> Jim Dunstan:
> Nice right up on E and M loops or Electromagnetic and Magnetic
> and shielded and unshielded loops. A little google I found this
> site and a great detailed write up. Go figure. I started to go
> though it. A little technical but there is something to that
> Shielding. I would have thought it counter productive but nay!
>
> Bottom line is the shield is part of the antenna. It also does
> not necessarily make it less subject to E noise or separate it
> from the M signal. Interesting. It does have a use but the design
> of the loop and shield must be right or the results can add noise,
> even force the feed line into being part of the antenna. I gather
> done right it does have real advantages but by how much or little
> is debatable. Of course there are different shielded loop designs,
> with different pros and cons. Didn't know.
>
>
> Here is the main shielded loop page:
>
> http://www.w8ji.com/magnetic_receiving_loops.htm
>
>
> These are some direct links referenced in hypertext in the above
> page:
>
> http://www.w8ji.com/loop_text.htm
> http://www.w8ji.com/skindepth.htm
> http://www.w8ji.com/coaxial%
> 20currents/coaxial_line_and_shielded_wires.htm
>

>
> Very nice. I want to make my own Mag loop. Shielded or not, yet
> to be decided.
>
> Cheers
>

6350. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-14 17:46:01 UTC
From: gmcjetpilot
Topic: 6308 Message: 6350

>"jr_dakota" <SG2112@...> wrote:
>
>
> But take the case of the ferrite loopstick mounted in a 'U' shaped
> trough of aluminum, here the shield truly is a shield and not the
> receiving element .... These are generally most useful for direction
> finding and RF leakage measuring but can work as receive antennas
>
> JR

Interesting, I was always thinking or focused on the signal and
gain and not the nulls, which clearly has use in rejecting noise
and Dir Finding. Loop-stick in aluminum trough...neat, DF in deed.
Cheers George

6351. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-15 07:37:29 UTC
From: brian russell
Topic: 6308 Message: 6351

Hi All,
This thread I find interesting as being recently given an
aluminium cycle wheel rim 27 in dia and of ' U ' section it
would seem ideal for a loop antenna project.
Obviously it would need to be cut at some point, top or bottom ????
More thought needed hi!
72, Brian, G0NSL-QRP.

----- Original Message -----
From: jr_dakota
To: loopantennas@yahoogroups.com
Sent: Saturday, February 14, 2009 8:05 AM
Subject: [loopantennas] Re: Homemade Loop, Literally

[Non-text portions of this message have been removed]

6352. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-15 12:20:09 UTC
From: cank13cat
Topic: 6308 Message: 6352

Local noise rejection is the main advantage to my homebrewed passive loop made from coaxial cable. The nulls aren't nearly as sharp as a typical AM MW portable's internal ferrite loopstick. But it's enough to minimize local interference and aid in skywave reception for the roughly 1000 kHz-10 MHz range. It's cut way back on the "cloud" of ambient white noise typical of my semi-urban neighborhood too, especially during peak TV watching hours when my outdoor random wire picked up mostly buzz and hash.

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> Interesting, I was always thinking or focused on the signal and
> gain and not the nulls, which clearly has use in rejecting noise...
>

6353. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-15 18:03:57 UTC
From: Jim Dunstan
Topic: 6308 Message: 6353

At 07:37 AM 2/15/2009 +0000, you wrote:

>Hi All,
>This thread I find interesting as being recently given an
>aluminium cycle wheel rim 27 in dia and of ' U ' section it
>would seem ideal for a loop antenna project.
>Obviously it would need to be cut at some point, top or bottom ????
>More thought needed hi!
>72, Brian, G0NSL-QRP.

I think you are referring to the reference to the 'U' shape aluminium used with a ferrite loop which may act as a shield against close electric fields. I believe the reason it may work with the small ferrite loop is that the loop is very small and the magnetic field very concentrated .... whereas a single or multiple turn loop 27" in diameter would have a very much enlarged field making shielding much less effective. I may be wrong ... I have never tried that and never read of others trying it. Perhaps you are on to something.

In any event cutting the slot would not be necessary as antenna currents on the circular 'U' channel would already be on all surfaces ... unlike the situation if the wheel was a circular metal tube instead of a channel.

Jim, VE3CI

6354. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-15 22:57:10 UTC
From: John Popelish
Topic: 6308 Message: 6354

brian russell wrote:
> Hi All,
> This thread I find interesting as being recently given an
> aluminium cycle wheel rim 27 in dia and of ' U ' section it
> would seem ideal for a loop antenna project.
> Obviously it would need to be cut at some point, top or bottom ????
> More thought needed hi!

You could use a two piece ferrite core that fits over the
rim to make a transformer that couples the circulating
current in the rim into a feed line. No cut needed in the
rim, and the electric field current picked up by the
capacitance of the rim can be grounded with a single
connection from the rim to ground without much effecting the
magnetic coupled signal that induces the circulating current.

Now, if you make the loop out of tubing and a coupling to
short it, you can thread a one piece toroid (with the output
winding already on) over the pipe before soldering the
shorting coupling in place.

--
Regards,

John Popelish

6355. Re: Indoor Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-16 03:04:39 UTC
From: huelbeag
Topic: 6346 Message: 6355

Thank you, Mr. Trask. I checked both files. As always, you work is outstading! Thank you again.

Huelbe

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> There was a lot of interest recently on the subject of indoor antennas,
> so I overhauled my earlier outdoor remotely tuned loop

6356. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-20 19:09:24 UTC
From: brian russell
Topic: 6308 Message: 6356

Hi,
Thanks to all for the comments on my cycle wheel rim antenna idea.
The project is in hand, more anon.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: John Popelish
To: loopantennas@yahoogroups.com
Sent: Sunday, February 15, 2009 10:57 PM
Subject: Re: [loopantennas] Re: Homemade Loop, Literally

[Non-text portions of this message have been removed]

6357. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-20 21:45:21 UTC
From: Aimo Unto Olavi RUOHO
Topic: 6308 Message: 6357

Hello, brains!

I have been wondering, if a grounded metal-sheet "shield" near on the other side of a ferrite loop could make the loop directive from only the "open"-side?

This has been my question for a very long time, but I have never tested it to see, if it would work...

Of course it would be very easy to test by putting a grounded copper or aluminium sheet behind (or forward) a transistor radio equipped with a ferrite rod antenna on a turning base... I just never "remembered" to do it! Too many interesting things coming and going!

What do you think? Worth testing?

73 and good one-direction DXing!

Aimo

-- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 07:37 AM 2/15/2009 +0000, you wrote:
>
> >Hi All,
> >This thread I find interesting as being recently given an
> >aluminium cycle wheel rim 27 in dia and of ' U ' section it
> >would seem ideal for a loop antenna project.
> >Obviously it would need to be cut at some point, top or bottom ????
> >More thought needed hi!
> >72, Brian, G0NSL-QRP.
>
>
> I think you are referring to the reference to the 'U' shape aluminium used
> with a ferrite loop which may act as a shield against close electric
> fields. I believe the reason it may work with the small ferrite loop is
> that the loop is very small and the magnetic field very concentrated ....
> whereas a single or multiple turn loop 27" in diameter would have a very
> much enlarged field making shielding much less effective. I may be wrong
> ... I have never tried that and never read of others trying it. Perhaps
> you are on to something.

>
> In any event cutting the slot would not be necessary as antenna
currents on
> the circular 'U' channel would already be on all surfaces ... unlike
the
> situation if the wheel was a circular metal tube instead of a channel.
>
> Jim, VE3CI
>

6358. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-21 13:21:23 UTC
From: José
Topic: 6308 Message: 6358

Hello Aimo
IMHO that will be of no use, because the ferrite bar loop uses the magnetic part of the electro-magnetic wave, then an electrostatic screen has no effect on the magnetic field, (I think so).
¿More ideas from the group?
Good DX
Jose

--- In loopantennas@yahoogroups.com, "Aimo Unto Olavi RUOHO" <aimounto@...> wrote:
>
> Hello, brains!
>
> I have been wondering, if a grounded metal-sheet "shield" near on the
> other side of a ferrite loop could make the loop directive from only
> the "open"-side?
> ....
> ....
> 73 and good one-direction DXing!
>
> Aimo
>

6359. Re: Homemade Loop, Literally (shield)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-21 19:56:13 UTC
From: gmcjetpilot
Topic: 6308 Message: 6359

Yes this is common with Direction Finding gear. In fact a loop stick in a metal u-shaped channel or trough has been done. A loop stick receives off the sides and the ends are nulls, right. A "U" shaped channel could block signals somewhat from 270 degrees. However the way that U-Channel works is you use the ends or nulls to look for min signal, where the station is.

Do you have an offending near station that is interfering with another station you want to listen to? I have that problem. I have a 50KW station on 850khz 5 miles to the east. To get Colorado +1000 miles to the west on the same freq is about impossible even at night. Thankfully at night the local power house clear channel AM BCB station goes direction N-S, so their strength goes way down. I doubt there is much I could do, except try some kind of uni-direction antenna (LOOP with a shield). The good news is if the station is 10Kz or more off I have no problem. At night I can get two stations at 850Khz one N-E and one S-SW. The LOOP antenna is a must. I have a radio with good selectivity and filters to narrow the band width, which helps.

You could try a shield with a flat plate, but radio waves bounce around and can get to your antenna jumping around your flat shield. I am no expert but you can play with it. Clearly you can change the gain in that direction. As I said you would want a U-shaped channel to make it more uni-directional and try to get a signal off the one side? I am no expert on the math and technical issues, but try it.

Here are some things I have tried that do work as "shields".

Say you have a portable radio with a loop stick. Say you have two passive 9" loops (tunable) and you are inductively coupling the loops to the radios internal loop stick. You can use one loop to boost a signal and another to null a signal from a different direction.

You null by pointing at the offending signal and trying to tune a notch or min gain, or you can turn the "shield" loop 90 degrees and face the side to the station and move the radio relative to the loop so the signal is muted.

The other way is to make a freq trap as well with a tunable capacitor and coil which is inserted into the feed line of an antenna as a filter or trap from certain freqs. You can actually put one or two or three traps at different freqs to trap or filter out freqs you don't want. In my case where both stations are 850khz

and are 180 degrees apart and one is powerful and far and one is
powerful and really near, there is not much I can do about getting
that distant station. Working distant stations N and S and are not
on the exact same freq is easy.

Cheers

> "Aimo Unto Olavi RUOHO" <aimounto@...> wrote:
>
> Hello, brains!
>
> I have been wondering, if a grounded metal-sheet "shield" near on
the
> other side of a ferrite loop could make the loop directive from only
> the "open"-side?
>
> This has been my question for a very long time, but I have never
> tested it to see, if it would work...
>
> Of course it would be very easy to test by putting a grounded copper
> or aluminium sheet behind (or forward) a transistor radio equipped
> with a ferrite rod antenna on a turning base... I just never
> "remembered" to do it! Too many interesting things coming and going!
>
> What do you think? Worth testing?
>
> 73 and good one-direction DXing!
>
> Aimo

6360. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-21 21:32:38 UTC
From: aimo ruoho
Topic: 6308 Message: 6360

Thanks, guys!

Now I am wondering, if a strongly magnetized iron or steel sheet would do the trick to minimize or totally nullify the magnetic part of the signal? This will probably show my perfect ignorance about these things, but just a thought anyway...

Ami

_____
De: José <jaafes@...>
Para: loopantennas@yahoogroups.com
Enviado: sábado, 21 de febrero, 2009 14:21:23
Asunto: [loopantennas] Re: Homemade Loop, Literally

Hello Aimo
IMHO that will be of no use, because the ferrite bar loop uses the
magnetic part of the electro-magnetic wave, then an electrostatic
screen has no effect on the magnetic field, (I think so).
¿More ideas from the group?
Good DX
Jose

--- In loopantennas@ yahoogroups. com, "Aimo Unto Olavi RUOHO"
<aimounto@.. .> wrote:
>
> Hello, brains!
>
> I have been wondering, if a grounded metal-sheet "shield" near on the
> other side of a ferrite loop could make the loop directive from only
> the "open"-side?
> ....
> ....
> 73 and good one-direction DXing!
>
> Aimo
>

[Non-text portions of this message have been removed]

6361. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-22 22:51:58 UTC
From: aimo ruoho
Topic: 6308 Message: 6361

Thank you, Jose'!

Does GROUNDING of the "Shield" mean nothing?
Won't the magnetic waves also go to earth/ground?
And, if a steel or iron sheet will be strongly magnetized,
and if the "shield" would cover the ferrite rod loop
from all other directions, but a very narrow desired
direction? In theory or in practice...?

73 de Amigo/Ami/Aimo

De: José <jaafes@...>
Para: loopantennas@yahoogroups.com
Enviado: sábado, 21 de febrero, 2009 14:21:23
Asunto: [loopantennas] Re: Homemade Loop, Literally

Hello Aimo
IMHO that will be of no use, because the ferrite bar loop uses the
magnetic part of the electro-magnetic wave, then an electrostatic
screen has no effect on the magnetic field, (I think so).
¿More ideas from the group?
Good DX
Jose

--- In loopantennas@ yahoogroups. com, "Aimo Unto Olavi RUOHO"
<aimounto@.. .> wrote:
>
> Hello, brains!
>
> I have been wondering, if a grounded metal-sheet "shield" near on the
> other side of a ferrite loop could make the loop directive from only
> the "open"-side?
> ....
> ....
> 73 and good one-direction DXing!
>
> Aimo
>

[Non-text portions of this message have been removed]

6362. Re: Homemade Loop, Literally (shield)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-22 23:16:47 UTC
From: Aimo Unto Olavi RUOHO
Topic: 6308 Message: 6362

Thanks for a very interesting answer,"gmcjetpilot"!

A "Mini-Flag Loop", which has a resistor towards one direction,
is a very effective means also to minimize interference from the
opposite direction. I have to continue tests with one as well as the
Mini K9AY as soon as the windy season will be over. I namely had to
postpone these tests because of very strong winds, that made my DX
One Professional MK II fall down, and take the other antenna off from
my Rotator.

I have noticed, that building, fixing, connecting and testing is about
all I'm doing here... Listening for DX takes less time and perhaps
interest, too.

One day soon I'm going to test things, which you suggested, I hope...

73 de Ami

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...>
wrote:
>
> Yes this is common with Direction Finding gear. In fact a loop stick
> in a metal u-shaped channel or trough has been done. A loop stick
> receives off the sides and the ends are nulls, right. A "U" shaped
> channel could block signals somewhat from 270 degrees. However
> the way that U-Channel works is you use the ends or nulls to look
> for min signal, where the station is.
>
> Do you have an offending near station that is interfering with
> another station you want to listen to? I have that problem.
> I have a 50KW station on 850khz 5 miles to the east. To get
> Colorado +1000 miles to the west on the same freq is about
> impossible even at night. Thankfully at night the local power
> house clear channel AM BCB station goes direction N-S, so their
> strength goes way down. I doubt there is much I could do, except
> try some kind of uni-direction antenna (LOOP with a shield). The
> good news is if the station is 10Kz or more off I have no problem.
> At night I can get two stations at 850Khz one N-E and one S-SW.
> The LOOP antenna is a must. I have a radio with good selectivity
> and filters to narrow the band width, which helps.
>
> You could try a shield with a flat plate, but radio waves bounce
> around and can get to your antenna jumping around your flat shield.
> I am no expert but you can play with it. Clearly you can change the
> gain in that direction. As I said you would want a U-shaped channel
> to make it more uni-directional and try to get a signal off the

> one side? I am no expert on the math and technical issues, but try
> it.
>
>
> Here are some things I have tried that do work as "shields".
>
> Say you have a portable radio with a loop stick. Say you have two
> passive 9" loops (tunable) and you are inductively coupling the
> loops to the radios internal loop stick. You can use one loop to
> boost a signal and another to null a signal from a different
> direction.
>
> You null by pointing at the offending signal and trying
> to tune a notch or min gain, or you can turn the "shield" loop
> 90 degrees and face the side to the station and move the radio
> relative to the loop so the signal is muted.
>
> The other way is to make a freq trap as well with a tunable
> capacitor and coil which is inserted into the feed line of an
> antenna as a filter or trap from certain freqs. You can actually
> put one or two or three traps at different freqs to trap or filter
> out freqs you don't want. In my case where both stations are 850khz
> and are 180 degrees apart and one is powerful and far and one is
> powerful and really near, there is not much I can do about getting
> that distant station. Working distant stations N and S and are not
> on the exact same freq is easy.
>
> Cheers
>
> > "Aimo Unto Olavi RUOHO" <aimounto@> wrote:
> >
> > Hello, brains!
> >
> > I have been wondering, if a grounded metal-sheet "shield" near
on
> the
> > other side of a ferrite loop could make the loop directive from
only
> > the "open"-side?
> >
> > This has been my question for a very long time, but I have never
> > tested it to see, if it would work...
> >
> > Of course it would be very easy to test by putting a grounded
copper
> > or aluminium sheet behind (or forward) a transistor radio
equipped
> > with a ferrite rod antenna on a turning base... I just never
> > "remembered" to do it! Too many interesting things coming and
going!

> >
> > What do you think? Worth testing?
> >
> > 73 and good one-direction DXing!
> >
> > Aimo
>

6363. Re: shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 04:39:38 UTC
From: Hue Miller
Topic: 6363 Message: 6363

Re the recent question about a shield plane on one side of a loop antenna: some years back "Palomar Engineers" (USA) offered a product called "Channel Scrubber" which seemed to be similar. However the use was applied to a small portable SW radio which laid on a platform; the shield plane actually shielded the extended whip antenna on the small radio. (BTW, this item has apparently sunk into history like a foot-print in the ocean; i found no listings on a Google search.) There is a review of the product in a WRTH from maybe 10-12 years back - guessing at the date. So at least there may be some potential to the idea.
-Hue Miller

6364. two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 04:30:07 UTC
From: Jim
Topic: 6364 Message: 6364

Has anyone experimented with a loop for two meter FM? If so would you have a design I could use?
tnx,

Jim

6365. Re: [loopantennas] two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 06:30:42 UTC
From: Mike Heppe
Topic: 6364 Message: 6365

look at quad design....
----- Original Message -----
From: Jim
To: loopantennas@yahoogroups.com
Sent: Sunday, February 22, 2009 10:30 PM
Subject: [loopantennas] two meter loop design needed

Has anyone experimented with a loop for two meter FM? If so would you
have a design I could use?
tnx,

Jim

[Non-text portions of this message have been removed]

6366. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 10:31:57 UTC
From: José
Topic: 6308 Message: 6366

Aimo
If you put a magnetized steel plate (= a magnet) near your ferrite antenna, probably you get the ferrite saturated because the strong CONTINUOUS magnetic field from the magnet, making the ferrite less able to collect the ALTERNATE magnetic field from the wave.
I dont think that grounding the plate change anything.
Jose

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Thank you, Jose'!
>
> Does GROUNDING of the "Shield" mean nothing?
> Won't the magnetic waves also go to earth/ground?
> And, if a steel or iron sheet will be strongly magnetized,
> and if the "shield" wouldÂ cover the ferrite rod loop
> from all otherÂ directions, but a very narrow desired
> direction? In theory or in practice...?
>
> 73 de Amigo/Ami/Aimo
>
>
>
>
> _____
> De: JosÃ© <jaafes@...>
> Para: loopantennas@yahoogroups.com
> Enviado: sÃ¡bado, 21 de febrero, 2009 14:21:23
> Asunto: [loopantennas] Re: Homemade Loop, Literally
>
>
> Hello Aimo
> IMHO that will be of no use, because the ferrite bar loop uses the
> magnetic part of the electro-magnetic wave, then an electrostatic
> screen has no effect on the magnetic field, (I think so).
> Â¿More ideas from the group?
> Good DX
> Jose
>
> --- In loopantennas@ yahoogroups. com, "Aimo Unto Olavi RUOHO"
> <aimounto@ .> wrote:
> >
> > Hello, brains!
> >
> > I have been wondering, if a grounded metal-sheet "shield" near on

the
> > other side of a ferrite loop could make the loop directive from
only
> > the "open"-side?
> > ....
> > ....
> > 73 and good one-direction DXing!
> >
> > Aimo
> >
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6367. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 15:32:50 UTC
From: aimo ruoho
Topic: 6308 Message: 6367

Thank you for your opinion, Jose!

Have you tested these things in practice?
Another stupid idea:
A "wall-shield" of several equal ferrite-
antennae as the one used in reception.
All connected to earth, only.
I have over 40 ferrit-bars to build a rather
large "shield" of them...
About a magnetized metal-shield, why
should it be so near the receiving ferrite?
Why not so far, that it could not "saturate"?

About grounding: If I connect an antenna
only to earth, what happens? Will the
signal, any signal, go to ground? Or will
the antenna turn to be a transmission-
antenna, transmitting all received signals
to the space? Now we have a problem of
signals, that pass through earth. No shield
can protect us from those unwanted-ones
near or on the same frequency, we want
to listen to...
So, an army of "traps" will then be one of
the best methods to deal with interfering
transmissions from any direction...?

When using my TEN-TEC RX340 DSP I have
many other possibilities too, like SAM, USB,
LSB, ISB,CW,CWI,FM,PBT,Notch Filter,
over 50 IF widths and many directive antennae,
many add-on-devices, like preselectors, audio-
manipulators etc, but I also want to test my 3
SONYs and many other receivers, now and then.

Thank you for your patience, Jose1

Best Regards from Aimo

De: José <jaafes@...>
Para: loopantennas@yahoogroups.com
Enviado: lunes, 23 de febrero, 2009 11:31:57
Asunto: [loopantennas] Re: Homemade Loop, Literally

[Non-text portions of this message have been removed]

6368. Re: [loopantennas] two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 16:50:43 UTC
From: Jim Dunstan
Topic: 6364 Message: 6368

At 04:30 AM 2/23/2009 +0000, you wrote:

>Has anyone experimented with a loop for two meter FM? If so would you
>have a design I could use?
>tnx,
>
>Jim

hi Jim,

Yes, I have used a resonant loop .... actually a quad ... a driven loop with a reflector loop. Easy and cheap to construct and very effective. I don't have one at the moment and don't have the plans ... I have seen them on the internet ... I am sure a 15 minute internet search will give you directions and dimensions. The dimensions you need are loop circumference, reflector circumference, distance between driven and reflector elements, and length of matching stub if you use one.

Jim, VE3CI_

6369. Re: two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 17:45:26 UTC
From: John
Topic: 6364 Message: 6369

--- jimdunstan wrote:
> Has anyone experimented with a loop for two meter FM? If so would
> youc have a design I could use?

http://www.arrl.org/tis/info/pdf/8009026.pdf

6370. Re: [loopantennas] Re: two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 18:34:08 UTC
From: Jim Dunstan
Topic: 6364 Message: 6370

At 05:45 PM 2/23/2009 +0000, you wrote:

>--- jimdunstan wrote:
> > Has anyone experimented with a loop for two meter FM? If so would
> > youc have a design I could use?

Hi,

I took a quick look in my handy Antenna Book and see they have a description of a 2 element loop antenna for 144 mhz. (cubical quad). It is simplicity itself. It uses 1" x 1" lumber for the frame. The elements are made of # 8 aluminium wire that is self supporting with a single 1" frame member.

The driven element is 83 in. (formed into a square) and the reflector is 5% longer or 87 in. The driven element leaves an opening for the feed point ... a small piece of plastic can be used there and it is fed directly with 50 ohm coax. the driven element is closed and spaced somewhere between .15 to .25 wavelength distance (12.5" to 20.75") from the driven element. They recommend adjusting the spacing for the best SWR ... as it has little effect on antenna gain.

The resulting antenna has forward gain and is quite broadband. If you just want a single loop then simply forget the reflector.

Jim, VE3CI

6371. Re: [loopantennas] two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 19:52:48 UTC
From: brian russell
Topic: 6364 Message: 6371

Jim,
For compactness especially out portable see the Moxon Loop page
at www.cebik.com , there is a ' stand alone ' calculator for dimensions.
I made mine from 8mm copper central heating tubing with just
a central 16mm dia PVC boom.
Works well with 2.5 watts from a FT-290 Mk1.
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

6372. Re: [loopantennas] two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-23 21:45:08 UTC
From: Jim Dunstan
Topic: 6364 Message: 6372

At 07:52 PM 2/23/2009 +0000, you wrote:

>Jim,
>For compactness especially out portable see the Moxon Loop page
>at www.cebik.com , there is a ' stand alone ' calculator for dimensions.
>I made mine from 8mm copper central heating tubing with just
>a central 16mm dia PVC boom.
>Works well with 2.5 watts from a FT-290 Mk1.
>72, Brian, G0NSL-QRP.

Hi Brian,

Are you referring to a 2 mtr moxon ??? Interesting ... actually I have
been thinking of making a moxon for 20 mtrs. actually a 2 el yagi with the
ends bent towards each other. yes, I have read the info on the moxon by
cebik. thanks

73 Jim, VE3CI

>[Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

6373. Re: shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-24 15:30:29 UTC
From: cank13cat
Topic: 6363 Message: 6373

That sounds familiar. I don't recall the Palomar model, but Joe Carr had a couple of designs for shielded loops as "portable helper" antennas, to improve the signal to noise ratio and minimize fluttering fades and QRM from two stations at roughly equal signal levels. These were in the small loops section of his Receiving Antenna Handbook.

I've seen similar designs online, mostly using boxes or squares made from thin sheets of metal, or even aluminum foil. Some involve a turntable, others use aluminum foil on a sheet of foamcare, with the portable sitting on the foamcore inside the perimeter formed by the foil loop. One of the coolest expedient variations I've seen involves using a loose tail of aluminum foil and a book to slide the foil tail around as a rough capacitor for tuning!

--- In loopantennas@yahoogroups.com, "Hue Miller" <kargo_cult@...> wrote:
>
> Re the recent question about a shield plane on one
> side of a loop antenna: some years back "Palomar
> Engineers" (USA) offered a product called "Channel
> Scrubber" which seemed to be similar. However the
> use was applied to a small portable SW radio which
> laid on a platform; the shield plane actually shielded
> the extended whip antenna on the small radio. (BTW,
> this item has apparently sunk into history like a foot-
> print in the ocean; i found no listings on a Google
> search.) There is a review of the product in a WRTH
> from maybe 10-12 years back - guessing at the date.
> So at least there may be some potential to the idea.
> -Hue Miller
>

6374. two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-02-24 18:52:37 UTC
From: brian russell
Topic: 6364 Message: 6374

Hello Jim,
Nice to hear from you.
Yes my Moxon loop is a 2m version, the 16mm PVC boom has a
' T ' piece in the center to slip on a 16mm PVC mast made of 2 x 1m
lengths, though I did fit a timber insert inside the tube to add strength
without any real weight increase, by making one core longer than 1m
that facilitated the jointing method.
The mast sections go down my rucksack corner and the Moxon hangs
on the back like a snowshoe hi!
At the spacing point of the elements a piece of 10mm dia Delrin is used,
the ends being reduced to a ' tap in ' fit to the 8mm copper tubing.
I have thought of an ' add on ' director, just another piece of 16mm
PVC tube with a rod element, or better still using two telescopic whip
antennas from a BC set, that way they would fold flat down the
extra boom piece for carrying.
Regards,

[Non-text portions of this message have been removed]

6375. Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-02 08:16:28 UTC
From: José
Topic: 6308 Message: 6375

Aimo, Did you received my mail off-group?
Jose

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Thank you for your opinion, Jose!
>
> Have you tested these things in practice?
.....
.....
>
> Best Regards from Aimo

6376. Re: [loopantennas] Re: Homemade Loop, Literally

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-02 11:55:18 UTC
From: aimo ruoho
Topic: 6308 Message: 6376

Yes, I did, and I answered you a few minutes ago. Sorry for delay.

Thanks for helping a lot, even drawing the principal drawings.

73 de Amigo/Aimo

De: José <jaafes@...>
Para: loopantennas@yahoogroups.com
Enviado: lunes, 2 de marzo, 2009 9:16:28
Asunto: [loopantennas] Re: Homemade Loop, Literally

Aimo, Did you received my mail off-group?
Jose

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> Thank you for your opinion, Jose!
>
> Have you tested these things in practice?
....
....
>
> Best Regards from Aimo

[Non-text portions of this message have been removed]

6377. Passport to Worldwide Radio or WRTH? Which one is better?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-04 14:51:21 UTC
From: Marcelo
Topic: 6377 Message: 6377

Hello,

As I suppose many of you use the loop antenna for receiving SW stations, I think you may answer my dilemma.

I was wondering which one of the following to buy

Passport to Worldwide Radio or WRTH? Which one is better?

Does any of them have a section divided by emission language?

Thanks
Regards

Marcelo
M/LW3EOV

6378. Re: Passport to Worldwide Radio or WRTH? Which one is better?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-05 00:00:47 UTC
From: flhrirydr2000
Topic: 6377 Message: 6378

I have the passport book but I use this for current info.
http://www.naswa.net/swlguide/

Mike

6379. Re: Passport to Worldwide Radio or WRTH? Which one is better?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-05 20:25:14 UTC
From: gmcjetpilot
Topic: 6377 Message: 6379

This is my opinion after owning a Passport book and looking at
WRTH's web site. I am no expert but this is my opinion.

For Freq and time alone I find the web is free and fairly good.

There are few web sites that you can type in a search or ask for
all the radio stations on air or specific freqs or locations.

There are several online freq search engines,

I have used it. It's pretty good.
http://www.naswa.net/swlguide/

"Monitoring times" (available on the news stand) is pretty
good and here is an online list
http://www.grove-ent.com/mttopHF.html
http://www.monitoringtimes.com/html/reference_library.html

A list of many links to other SW radio freq lists
http://www.ac6v.com/swl.htm#GSWL

For MW in the US "Radio Locator" is great.
www.radio-locator.com/

For MW AM Clear channel (50KW'ers)
http://www.ac6v.com/clearam.htm

WRTH I'll say I am least familiar with but in my opinion from
what I have read and their web site they appear to be serious
about pure freq/time data base. They have online updates I think.
Not sure if WRTH has all the reviews and other info or just a dry
data base? Not a put down I don't know. I like Passport because
its more than just data.

I love my Passport book. I bought a 2006 version of passport last
year on Amazon "used". Obviously not up to date. With shipping it
was so cheap why not, a few bucks. However I love the reviews of
radios and antennas, of which 2006 had reviews of my two SW radios,
which was a pleasant surprise and a review of an antenna I lust
after (Wellbrook). The book is about 2/3rds or 3/4th info and the
rest freq data. They don't divide by language, but Freq, County
and Time. That may have changed, I have 2006 right.

Passport has good basics informational stuff. Since I was getting
back into radios after a long absences when I was a teenager 25 yrs
ago. It also has profiles of big SW radio stations around the
world. The radio and antenna reviews are really great. I have a
TenTec RX320D and Degen/Kaito 1103. I was pleased to see they

where passport picks or well rated in their respective categories.

Passports Freq/Time/Location data base looks very complete down to contact info for the station. It has nice bar graphs. The graphs are grouped in Freq ranges than by country/location and than the bars show the time on the air.

The be honest I rarely use my book. My MODE OF OPERATION is to scan and find stations. Than I figure out what station it is. Of course not speaking Spanish, Italian, french, German, Russian and even Arabia, impedes my deciphering of the station, but in general I can figure out where it comes from.

Also my radio is a PC/Computer based radio. I down loaded ILG data base into the radio. Use to be free or they sold the data base part off, but I have a data base about 6 mo old. Data base is great because you just click and it goes into the radio.

Mostly I'll turn to the online radio data base, or the data base in my radio or saved station Freqs. I found the on line data bases are not correct or complete all the time (or I am using them incorrectly). I'll put in a freq that I know is on the air and it does not come up. Or it will come up with a station that is clearly not the one I have (language).

If you go the other direction and target a station than the books will help you. However the art of receiving distant stations is a bit of challenge any way. I tend to use my spectrum scan and look for signal I can get at that time.

Try amazon and check the prices, you will be surprised what last years Passport goes for, cheap. Even older data will give you a clue of what is going on, plus has cool reviews and suggestions.

Than you can go to the web and see if the station has a web site with latest freq/time schedule. SW times and freq change by seasons, but tend to use the same freqs.

Cheers

PS language is not always a key to location.

There are remote repeaters in the US. RCI (radio Canada Int'l) transmits many foreign language programs from North America. Some are foreign radio programs in English, which is interesting getting the news about China or Netherlands, which is going through issues with Islam and muslim immigrants as many parts of Europe are. Doha!

Here is a good site with world radio stations. These folks shoot some big power. http://radiostationworld.com/

Most SW stations in the US are religion stations
http://radiostationworld.com/Locations/United_States_of_America/shortwave.asp

Of course you have to time stations in the US and Canada:
US Time: 5,000, 10,000, 15,000, 20,000 Khz

3330 kHz (3 kW)
7335 kHz (10 kW) changed to 7850 kHz as of 01 JAN 2009.
14670 kHz (3 kW

BBC is SW in North America is dead. They stopped to focus on
satellite and cable TV for NA. They still have SW in South America
and Africa, Asia. I get BBC on digital cable TV. Top Gear is one
of my favorite shows. The news from other countries is always
interesting to filter and contrast to what you hear from our
networks. Here are some more links to radio sites:

Latest edition of this schedule version, including AM, FM, satellite
and webcasts with hotlinks to station sites and audio, is at:
http://www.worldofradio.com/radioskd.html
http://schedule.worldofradio.org
http://sked.worldofradio.org

For updates see our Anomaly Alert page:
http://www.worldofradio.com/anomaly.html

WRN ON DEMAND:
http://new.wrn.org/listeners/stations/station.php?StationID=24

WORLD OF RADIO PODCASTS VIA WRN NOW AVAILABLE:
http://podcast.worldofradio.org or
http://www.wrn.org/listeners/stations/podcast.php

OUR ONDEMAND AUDIO:
http://www.worldofradio.com/audiomid.html
or http://wor.worldofradio.org

--- In loopantennas@yahoogroups.com, "Marcelo" <marcelo0680@...> wrote:
>
> Hello,
>
> As I suppose many of you use the loop antenna for receiving SW stations, I think you may
answer my dilemma.
>
> I was wondering which one of the following to buy
>
> Passport to Worldwide Radio or WRTH? Which one is better?
>
> Does any of them have a section divided by emission language?
>
> Thanks
> Regards
>

> Marcelo
> M/LW3EOV
>

6380. Re: Passport to Worldwide Radio or WRTH? Which one is better?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-05 20:25:17 UTC
From: gmcjetpilot
Topic: 6377 Message: 6380

This is my opinion after owning a Passport book and looking at
WRTH's web site. I am no expert but this is my opinion.

For Freq and time alone I find the web is free and fairly good.

There are few web sites that you can type in a search or ask for
all the radio stations on air or specific freqs or locations.

There are several online freq search engines,

I have used it. It's pretty good.
http://www.naswa.net/swlguide/

"Monitoring times" (available on the news stand) is pretty
good and here is an online list
http://www.grove-ent.com/mttopHF.html
http://www.monitoringtimes.com/html/reference_library.html

A list of many links to other SW radio freq lists
http://www.ac6v.com/swl.htm#GSWL

For MW in the US "Radio Locator" is great.
www.radio-locator.com/

For MW AM Clear channel (50KW'ers)
http://www.ac6v.com/clearam.htm

WRTH I'll say I am least familiar with but in my opinion from
what I have read and their web site they appear to be serious
about pure freq/time data base. They have online updates I think.
Not sure if WRTH has all the reviews and other info or just a dry
data base? Not a put down I don't know. I like Passport because
its more than just data.

I love my Passport book. I bought a 2006 version of passport last
year on Amazon "used". Obviously not up to date. With shipping it
was so cheap why not, a few bucks. However I love the reviews of
radios and antennas, of which 2006 had reviews of my two SW radios,
which was a pleasant surprise and a review of an antenna I lust
after (Wellbrook). The book is about 2/3rds or 3/4th info and the
rest freq data. They don't divide by language, but Freq, County
and Time. That may have changed, I have 2006 right.

Passport has good basics informational stuff. Since I was getting
back into radios after a long absences when I was a teenager 25 yrs
ago. It also has profiles of big SW radio stations around the
world. The radio and antenna reviews are really great. I have a
TenTec RX320D and Degen/Kaito 1103. I was pleased to see they

where passport picks or well rated in their respective categories.

Passports Freq/Time/Location data base looks very complete down to contact info for the station. It has nice bar graphs. The graphs are grouped in Freq ranges than by country/location and than the bars show the time on the air.

The be honest I rarely use my book. My MODE OF OPERATION is to scan and find stations. Than I figure out what station it is. Of course not speaking Spanish, Italian, french, German, Russian and even Arabia, impedes my deciphering of the station, but in general I can figure out where it comes from.

Also my radio is a PC/Computer based radio. I down loaded ILG data base into the radio. Use to be free or they sold the data base part off, but I have a data base about 6 mo old. Data base is great because you just click and it goes into the radio.

Mostly I'll turn to the online radio data base, or the data base in my radio or saved station Freqs. I found the on line data bases are not correct or complete all the time (or I am using them incorrectly). I'll put in a freq that I know is on the air and it does not come up. Or it will come up with a station that is clearly not the one I have (language).

If you go the other direction and target a station than the books will help you. However the art of receiving distant stations is a bit of challenge any way. I tend to use my spectrum scan and look for signal I can get at that time.

Try amazon and check the prices, you will be surprised what last years Passport goes for, cheap. Even older data will give you a clue of what is going on, plus has cool reviews and suggestions.

Than you can go to the web and see if the station has a web site with latest freq/time schedule. SW times and freq change by seasons, but tend to use the same freqs.

Cheers

PS language is not always a key to location.

There are remote repeaters in the US. RCI (radio Canada Int'l) transmits many foreign language programs from North America. Some are foreign radio programs in English, which is interesting getting the news about China or Netherlands, which is going through issues with Islam and muslim immigrants as many parts of Europe are. Doha!

Here is a good site with world radio stations. These folks shoot some big power. http://radiostationworld.com/

Most SW stations in the US are religion stations
http://radiostationworld.com/Locations/United_States_of_America/shortwave.asp

Of course you have to time stations in the US and Canada:
US Time: 5,000, 10,000, 15,000, 20,000 Khz

3330 kHz (3 kW)
7335 kHz (10 kW) changed to 7850 kHz as of 01 JAN 2009.
14670 kHz (3 kW

BBC is SW in North America is dead. They stopped to focus on
satellite and cable TV for NA. They still have SW in South America
and Africa, Asia. I get BBC on digital cable TV. Top Gear is one
of my favorite shows. The news from other countries is always
interesting to filter and contrast to what you hear from our
networks. Here are some more links to radio sites:

Latest edition of this schedule version, including AM, FM, satellite
and webcasts with hotlinks to station sites and audio, is at:
http://www.worldofradio.com/radioskd.html
http://schedule.worldofradio.org
http://sked.worldofradio.org

For updates see our Anomaly Alert page:
http://www.worldofradio.com/anomaly.html

WRN ON DEMAND:
http://new.wrn.org/listeners/stations/station.php?StationID=24

WORLD OF RADIO PODCASTS VIA WRN NOW AVAILABLE:
http://podcast.worldofradio.org or
http://www.wrn.org/listeners/stations/podcast.php

OUR ONDEMAND AUDIO:
http://www.worldofradio.com/audiomid.html
or http://wor.worldofradio.org

--- In loopantennas@yahoogroups.com, "Marcelo" <marcelo0680@...> wrote:
>
> Hello,
>
> As I suppose many of you use the loop antenna for receiving SW stations, I think you may
answer my dilemma.
>
> I was wondering which one of the following to buy
>
> Passport to Worldwide Radio or WRTH? Which one is better?
>
> Does any of them have a section divided by emission language?
>
> Thanks
> Regards
>

> Marcelo
> M/LW3EOV
>

6381. Re: Passport to Worldwide Radio or WRTH? Which one is better?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-06 05:09:13 UTC
From: gmcjetpilot
Topic: 6377 Message: 6381

I blew tha dust off the passport guide and actually its pretty amazing with info especially if you are new to SW. I said it is only 1/2 data, really it is about 80% data and it does have english only station section. Like I said at amazon, you can get last years for cheap. It will have pretty good data. Cheers

--- In loopantennas@yahoogroups.com, "Marcelo" <marcelo0680@...> wrote:
>
> Hello,
>
> As I suppose many of you use the loop antenna for receiving SW stations, I think you may answer my dilemma.
>
> I was wondering which one of the following to buy
>
> Passport to Worldwide Radio or WRTH? Which one is better?
>
> Does any of them have a section divided by emission language?
>
> Thanks
> Regards
>
> Marcelo
> M/LW3EOV
>

6382. Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-06 18:13:52 UTC
From: q97323a
Topic: 6382 Message: 6382

I posted this elsewhere but might be of interest here:

This is quite an amazing story IMHO.

I bought a laptop for Xams to be used upstairs & a DLink Wireless Router (D615) to connect it to my main computer in my radio shack where the cable modem is located. As soon as the Router was plugged in I knew I was in trouble RFI wise.

After many hours of troubleshooting, experimenting & changing locations of the Router, nothing worked. Using my portable Eton E5 I determined that the stock 5VDC Power Supply was the culprit by conducting & amplifying digital hash from the Router Box into the house wiring & then into my radios - untenable. I managed to find an old, heavy 5VDC Zip Drive Power Supply that worked fine & quietly - obvously it had good filtering components. Unfortunately, it is rated
at only 1 Amp (whereas the stock PS is 2.5 Amps) causing it to run quite warm - not good.

I contacted DLink Canada with my problem & requested that they find me a quiet PS with the proper rating. Of course they had never heard of such a problem & initially I was dismissed; however, I persisted in a polite manner & the file was passed to their Toronto engineering staff who took it over.

Well, to make a long story short, yesterday at my home on Vancouver Island on Canada's west coast, I hosted 1 Dlink Tech Rep from Toronto & 2 DLink Electronic Engineers directly from Taiwan to confirm my problem. These guys flew half way around the world to specifically address my Wireless Router RFI problem & flew home last night - extraordinary effort on DLink's part & simply amazing to me.

When I plugged in their stock PS with my Kenwood R1000 tuned to the 17Mhz Band, they winced. One engineer was DLink's PS expert & brought a bunch of different units to test. He confirmed my diagnosis that the stock PS was injecting square waves into the house wiring. His PS's all worked well so good PSs are available out there.

While this type of RFI problem will not affect 99.9% of their customers as there are so few SW Listeners anymore, they now know of radio enthusiasts' RFI problems with their products. They took a qenuine interest in my situation & went well beyond the normal service call on a component that cost $50!! So DLink spent a ton of money to give me a replacement PS & I'm very grateful.

Hopefully, we have made some headway here in our constant battle with RFI producing compnents. At least this company now recognizes this fact.

Cheers

TAM
Vancouver Island

6384. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-07 23:20:13 UTC
From: Hue
Topic: 6382 Message: 6384

Am i correct that the old noisy supply was just a diode
unregulated supply, or is there some kind of switching supply in it?
Were you able to keep it, to tear it apart and see?
It amazes me that the manufacturer actually responded to you!
Usually, once they have your money and the product works, it's goodbye!
-Hue Miller

6385. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-08 06:19:52 UTC
From: q97323a
Topic: 6382 Message: 6385

Hue:

I still have the original PS that is light weight & enclosed in a very small housing. Compared to the PSs that are properly filtered, it is about 1/4 of the size & weight. That should be a clue in itself. Not being an electronics guy, if I broke it apart I wouldn't know what I was looking at.

It is obvious that this diminuative type of PS is not adequate for filtering RFI; however, the radio enthusiast world is so small that the vast majority of their customer base would never experience this problem.

TAM
Vancouver Island

--- In loopantennas@yahoogroups.com, "Hue" <kargo_cult@...> wrote:
>
> Am i correct that the old noisy supply was just a diode
> unregulated supply, or is there some kind of switching supply in it?
> Were you able to keep it, to tear it apart and see?
> It amazes me that the manufacturer actually responded to you!
> Usually, once they have your money and the product works, it's goodbye!
> -Hue Miller
>

6386. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-08 19:20:30 UTC
From: gmcjetpilot
Topic: 6382 Message: 6386

I never found my WiFI caused any RFI for me, but the two biggest offenders of RFI was my computers Scanner/Printer and wireless mouse. The scanner/printer fix is unplug it, when not in use. The wireless mouse is OK when not moved, and only affects some of the higher HF freqs.

My issue is I use a Ten Tex RX320D, which if a PC based radio, so I have to have the computer gear nearby. However I do have a Palm PDA that I can use to control the RX320D, which is cool, but

Flat screen monitors/TV's make some atroucious local RFI.

I got the noise issue solved by using and outdoor antenna with shielded coaxial, balun and good outdoor GROUND (in the ground).

The the Ten Tex RX320D just a BOX, all the control (except on/off) is by software. The BOX is as far away from the computer as I can get with an 8' serial cable that connects the radio and computer.

I took a portable HF SW radio and went around the house and used it for a RFI noise detector. Almost everything makes some noies right next to it. The issue is how far it spews the noise.

I know where noise is coming from, and the best solution was the outdoor antenna away from the house and the coaxial feed, balun (random wire 400ohm to 50ohm) and a good ground with copper in the dirt.

The remote tune active magnetic loop I am making will go on a poll, rotor and outside the house.

>> "there some kind of switching supply in it?"

Switching power supplies are the WORSE and can be at switching at very undesirable Freqs.

No wall wart is perfect but you want linear types, which tend to be physically bigger, heaver and a more little expensive are better. Linear wall wart pwr spplies where the standard and typical. Now you see a lot of switching AC/DC converters.

The RX320D runs on a wall wart, linear and has a CHOKE or one of those Ferrite beads on the wire from the power supply to device. You see those ferrite beads or chokes on computer wires also, that plastic blister you see on wires. You can buy them and snap them on a power wire, usually you loop the wire though twice. You can buy them cheap and they keep stray noise from being picked up and fed down the power wire.

Cheers

--- In loopantennas@yahoogroups.com, "q97323a" <q97323a@...> wrote:
>
> Hue:
>
> I still have the original PS that is light weight & enclosed in a very small housing. Compared to the PSs that are properly filtered, it is about 1/4 of the size & weight. That should be a clue in itself. Not being an electronics guy, if I broke it apart I wouldn't know what I was looking at.
>
> It is obvious that this diminuative type of PS is not adequate for filtering RFI; however, the radio enthusiast world is so small that the vast majority of their customer base would never experience this problem.
>
> TAM
> Vancouver Island
>
> --- In loopantennas@yahoogroups.com, "Hue" <kargo_cult@> wrote:
> >
> > Am i correct that the old noisy supply was just a diode
> > unregulated supply, or is there some kind of switching supply in it?
> > Were you able to keep it, to tear it apart and see?
> > It amazes me that the manufacturer actually responded to you!
> > Usually, once they have your money and the product works, it's goodbye!
> > -Hue Miller
> >
>

6387. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-08 19:49:42 UTC
From: Steve
Topic: 6382 Message: 6387

It is a switching power supply, and the Zip drive power supply you tried is a linear regulator supply.

That is how I would expect it to be. Switching supplies have lots of fast switching, so there must be careful filtering and shielding to prevent RFI from escaping. In a linear supply, the fastest switching is the current pulse of the filter capacitor charging at 120Hz.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "q97323a" <q97323a@...> wrote:
>
> Hue:
>
> I still have the original PS that is light weight & enclosed in a very small housing. Compared to the PSs that are properly filtered, it is about 1/4 of the size & weight. That should be a clue in itself. Not being an electronics guy, if I broke it apart I wouldn't know what I was looking at.
>
> It is obvious that this diminuative type of PS is not adequate for filtering RFI; however, the radio enthusiast world is so small that the vast majority of their customer base would never experience this problem.
>
> TAM
> Vancouver Island
>
> --- In loopantennas@yahoogroups.com, "Hue" <kargo_cult@> wrote:
> >
> > Am i correct that the old noisy supply was just a diode
> > unregulated supply, or is there some kind of switching supply in it?
> > Were you able to keep it, to tear it apart and see?
> > It amazes me that the manufacturer actually responded to you!
> > Usually, once they have your money and the product works, it's goodbye!
> > -Hue Miller
> >
>

6388. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-08 23:28:51 UTC
From: q97323a
Topic: 6382 Message: 6388

The PS that the DLink Engineer left for me is large & of the same size & weight of my old Zip Drive PS - the main difference is that it is rated at 2.5 Amps & therefore runs much cooler than the Zip PS that was rated at 1 Amp.

That make me feel better.

TAM
Vancouver Island

--- In loopantennas@yahoogroups.com, "Steve" <alienrelics@...> wrote:
>
> It is a switching power supply, and the Zip drive power supply you tried is a linear regulator supply.
>
> That is how I would expect it to be. Switching supplies have lots of fast switching, so there must be careful filtering and shielding to prevent RFI from escaping. In a linear supply, the fastest switching is the current pulse of the filter capacitor charging at 120Hz.
>
> Steve Greenfield
>
>
> --- In loopantennas@yahoogroups.com, "q97323a" <q97323a@> wrote:
> >
> > Hue:
> >
> > I still have the original PS that is light weight & enclosed in a very small housing. Compared to the PSs that are properly filtered, it is about 1/4 of the size & weight. That should be a clue in itself. Not being an electronics guy, if I broke it apart I wouldn't know what I was looking at.
> >
> > It is obvious that this diminuative type of PS is not adequate for filtering RFI; however, the radio enthusiast world is so small that the vast majority of their customer base would never experience this problem.
> >
> > TAM
> > Vancouver Island

6389. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-08 23:35:22 UTC
From: q97323a
Topic: 6382 Message: 6389

gmc:

Four of my 5 antennas - PAR EF-SWL, 'Snake in the Grass', DIY 1 Meter multi-turn Loop on a rotator & a vertical 20' Slinky are outside. The first 3 are 30' from my house & fed with properly shielded coax & grounding.

Even they could not mitigate the RFI being injected into my house wiring. I guess that battery power is really the only way to go....

TAM
Vancouver Island

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> I never found my WiFI caused any RFI for me, but the two biggest
> offenders of RFI was my computers Scanner/Printer and wireless
> mouse. The scanner/printer fix is unplug it, when not in use.
> The wireless mouse is OK when not moved, and only affects some
> of the higher HF freqs.
>
> My issue is I use a Ten Tex RX320D, which if a PC based radio,
> so I have to have the computer gear nearby. However I do have a
> Palm PDA that I can use to control the RX320D, which is cool, but
>
> Flat screen monitors/TV's make some atroucious local RFI.
>
> I got the noise issue solved by using and outdoor antenna with
> shielded coaxial, balun and good outdoor GROUND (in the ground).
>
> The the Ten Tex RX320D just a BOX, all the control (except on/off)
> is by software. The BOX is as far away from the computer as I can
> get with an 8' serial cable that connects the radio and computer.
>
> I took a portable HF SW radio and went around the house and used
> it for a RFI noise detector. Almost everything makes some noies
> right next to it. The issue is how far it spews the noise.
>
> I know where noise is coming from, and the best solution was the
> outdoor antenna away from the house and the coaxial feed, balun
> (random wire 400ohm to 50ohm) and a good ground with copper in
> the dirt.
>
> The remote tune active magnetic loop I am making will go on a
> poll, rotor and outside the house.
>
>

> >> "there some kind of switching supply in it?"
>
> Switching power supplies are the WORSE and can be at switching
> at very undesirable Freqs.
>
> No wall wart is perfect but you want linear types, which
> tend to be physically bigger, heaver and a more little expensive
> are better. Linear wall wart pwr spplies where the standard
> and typical. Now you see a lot of switching AC/DC converters.
>
> The RX320D runs on a wall wart, linear and has a CHOKE or one
> of those Ferrite beads on the wire from the power supply to
> device. You see those ferrite beads or chokes on computer wires
> also, that plastic blister you see on wires. You can buy them
> and snap them on a power wire, usually you loop the wire though
> twice. You can buy them cheap and they keep stray noise from
> being picked up and fed down the power wire.
>
>
> Cheers
>
> --- In loopantennas@yahoogroups.com, "q97323a" <q97323a@> wrote:
> >
> > Hue:
> >
> > I still have the original PS that is light weight & enclosed in a very small housing. Compared to the PSs that are properly filtered, it is about 1/4 of the size & weight. That should be a clue in itself. Not being an electronics guy, if I broke it apart I wouldn't know what I was looking at.
> >
> > It is obvious that this diminuative type of PS is not adequate for filtering RFI; however, the radio enthusiast world is so small that the vast majority of their customer base would never experience this problem.
> >
> > TAM
> > Vancouver Island
> >
> > --- In loopantennas@yahoogroups.com, "Hue" <kargo_cult@> wrote:
> > >
> > > Am i correct that the old noisy supply was just a diode
> > > unregulated supply, or is there some kind of switching supply in it?
> > > Were you able to keep it, to tear it apart and see?
> > > It amazes me that the manufacturer actually responded to you!
> > > Usually, once they have your money and the product works, it's goodbye!
> > > -Hue Miller
> > >
> >
>

6390. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-09 07:00:39 UTC
From: jr_dakota
Topic: 6382 Message: 6390

--- In loopantennas@yahoogroups.com, "q97323a" <q97323a@...> wrote:
>
> I posted this elsewhere but might be of interest here:
>
> This is quite an amazing story IMHO.
>
> I bought a laptop for Xams to be used upstairs & a DLink Wireless Router (D615) to connect it to my main computer in my radio shack where the cable modem is located. As soon as the Router was plugged in I knew I was in trouble RFI wise.
>
> After many hours of troubleshooting, experimenting & changing locations of the Router, nothing worked. Using my portable Eton E5 I determined that the stock 5VDC Power Supply was the culprit by conducting & amplifying digital hash from the Router Box into the house wiring & then into my radios - untenable. I managed to find an old, heavy 5VDC Zip Drive Power Supply that worked fine & quietly - obvously it had good filtering components. Unfortunately, it is rated
> at only 1 Amp (whereas the stock PS is 2.5 Amps) causing it to run quite warm - not good.

< SNIP>

> Cheers
>
> TAM
> Vancouver Island
>

I've had the same problem with those little 5v (cheap, poorly designed) switching power supplies but found using them with a UPS keeps them from radiating back into the power likes ... Problem is they don't use any input filtering and you really need filters on the input as well as the output ... A good UPS provides some isolation and filtering

The reason you got engineers is I suspect they already know they have a problem with compliance of whatever the Canadian equivelent of the FCC is and don't want a complaint to them triggering a recall of thousands of units and/or a hefty fine

The problem here is companies usually submit a in-house power supply made by their R&D department to pass compliance, then they farm it out to some ChiCom factory and frankly, the ChiComs don't give a whit and will cut corners (like leaving out input filters) to maximize their profit (Or just to make a profit because they underbid to steal the job from an honest company) They know agencies like the FCC won't do a random check for compliance like they should, so they get away with this and if they do get caught it comes back on the company that contracted to them and not back to them

If you think food and paint in children's toys are the only places they cheat, think again ... I have little faith in anything coming from China and believe they are slowly bleeding countries dry in exchange for "Trinkets and Beads" .. Crap that doesn't last more than a

couple of years and gets pitched into a landfill ... Anyone foolish enough to believe you can practice Free Trade with Communists needs to look up the meaning of Communist again

JR

6391. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-09 19:14:29 UTC
From: gmcjetpilot
Topic: 6382 Message: 6391

5 antennas I am jealous. I can barely get one up with out the HOA police sending me a letter.

Have you thought of a Wellbrook ALA1530? Those mag loops can not perform miracles but they have been the solution to many peoples RFI issues, with reports of people getting great drops in Noise by 3 or more on the S-meter, while getting the same signal, which means a GREAT S/N ratio improvement and really the KEY to this game.

Yes, RFI is a devil. I was so frustrated and it took a lot of effort to solve mine. I was going to give up but finanly hit upon the solution for my problem. No need to get into detail because every situation is different, but it was the antenna design and going outside, balun, coax and ground ground in the ground (not some other thing like some try using the home wiring ground). Please no 'ground' wars guys.

I am nervous, things are good noise wise for me, but they are making the two lane road out side my development wider and putting in some high power lines along it. I am in the front of the development and may be 1000' or slightly more to the road and power lines? We shall see or hear I mean.

I have a second antenna I am making, an active magnetic remote tune (varactor) loop, like a wellbrook. There is nothing they (antenna nazis) can say, its a 1M dia loop (like a satellite dish) and it will be on a rotor. Actually re-reading the covenant, the rule is 1M max antenna UNLESS it is needed for reception? Humm. May be I should put the random wire up again. The problem is the lot is small and surrounded by green areas on two sides with nice trees. Unfortunately the trees don't belong to me even though they appear to be in my back yard. I would like to use one for a wire but they got on me about it after a year. It is going back up in the spring with the leaves. They will not see it.

There are nice things about being in a planned HOA community but there is some real drags, like paying dues and rules that cramp my antenna style.

Any way good luck. GMC

--- In loopantennas@yahoogroups.com, "q97323a" <q97323a@...> wrote:
>
> gmc:
>
> Four of my 5 antennas - PAR EF-SWL, 'Snake in the Grass', DIY 1 Meter multi-turn Loop on

a rotator & a vertical 20' Slinky are outside. The first 3 are 30' from my house & fed with properly shielded coax & grounding.
>
> Even they could not mitigate the RFI being injected into my house wiring. I guess that battery power is really the only way to go....
>
> TAM
> Vancouver Island

6392. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 02:11:06 UTC
From: q97323a
Topic: 6382 Message: 6392

gmc:

Yes, I've always lusted after the Wellbrook; however, its high price has been a deterent for me. I recently built a DIY 1 Meter Loop in which I stuffed as many turns of 3-conductor TV Rotator Wire into a 10 foot plastic tube that I bent into a hoop. I estimate that there is about 250' of continous wire inside with the way that I soldered the ends of the conductors.

I managed to snag the last TV Antenna Rotator plus 200' of the 3-conductor wire from our local RS for 60% off. I soldered the 2 ends of the rotator wire of the loop to 50' of buried coax into my shack thru an old MFJ-956 Antenna Tuner & MFJ-959C Tuner/Preamplifier. So I have a nice Loop that performs very well from LW up to 17 Mhz. I've received a lot of NDBs that are completely lost in noise or missing due to weak signals on my other wire antennas.

My Loop may not conform to normal theory or convention, but it does work fairly well. I'm under no illusions that it rivals a Wellbrook, but now that I have a rotator already erected, perhaps a Wellbrook just might be in my future. Either that or I'll tackle a 2 meter Loop project this summer.

At 0200Z (1900 PDT) I'm resently listening a wonderful signal from Radio New Zealand on 15720. My Loop is easily rivalling my PAR EF-SWL here with no RF boost.

I am somewhat lucky as the power cables in front of my house are underground. Generally RFI is tolerable here in the smaller town where I reside.

TAM
Vancouver Island

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> 5 antennas I am jealous. I can barely get one up with out the
> HOA police sending me a letter.
>
> Have you thought of a Wellbrook ALA1530? Those mag loops can not
> perform miracles but they have been the solution to many peoples
> RFI issues, with reports of people getting great drops in Noise
> by 3 or more on the S-meter, while getting the same signal, which
> means a GREAT S/N ratio improvement and really the KEY to this
> game.
>
>
> Yes, RFI is a devil. I was so frustrated and it took a lot of
> effort to solve mine. I was going to give up but finanly hit upon
> the solution for my problem. No need to get into detail because
> every situation is different, but it was the antenna design and
> going outside, balun, coax and ground ground in the ground (not

> some other thing like some try using the home wiring ground).
> Please no 'ground' wars guys.

6393. Fence-mounted loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-09 21:22:58 UTC
From: david_medders
Topic: 6393 Message: 6393

I am in need of advice regarding an amateur HF antenna implementation. I have recently moved into a home that is antenna restricted by Home-Owners Association. I have approximately 100 feet of 8-foot tall wood fence -- supported by spaced metal posts -- that seems an ideal location to conceal a loop. I am contemplating an SC-230 tuner mounted in the middle of the fence line, feeding 14 gauge Silky wire, creating either a loop or a folded dipole along the top and bottom of the fence. Based on my limited NEC2 abilities, it appears the folded dipole provides a better NVIS pattern. My questions:

1. Is this a reasonable/good antenna?

2. Loop or folded dipole?

3. How much should the wire be spaced from the fence? The metal posts?

4. What you use to mount the wire on, and space it from, the fence?

Thank you in advance,

David

K5PL

[Non-text portions of this message have been removed]

6394. Re: [loopantennas] Fence-mounted loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 18:39:45 UTC
From: Jim Dunstan
Topic: 6393 Message: 6394

At 09:22 PM 3/9/2009 +0000, you wrote:

>I am in need of advice regarding an amateur HF antenna implementation.
>I have recently moved into a home that is antenna restricted by
>Home-Owners Association. I have approximately 100 feet of 8-foot tall
>wood fence -- supported by spaced metal posts -- that seems an ideal
>location to conceal a loop. I am contemplating an SC-230 tuner mounted
>in the middle of the fence line, feeding 14 gauge Silky wire, creating
>either a loop or a folded dipole along the top and bottom of the fence.
>Based on my limited NEC2 abilities, it appears the folded dipole
>provides a better NVIS pattern. My questions:
>
>1. Is this a reasonable/good antenna?
>
>2. Loop or folded dipole?
>
>3. How much should the wire be spaced from the fence? The metal posts?
>
>4. What you use to mount the wire on, and space it from, the fence?
>
>Thank you in advance,
>
>David
>
>K5PL

Hi David,

I understand you have 100' of 8' fence on which you can either form a 116' loop (using the top and bottom rails of the fence) or simply place a 100' dipole along the top of the fence. You plan to feed the antenna (loop or dipole) with an automatic antenna tuner.

First, a rectangular loop 100' x 8' will not be very efficient in terms of the capture area. Mechanically it will be more flexible than a dipole in that you can feed it just bout anywhere along the 100 ft fence .... whereas a dipole along the top of the 100' fence must be fed at the centre. As long as the feed point is not a problem I would go for the dipole along the top of the fence (you didn't mention if the 100' fence is in a straight line ... that is what I am assuming) since the bottom of a loop would be a few inches from ground.

As far as the metal posts ... not to worrry ... as they are perpendicular to the field of the dipole. As far as mechanical fastening of the wire to the fence ... I would go to the rural hardware store and purchase standard fittings (quite cheap) used in electrical fencing.

I now have a question ... why are mentioning a folded dipole? A 8' x 100' loop is not a folded dipole. If you wanted to construct a folded dipole you would have to use some kind of ladder line or 300 ohm twin lead.

Jim, VE3CI

6395. Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 18:05:54 UTC
From: Mike Phillips
Topic: 6395 Message: 6395

Hi Gents,

I'm new to the list. I have been a mostly inactive ham (tech) until I went to a local antique radio show and got inspired to repair my Grandfather's SW receiver. It's up and running, but not finished. So in the mean time, my condo restricts how large an antenna I can put in the attic since the attic is small. But at least there is attic access.

I'm interested in making a loop antenna. I have a Vector Network Analyzer that is great for looking at antenna's and revealing swr, impedance, bandwidth etc. What I am finding is that it's not easy to get a loop any where near 50 ohms. Granted, I'm a total rookie. But I'd like to pick up a design that I can make easily, test and tune, for any band, as long as it works. It seems from a few rough experiments the feed point design is critical. This was true a few years ago when I was helping a bit to design BlueTooth antennas. I hope some of that scales to 2-160 meter designs.

I'm close to buying a Tak-tenna. But at heart I'm a builder and want to spend time tweaking and tuning on my own. I don't really have a band yet that I can call home, I can barely get WWV on 5mhz. I am a decent fabricator and have good soldering skills.

I have looked at all of the photos in that section. I'm wondering if there are any more pics regarding the feed point on successful designs. I'm partial to not using any matching components(caps/inductors) in the design, if that is even possible.

At some point I'll get a transmitter. But for now I just have the SW receiver.

Thanks for your time,

Mike

6396. Re: two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 18:14:29 UTC
From: Mike Phillips
Topic: 6364 Message: 6396

Hi Jim,

Can I get the title of your Antenna Book? That cubical quad is right up my alley for an attic antenna.

Mike

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 05:45 PM 2/23/2009 +0000, you wrote:
>
> >--- jimdunstan wrote:
> > > Has anyone experimented with a loop for two meter FM? If so would
> > > youc have a design I could use?
>
> Hi,
>
> I took a quick look in my handy Antenna Book and see they have a
> description of a 2 element loop antenna for 144 mhz. (cubical quad). It is
> simplicity itself. It uses 1" x 1" lumber for the frame. The elements are
> made of # 8 aluminium wire that is self supporting with a single 1" frame
> member.
>
> The driven element is 83 in. (formed into a square) and the reflector is 5%
> longer or 87 in. The driven element leaves an opening for the feed point
> ... a small piece of plastic can be used there and it is fed directly with
> 50 ohm coax. the driven element is closed and spaced somewhere between .15
> to .25 wavelength distance (12.5" to 20.75") from the driven element. They
> recommend adjusting the spacing for the best SWR ... as it has little
> effect on antenna gain.
>
> The resulting antenna has forward gain and is quite broadband. If you just
> want a single loop then simply forget the reflector.
>
> Jim, VE3CI
>

6397. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 21:09:48 UTC
From: Jim Dunstan
Topic: 6395 Message: 6397

At 06:05 PM 3/10/2009 +0000, you wrote:

>Hi Gents,
>
>I'm new to the list. I have been a mostly inactive ham (tech) until I went
>to a local antique radio show and got inspired to repair my Grandfather's
>SW receiver. It's up and running, but not finished. So in the mean time,
>my condo restricts how large an antenna I can put in the attic since the
>attic is small. But at least there is attic access.
>
>I'm interested in making a loop antenna. I have a Vector Network Analyzer
>that is great for looking at antenna's and revealing swr, impedance,
>bandwidth etc. What I am finding is that it's not easy to get a loop any
>where near 50 ohms. Granted, I'm a total rookie. But I'd like to pick up a
>design that I can make easily, test and tune, for any band, as long as it
>works. It seems from a few rough experiments the feed point design is
>critical. This was true a few years ago when I was helping a bit to design
>BlueTooth antennas. I hope some of that scales to 2-160 meter designs.
>
>I'm close to buying a Tak-tenna. But at heart I'm a builder and want to
>spend time tweaking and tuning on my own. I don't really have a band yet
>that I can call home, I can barely get WWV on 5mhz. I am a decent
>fabricator and have good soldering skills.
>
>I have looked at all of the photos in that section. I'm wondering if there
>are any more pics regarding the feed point on successful designs. I'm
>partial to not using any matching components(caps/inductors) in the
>design, if that is even possible.
>
>At some point I'll get a transmitter. But for now I just have the SW receiver.
>
>Thanks for your time,
>
>Mike

Hi Mike,

Before any useful response can be made I (we) need to have more
information. What will be the approximate size of the loop ... eg will it
be made of wire and approximately the circumference of the attic ... or are
you thinking a magnetic loop ... e.g. less than 1/10 of a wavelength ... eg
for HF it might be 3ft in diameter. Since it is going to be used for SW
listening and Amateur transmissions later we can start as a receiving
antenna only.

Assuming you are going to make it out of wire and as large as the circumference of the attic will allow ... you might as well design it to be a resonant 1 wavelength at an Amateur band ... so you can start to use it for that purpose once you get around to getting a transceiver in operation. The formula to determine the resonant size of a full size loop is 1005/F(in mhz) = FT As a result a 20m loop will be approx. 70ft in circumference and 40m 140ft in circumference. If you can make it 140ft go for it ...

The impedance of a full size loop is approximately 100 ohms ... not a bad match for coax .... for transmitting ... and just fine for receiving. Hook it to your receiver and it will work just great. The impedance match for reception is not critical ...However, if you are going to transmit then it is a different story and there are other considerations in order to achieve antenna/feed line efficiency and acceptible load for your transmitter.

Jim, VE3CI

6398. Re: [loopantennas] Re: two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 21:16:15 UTC
From: Jim Dunstan
Topic: 6364 Message: 6398

At 06:14 PM 3/10/2009 +0000, you wrote:

>Hi Jim,
>
>Can I get the title of your Antenna Book? That cubical quad is right up my
>alley for an attic antenna.
>
>Mike

Hi Mike,

Yes, it is the ARRL Antenna Handbook .... it is in the 13th edition .... I have older editions but this particular project (2m 2 el. Quad) is only in this edition. The electrical information is in all the editions ... the difference is in this edition it actually shows a simple construction project ... just uses wood for the spreaders and the boom. The wire is self supporting soft aluminium. But it is really pretty simple and all it does is show a line drawing of what it might look like ... if you need it, I can scan it for you.

Jim, VE3CI

6399. Re: two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 21:42:53 UTC
From: Mike Phillips
Topic: 6364 Message: 6399

I have the ARRL Antenna Book, 21st addition. You mentioned hand book. Two different volumes?

Mike

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 06:14 PM 3/10/2009 +0000, you wrote:
>
> >Hi Jim,
> >
> >Can I get the title of your Antenna Book? That cubical quad is right up my
> >alley for an attic antenna.
> >
> >Mike
>
> Hi Mike,
>
> Yes, it is the ARRL Antenna Handbook .... it is in the 13th edition I
> have older editions but this particular project (2m 2 el. Quad) is only in
> this edition. The electrical information is in all the editions ... the
> difference is in this edition it actually shows a simple construction
> project ... just uses wood for the spreaders and the boom. The wire is
> self supporting soft aluminium. But it is really pretty simple and all it
> does is show a line drawing of what it might look like ... if you need it,
> I can scan it for you.
>
> Jim, VE3CI
>

6400. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 21:52:07 UTC
From: Mike Phillips
Topic: 6395 Message: 6400

Jim,

I should pick something, but since I cannot get anything right now in the hams bands, then I suppose smaller is better for right now. I am more interested in proving the concept of how the feed point influences the antenna at ham frequencies. It's easy to scale up to something that will fill the attic for the receiver after I get some feed point experience. But for now I need the antenna to be small just for prototyping purposes. Maybe you know of a ham band from near 60mhz that my receiver could tune to when I get a prototype made?

Here is a great example of a small loop type antenna:
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=18393

I'll do the math you have provided for a full wavelength loop and see if it might fit in the attic. 70ft might be the limit however using rough math.

Oh, one other issue. The antique receiver, an ACR-175 from RCA only has the old clips on the back for antenna and ground, no coax connection. Will making a short cable that adapts to my receiver and the RG8 that I have work ok in terms of impedance match, etc?

Mike

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 06:05 PM 3/10/2009 +0000, you wrote:
>
> >Hi Gents,
> >
> >I'm new to the list. I have been a mostly inactive ham (tech) until I went
> >to a local antique radio show and got inspired to repair my Grandfather's
> >SW receiver. It's up and running, but not finished. So in the mean time,
> >my condo restricts how large an antenna I can put in the attic since the
> >attic is small. But at least there is attic access.
> >
> >I'm interested in making a loop antenna. I have a Vector Network Analyzer
> >that is great for looking at antenna's and revealing swr, impedance,
> >bandwidth etc. What I am finding is that it's not easy to get a loop any
> >where near 50 ohms. Granted, I'm a total rookie. But I'd like to pick up a
> >design that I can make easily, test and tune, for any band, as long as it
> >works. It seems from a few rough experiments the feed point design is
> >critical. This was true a few years ago when I was helping a bit to design
> >BlueTooth antennas. I hope some of that scales to 2-160 meter designs.
> >
> >I'm close to buying a Tak-tenna. But at heart I'm a builder and want to
> >spend time tweaking and tuning on my own. I don't really have a band yet
> >that I can call home, I can barely get WWV on 5mhz. I am a decent
> >fabricator and have good soldering skills.

> >
> >I have looked at all of the photos in that section. I'm wondering if there
> >are any more pics regarding the feed point on successful designs. I'm
> >partial to not using any matching components(caps/inductors) in the
> >design, if that is even possible.
> >
> >At some point I'll get a transmitter. But for now I just have the SW receiver.
> >
> >Thanks for your time,
> >
> >Mike
>
> Hi Mike,
>
> Before any useful response can be made I (we) need to have more
> information. What will be the approximate size of the loop ... eg will it
> be made of wire and approximately the circumference of the attic ... or are
> you thinking a magnetic loop ... e.g. less than 1/10 of a wavelength ... eg
> for HF it might be 3ft in diameter. Since it is going to be used for SW
> listening and Amateur transmissions later we can start as a receiving
> antenna only.
>
> Assuming you are going to make it out of wire and as large as the
> circumference of the attic will allow ... you might as well design it to be
> a resonant 1 wavelength at an Amateur band ... so you can start to use it
> for that purpose once you get around to getting a transceiver in
> operation. The formula to determine the resonant size of a full size loop
> is 1005/F(in mhz) = FT As a result a 20m loop will be approx. 70ft in
> circumference and 40m 140ft in circumference. If you can make it 140ft go
> for it ...
>
> The impedance of a full size loop is approximately 100 ohms ... not a bad
> match for coax .... for transmitting ... and just fine for receiving. Hook
> it to your receiver and it will work just great. The impedance match for
> reception is not critical ...However, if you are going to transmit then it
> is a different story and there are other considerations in order to achieve
> antenna/feed line efficiency and acceptible load for your transmitter.
>
> Jim, VE3CI
>

6401. Re: [loopantennas] Re: two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 22:25:04 UTC
From: Jim Dunstan
Topic: 6364 Message: 6401

At 09:42 PM 3/10/2009 +0000, you wrote:

>I have the ARRL Antenna Book, 21st addition. You mentioned hand book. Two
>different volumes?
>
>Mike

Hi Mike,

I guess I miss spoke hi ... same book different edition ... e.g. ARRL
Antenna Book, 13th edition.

Jim

6402. Re: [loopantennas] Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 22:54:49 UTC
From: Jim Dunstan
Topic: 6395 Message: 6402

At 09:52 PM 3/10/2009 +0000, you wrote:

>Jim,
>
>I should pick something, but since I cannot get anything right now in the
>hams bands, then I suppose smaller is better for right now. I am more
>interested in proving the concept of how the feed point influences the
>antenna at ham frequencies. It's easy to scale up to something that will
>fill the attic for the receiver after I get some feed point experience.
>But for now I need the antenna to be small just for prototyping purposes.
>Maybe you know of a ham band from near 60mhz that my receiver could tune
>to when I get a prototype made?

Not sure about the concept ... "the feed point influences the antenna" ....
usually it is the antenna, its construction and location, that influences
the feed point ... eg its impedance.

>Here is a great example of a small loop type antenna:
><http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=18393>http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=18393

The antenna you are referring to is actually a special arrangement of a 2
element yagi with the ends of the elements bent in towards each other, the
MOXON, It does look like a loop. It is a very interesting antenna with a
very high front to back ratio with a reasonable amount of gain. When all
aspects are adjusted properly it represents an almost perfect match to 50
ohm coax. This is true for only 1 small frequency band. As soon as you
move the frequency all performance characteristics are off.

>I'll do the math you have provided for a full wavelength loop and see if
>it might fit in the attic. 70ft might be the limit however using rough math.
>
>Oh, one other issue. The antique receiver, an ACR-175 from RCA only has
>the old clips on the back for antenna and ground, no coax connection. Will
>making a short cable that adapts to my receiver and the RG8 that I have
>work ok in terms of impedance match, etc?

Your receiver antenna input is already configured for a balanced
input. Forget the coax and simply feed the loop in the attic with balanced
feed line ... like TV twinlead ... then all you do is connect the 2 leads
to the 2 connectors on the radio. Usually there were 3 connections ....
sometimes called antenna 1, and antenna 2, and ground.

or A, B, and GND. If you are using single random wire antenna then
connect the wire to A and then connect B to ground. If you have a balanced
feed line then Connect the 2 wires to A and B with no connection to
ground .... that is no connection from either A or B to the ground connection.

When using a large wire loop in the attic .... you won't have to worry about matching impedance. The input impedance of whatever size you end up will be all over the map as you go across the MW and SW frequencies. For reception that is okay ... once you want to send RF up to the loop you can go back to the drawing board.

Jim

[Non-text portions of this message have been removed]

6403. Re: two meter loop design needed

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 00:07:36 UTC
From: Mike Phillips
Topic: 6364 Message: 6403

There is a chapter in the 21st addition about quads. I'll study that for now. Thanks for the offer of a scan.

Mike

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 09:42 PM 3/10/2009 +0000, you wrote:
>
> >I have the ARRL Antenna Book, 21st addition. You mentioned hand book. Two
> >different volumes?
> >
> >Mike
>
>
> Hi Mike,
>
> I guess I miss spoke hi ... same book different edition ... e.g. ARRL
> Antenna Book, 13th edition.
>
> Jim
>

6404. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 00:14:45 UTC
From: Mike Phillips
Topic: 6395 Message: 6404

The Moxon sure looks like a folded Yagi now that you mention it. It still qualifies as a condo loop for my uses.

In my notes from years ago when I was learning to make Bluetooth antennas, the steps for making one were 1) Adjust the feed point to match the impedance, 2) Adjust the element's length, width, positions etc for tuning to frequency. That's how I remember doing it. Now granted, you cannot have a 50 ohm match without some amount of antenna already at least roughed out. But I do remember that the feed point adjusted the impedance so radically that it had to come first. This was for PIFA (Planar Inverted F Antenna) antennas. Not sure is that will apply to any other type.

Mike

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 09:52 PM 3/10/2009 +0000, you wrote:
>
> >Jim,
> >
> >I should pick something, but since I cannot get anything right now in the
> >hams bands, then I suppose smaller is better for right now. I am more
> >interested in proving the concept of how the feed point influences the
> >antenna at ham frequencies. It's easy to scale up to something that will
> >fill the attic for the receiver after I get some feed point experience.
> >But for now I need the antenna to be small just for prototyping purposes.
> >Maybe you know of a ham band from near 60mhz that my receiver could tune
> >to when I get a prototype made?
>
> Not sure about the concept ... "the feed point influences the antenna" ....
> usually it is the antenna, its construction and location, that influences
> the feed point ... eg its impedance.
>
>
> >Here is a great example of a small loop type antenna:
> ><http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=18393>http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=18393
>
>
> The antenna you are referring to is actually a special arrangement of a 2
> element yagi with the ends of the elements bent in towards each other, the
> MOXON, It does look like a loop. It is a very interesting antenna with a
> very high front to back ratio with a reasonable amount of gain. When all
> aspects are adjusted properly it represents an almost perfect match to 50
> ohm coax. This is true for only 1 small frequency band. As soon as you
> move the frequency all performance characteristics are off.
>

>
> >I'll do the math you have provided for a full wavelength loop and see if
> >it might fit in the attic. 70ft might be the limit however using rough math.
> >
> >Oh, one other issue. The antique receiver, an ACR-175 from RCA only has
> >the old clips on the back for antenna and ground, no coax connection. Will
> >making a short cable that adapts to my receiver and the RG8 that I have
> >work ok in terms of impedance match, etc?
>
> Your receiver antenna input is already configured for a balanced
> input. Forget the coax and simply feed the loop in the attic with balanced
> feed line ... like TV twinlead ... then all you do is connect the 2 leads
> to the 2 connectors on the radio. Usually there were 3 connections ....
> sometimes called antenna 1, and antenna 2, and ground.
>
> or A, B, and GND. If you are using single random wire antenna then
> connect the wire to A and then connect B to ground. If you have a balanced
> feed line then Connect the 2 wires to A and B with no connection to
> ground .... that is no connection from either A or B to the ground connection.
>
> When using a large wire loop in the attic .... you won't have to worry
> about matching impedance. The input impedance of whatever size you end up
> will be all over the map as you go across the MW and SW frequencies. For
> reception that is okay ... once you want to send RF up to the loop you can
> go back to the drawing board.
>
> Jim
>
>
>
> [Non-text portions of this message have been removed]
>

6405. Re: [loopantennas] Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-10 22:14:32 UTC
From: vaclav sal
Topic: 6395 Message: 6405

Mike, since you are looking for a receiving antenna your main objective should be an antenna configuration providing largest possible "capture area". It is not that important to provide feed with "matching impedance" to your receiver. However, a "real" Earth ground is very helpful.
73 Vaclav AA7EJ

[Non-text portions of this message have been removed]

6406. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 02:50:21 UTC
From: Mike Phillips
Topic: 6395 Message: 6406

I hear you. But I can tell you that a matched and tuned antenna also has higher gain. So it will matter on receive as well as transmit, on a given band. At least it shows up that way with Bluetooth. I suspect the band is not important. But I feel that my concept is. Gain is gain weather it's receiving or transmitting.

I am not looking for an easy way out. I want a matched and tuned antenna even for just a receiver. Although I could very well pick up a transmitter this year.

This is a very interesting research for me. I sure don't mind the investigative time spent.

Mike

--- In loopantennas@yahoogroups.com, vaclav sal <vaclav_sal@...> wrote:
>
> Mike, since you are looking for a receiving antenna your main objective should be an antenna configuration providing largest possible "capture area". It is not that important to provide feed with "matching impedance" to your receiver. However, a "real" Earth ground is very helpful.
> 73 Vaclav AA7EJ
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6407. Re: Router RFI - Solved Big Time

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 05:50:28 UTC
From: gmcjetpilot
Topic: 6382 Message: 6407

> At 0200Z (1900 PDT) I'm recently listening a wonderful signal from Radio New Zealand on 15720. My Loop is easily rivalling my PAR EF-SWL here with no RF boost.

Yea I love getting RNZ from the east Coast. My goal is to get their DRM signal. I get their SW when the weather is right. DRM needs a
min signal threshold or its zip.

The night I listened to RNZ SW, I was amused at the content. It a
combo of stuff I never have heard or haven't listen to in a LONG
TIME:

-BBC radio drama mysteries from the 1930's (I think)
-Music Frank Sinatra (before my time but great music)
-News, interesting to hear other news
-More eclectic music I never heard or from the 60's, 70's?

For awhile I thought my radio was in a time machine, ha ha.

Any one wants to listen to RNZ they have streaming audio web
cast. They also have a big antenna array you can see on google
earth.

Good Luck,

PS - Lived in Seattle for 15 years, worked for Boeing as an Engineer and did flight instruction out of Seattle Boeing Field and flew
freight, charters, corporate pilot and Horizon air. Spent many
a lovely day in Victoria. The wife and I would take the ferry from
Seattle (old and slow and high speed). Great fun.
from Seattle. Had noon tea at the Empress.

6408. Re: Fence-mounted loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 06:33:08 UTC
From: gmcjetpilot
Topic: 6393 Message: 6408

I feel for you with the HOA. I have that issue as well.

You did not mention this but I would run a random wire, about 75' or as long as you can on the top on electric fence on standoffs. The standoffs are for electric fences and they can be in neutral colors and not very obvious. They also come in bright orange. Not sure how high the metal post stick up above the fence if at all.

The wire (could be 20AWG white or black stranded) goes to a 9:1 balun, local ground with a coaxial feed to the house. It's just a random wire. Nothing fancy but its my go to antenna and is about as new as dirt.

What you are doing sounds interesting.

Not sure about the loop scenario. I assume the metal fence post are 8 feet apart? You could make magnetic square loop up to 8' by 8' out of wire or copper pipe. You would tune it with an Air Cap remote tuned with a stepper motor? Kind of fancy. It could be a TX antenna of course as well as RX. You could tune a RX only loop with electronics and a variator.

A loop is going to be directional along the fence line.

If you google the web for loops you can see what you can adapt. I'm not on my main computer and don't have the saved links for ones that might hang off a fence. Again plastic electric fence stand offs. I assume you could make a multi turn radial loop? Still it would be limited to two directions down the fence line and I guess sky waves.

Folded Dipole with the wire MID fence, sounds OK but not sure about the metal fence posts bisecting it. Clearly you want some space. I would put the folded dipole all above the fence like the random wire. However if you are using say ladder line its going to be way more visible floating above the fence on stand offs than a single skinny wire (random wire).

This does not have anything to do with the fence. But if they (HOA) let people have satellite dishes this might apply.

What I and another Gent where talking about is the Wellbrook loop. I am making 1 meter diameter active magnetic loop and it will go on a poll and rotor just above the roof line. I am going to DARE my HOA to say something. It is RX only.

Based on the rules satellite dishes up to 1 meter are allowed.
Why would a hoop not be allowed. It meets the rule.

The nice thing about the wellbrook is you don't tune it and it
is directional, but it does not have such deep nulls it is deaf
on the sides. So it could be fixed somewhat. The down side is if
you have some boomer AM BCB station it can bleed. That is the
worst thing I have ever heard and it is only if you are close
and point the loop at the station.

Wellbrook makes a model that detunes the MW band so this is not an
issue, but you lose the bottom freqs. By the time you buy it, ship
it and buying all the things you need to install, including the
coaxial you are looking at close $400 or more. Base price with shipping is about $280 US
(ala1530).

You could hang that wellbrook on the fence but what a waste. I
would put it on a poll in the yard it is pretty invisible and
its a pretty aluminum hulu hoop. You could put it in the attic.

I just would not hang a nice loop like the wellbrook on the fence,
but it would work. It would be expensive and not the ideal way
to mount it.

If you are going to use a 100 foot fence I would think you want
to use its length, which would lead to wire antennas, random,
dipoles, zipps, beverage. I would just try to go as high as you
can on-top of the fence aways from the metal posts.

What about your yard, Just on a poll put the loop. You can make a
loop look fairly innocuous, like some pop art. If the neighbors
complain out a nylon net on it and call it a dream catcher! ha ha

Have fun playing. George

--- In loopantennas@yahoogroups.com, "david_medders" <david@...> wrote:
>
>
> I am in need of advice regarding an amateur HF antenna implementation.
> I have recently moved into a home that is antenna restricted by
> Home-Owners Association. I have approximately 100 feet of 8-foot tall
> wood fence -- supported by spaced metal posts -- that seems an ideal
> location to conceal a loop. I am contemplating an SC-230 tuner mounted
> in the middle of the fence line, feeding 14 gauge Silky wire, creating
> either a loop or a folded dipole along the top and bottom of the fence.
> Based on my limited NEC2 abilities, it appears the folded dipole
> provides a better NVIS pattern. My questions:
>
> 1. Is this a reasonable/good antenna?
>
> 2. Loop or folded dipole?
>
> 3. How much should the wire be spaced from the fence? The metal posts?

>
> 4. What you use to mount the wire on, and space it from, the fence?
>
>
>
> Thank you in advance,
>
> David
>
> K5PL
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6409. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 18:38:05 UTC
From: airchecklover
Topic: 6395 Message: 6409

Mike;

Understood about matching. Thing is, SWL means anything from 1.8 mHz to 30 mHz. No single antenna "cut-to-length" antenna will match across that wide a frequency spread. So now you get into design considerations & tricks.... Off-center fed dipole vs. closed-loop dipole with termination resistor (T2FD) vs. multi-element/multi-length dipole vs tuned loops vs untuned loops vs electrically short active verticals and dipoles.

If you like to stick with resonance as your guiding design principle, I'd suggest looking at the Chris Trask' paper in the files section "Varactor Tuned Loop Antenna.pdf". It's a good starting point. There's great info in the files section and on the web w/ the help of Google.

BTW - I live in a high RF area - lots of AM, FM & TV w/in 10 miles. Tuned antennas (loops in my case) help since they, by nature, act as bandpass filters.

Thoughts?

Mark

==========

--- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@...> wrote:
>
> I hear you. But I can tell you that a matched and tuned antenna also has higher gain. So it will matter on receive as well as transmit, on a given band. At least it shows up that way with Bluetooth. I suspect the band is not important. But I feel that my concept is. Gain is gain weather it's receiving or transmitting.
>
> I am not looking for an easy way out. I want a matched and tuned antenna even for just a receiver. Although I could very well pick up a transmitter this year.
>
> This is a very interesting research for me. I sure don't mind the investigative time spent.
>
> Mike
>
>
>
> --- In loopantennas@yahoogroups.com, vaclav sal <vaclav_sal@> wrote:
> >
> > Mike, since you are looking for a receiving antenna your main objective should be an antenna configuration providing largest possible "capture area". It is not that important to provide feed with "matching impedance" to your receiver. However, a "real" Earth ground is very helpful.
> > 73 Vaclav AA7EJ
> >

> >
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

6410. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 19:08:25 UTC
From: brian russell
Topic: 6395 Message: 6410

Hi,
As a confirmed ' looper ' for many years using basically a W0MHS
' Skywire ' for 40 - 10m QRP operation I have never had any problems
with feeding via 120 ohm flat twin, no ATU required on 40, just a touch of
tweaking on the other bands.
As for impededance, I seem to recall in W8JK's book ' Antennas ' there
is a graph showing the impedance of a closed loop antenna and it has the
75 ohm point coinciding with 0.75 wavelength.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Mike Phillips
To: loopantennas@yahoogroups.com
Sent: Tuesday, March 10, 2009 6:05 PM
Subject: [loopantennas] Loop feed point pics

[Non-text portions of this message have been removed]

6411. Re: Fence-mounted loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 21:15:05 UTC
From: cank13cat
Topic: 6393 Message: 6411

Sounds like my situation (apartment, wooden fence between complexes). I'm considering rigging up a discrete ewe, flag or pennant antenna using the wooden fence as a support. Based on feedback from other MW and HF DXers using these antennas in similar situations (urban and suburban RFI-rich areas), this may do the trick for me.

At the moment my main antenna is a homebrewed passive indoor shielded loop (approx. 3' wide, 7' high). Not bad, but could stand to be a bit quieter and might also work in a variation of the design rigged up on the same wooden fence.

--- In loopantennas@yahoogroups.com, "david_medders" <david@...> wrote:
>
> I have recently moved into a home that is antenna restricted by
> Home-Owners Association. I have approximately 100 feet of 8-foot tall
> wood fence -- supported by spaced metal posts -- that seems an ideal
> location to conceal a loop.

6412. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-11 21:22:40 UTC
From: Jim Dunstan
Topic: 6395 Message: 6412

At 07:08 PM 3/11/2009 +0000, you wrote:

>Hi,
>As a confirmed ' looper ' for many years using basically a W0MHS
>' Skywire ' for 40 - 10m QRP operation I have never had any problems
>with feeding via 120 ohm flat twin, no ATU required on 40, just a touch of
>tweaking on the other bands.
>As for impededance, I seem to recall in W8JK's book ' Antennas ' there
>is a graph showing the impedance of a closed loop antenna and it has the
>75 ohm point coinciding with 0.75 wavelength.
>72, Brian, G0NSL-QRP.

Hi Brian,

I see you mention using 120 ohm balanced feed line (computer cable). I wonder if you could let us know about your experience using this cable for antenna feed. Hve you tried using it at any power levels beyond 5 watts qrp? cable companies used to make low impedance rf balanced line (75 ohm) ... both a low power and high power version. However it has been dropped from the product lines. I used to use it all the time to feed both dipoles and loops. In a pinch I have been using speaker wire and zip cord ... but performance of these products is questionable at RF .... it certainly works ... but I have never seen specs at HF.

For example ... when operating portable at my daughter's house I have a light dipole and feed line made from #16 speaker wire. It works vy well at 20 watts ... but as mentioned I am not sure how efficient it is as the low impedance feed line.

Thanks.

Jim, VE3CI

6413. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-12 15:54:49 UTC
From: Mike Phillips
Topic: 6395 Message: 6413

I sure don't expect one antenna to do it all. Right now I need to know how well these various compact designs actually tune and match. For now it's perfectly fine to have a narrow band antenna, as long as I get some gain out of it. I have a lousy long random wire snaking up through and into the attic to compare my efforts to.

I'm finding encouragement from an article that gives very specific dimensions for loops in the several ghz range. So right now I'm seeing how it scales to 5-60mhz. I'm using all of the loop docs I have found on the various sites, Joe Carr's books and with empiracle testing on the analyzer, for guidance in making the various test loops. The goal being a tuned, broadband loop.

I've found that with a 1ghz loop that adding a solid square reflector of the same size behind the loop, that it can be brought into tune. It's a bit sensitive to tune, but it shows me the concept is possible. I just used a square reflector as it was laying in the junk box.

In one of the articles I have found, it shows great benefit from a parasitic loop added to the same interior plane as the main loop, that the loop becomes very well matched and is tunable without any components. The bandwidth looked to be 2-3 times wider than the same loop without a parasitic element. I roughly proved this one day on the bench. This same article tests a Rhombic pair of loops wired in parallel to make a serious improvement in bandwidth.

Is there a decent loop laying around that I could purchase from someone here in San Jose so I could test a known good loop?

Mike

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
> Mike;
>
> Understood about matching. Thing is, SWL means anything from 1.8 mHz to 30 mHz. No single antenna "cut-to-length" antenna will match across that wide a frequency spread. So now you get into design considerations & tricks.... Off-center fed dipole vs. closed-loop dipole with termination resistor (T2FD) vs. multi-element/multi-length dipole vs tuned loops vs untuned loops vs electrically short active verticals and dipoles.
>
> If you like to stick with resonance as your guiding design principle, I'd suggest looking at the Chris Trask' paper in the files section "Varactor Tuned Loop Antenna.pdf". It's a good starting point. There's great info in the files section and on the web w/ the help of Google.
>
> BTW - I live in a high RF area - lots of AM, FM & TV w/in 10 miles. Tuned antennas (loops in my case) help since they, by nature, act as bandpass filters.
>

> Thoughts?
>
>
> Mark
>
> ==========
>
>
> --- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@> wrote:
> >
> > I hear you. But I can tell you that a matched and tuned antenna also has higher gain. So it will matter on receive as well as transmit, on a given band. At least it shows up that way with Bluetooth. I suspect the band is not important. But I feel that my concept is. Gain is gain weather it's receiving or transmitting.
> >
> > I am not looking for an easy way out. I want a matched and tuned antenna even for just a receiver. Although I could very well pick up a transmitter this year.
> >
> > This is a very interesting research for me. I sure don't mind the investigative time spent.
> >
> > Mike
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, vaclav sal <vaclav_sal@> wrote:
> > >
> > > Mike, since you are looking for a receiving antenna your main objective should be an antenna configuration providing largest possible "capture area". It is not that important to provide feed with "matching impedance" to your receiver. However, a "real" Earth ground is very helpful.
> > > 73 Vaclav AA7EJ
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > > [Non-text portions of this message have been removed]
> > >
> >
>

6414. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-12 16:01:45 UTC
From: Mike Phillips
Topic: 6395 Message: 6414

I've read about the varactor in one of Joe Carr's books. What a neat idea. I'll look more into that. But my goal is tuning without components like we use to do years ago. I think the energy transfer to the air is more efficient so the field strength is maximized.

Mike

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
> Mike;
>
> Understood about matching. Thing is, SWL means anything from 1.8 mHz to 30 mHz. No single antenna "cut-to-length" antenna will match across that wide a frequency spread. So now you get into design considerations & tricks.... Off-center fed dipole vs. closed-loop dipole with termination resistor (T2FD) vs. multi-element/multi-length dipole vs tuned loops vs untuned loops vs electrically short active verticals and dipoles.
>
> If you like to stick with resonance as your guiding design principle, I'd suggest looking at the Chris Trask' paper in the files section "Varactor Tuned Loop Antenna.pdf". It's a good starting point. There's great info in the files section and on the web w/ the help of Google.
>
> BTW - I live in a high RF area - lots of AM, FM & TV w/in 10 miles. Tuned antennas (loops in my case) help since they, by nature, act as bandpass filters.
>
> Thoughts?
>
>
> Mark
>
> ==========
>
>
> --- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@> wrote:
> >
> > I hear you. But I can tell you that a matched and tuned antenna also has higher gain. So it will matter on receive as well as transmit, on a given band. At least it shows up that way with Bluetooth. I suspect the band is not important. But I feel that my concept is. Gain is gain weather it's receiving or transmitting.
> >
> > I am not looking for an easy way out. I want a matched and tuned antenna even for just a receiver. Although I could very well pick up a transmitter this year.
> >
> > This is a very interesting research for me. I sure don't mind the investigative time spent.
> >

> > Mike
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, vaclav sal <vaclav_sal@> wrote:
> > >
> > > Mike, since you are looking for a receiving antenna your main objective should be an antenna configuration providing largest possible "capture area". It is not that important to provide feed with "matching impedance" to your receiver. However, a "real" Earth ground is very helpful.
> > > 73 Vaclav AA7EJ
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > > [Non-text portions of this message have been removed]
> > >
> >
>

6415. Re: [loopantennas] Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 03:10:03 UTC
From: Gary Pewitt
Topic: 6395 Message: 6415

If you want to cover all the SWL bands get an "Evesdropper" antenna. It's a five band trap dipole. It's cut for the shortwave broadcast bands rather than the ham bands although it works well there too. I comes with a twinlead feed -or- a co-ax connector (without the co-ax) and a Zap Trapper lightning protector. I got mine from the AES catalog. All assembled and ready to go. I used one in England in the '60's and am currently using one here in Arkansas. They work great for -receive- only.
73 Gary N9ZSV

aircheckIover wrote:
>
> Mike;
>
> Understood about matching. Thing is, SWL means anything from 1.8 mHz
> to 30 mHz. No single antenna "cut-to-length" antenna will match across
> that wide a frequency spread. So now you get into design
> considerations & tricks.... Off-center fed dipole vs. closed-loop
> dipole with termination resistor (T2FD) vs. multi-element/multi-length
> dipole vs tuned loops vs untuned loops vs electrically short active
> verticals and dipoles.
>
> If you like to stick with resonance as your guiding design principle,
> I'd suggest looking at the Chris Trask' paper in the files section
> "Varactor Tuned Loop Antenna.pdf". It's a good starting point. There's
> great info in the files section and on the web w/ the help of Google.
>
> BTW - I live in a high RF area - lots of AM, FM & TV w/in 10 miles.
> Tuned antennas (loops in my case) help since they, by nature, act as
> bandpass filters.
>
> Thoughts?
>
> Mark
>
> ==========
>
> --- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, "Mike Phillips"
> <mikep_95133@...> wrote:
> >
> > I hear you. But I can tell you that a matched and tuned antenna also
> has higher gain. So it will matter on receive as well as transmit, on
> a given band. At least it shows up that way with Bluetooth. I suspect
> the band is not important. But I feel that my concept is. Gain is gain

> weather it's receiving or transmitting.
> >
> > I am not looking for an easy way out. I want a matched and tuned
> antenna even for just a receiver. Although I could very well pick up a
> transmitter this year.
> >
> > This is a very interesting research for me. I sure don't mind the
> investigative time spent.
> >
> > Mike
> >
> >
> >
> > --- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, vaclav sal <vaclav_sal@> wrote:
> > >
> > > Mike, since you are looking for a receiving antenna your main
> objective should be an antenna configuration providing largest
> possible "capture area". It is not that important to provide feed with
> "matching impedance" to your receiver. However, a "real" Earth ground
> is very helpful.
> > > 73 Vaclav AA7EJ
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > > [Non-text portions of this message have been removed]
> > >
> >
>
>

6416. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 04:52:45 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6416

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /VK7KRW/Wire antennas.pdf
Uploaded by : revex540 <vk7krw@...>
Description : Wire dipoles & verticals

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/VK7KRW/Wire%20antennas.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

revex540 <vk7krw@...>

6417. Wire dipoles & verticals

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 05:02:37 UTC
From: revex540
Topic: 6417 Message: 6417

I have uploaded a pdf file taken from a book by E M Noll, published in 1984. It has construction information on a range of wire dipoles and verticals for the BC & SW bands. It is in the VK7KRW files directory.

Regards
Bob VK7KRW

6418. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 07:39:44 UTC
From: brian russell
Topic: 6395 Message: 6418

Jim,
Thank you for the mail, good to hear from you.
When I first erected my 40m full wave loop back in the 1970's it was
fed with 75 ohm TV co-ax, with an electrical 1/4 wave of feedline the SWR
was 1.5 : 1.0.
I always understood the impedance of a closed loop was in the 110 - 120 ohm region
so when some 93 ohm co-ax came my way in the early 1990's I simply swapped the
75 ohm feedline for an identical length of the 93 ohm, SWR went to 1.15 : 1.0.
This stayed in place until around 6 years ago when working a German station on 40m
he told me his 40m loop was fed with 120 ohm flat twin, naturally having never heard
of this cable I queried it, apparently it had a separation between conductors of 4mm.
I hunted around and found that 15 amp rated DC power line had just that, mainly by virtue
of the thicker insulation.
Again I simply swapped the feeder and by trimming the length to 24ft 3 inches it
produced an SWR of 1.0 :1.0 with no ATU in line, lucky ??? most likely hi!
All my operating has been with a Kenwood TS-130V at 5 watts, SSB only,
however the antenna has been used by a friend with his FT-840 at 100 watts
and no problems.
In the UK years ago we could buy 75 ohm flat twin but having single solid
conductors it was hopeless for breaking in the wind, hence I always use
stranded wire for all antenna work.
The present 40m loop is made of 7 x 0.02mm silver plated PTFE covered wire,
scrap from aircraft wiring looms hi!
Regards,
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

6419. Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 17:40:06 UTC
From: aimo ruoho
Topic: 6419 Message: 6419

Thank you for your emails!

Now I am vey astonished at your policy of
putting prices on certain products.
It seems to me, that you value your R$
almost as high as US $

What might be the corresponding value???

I purchased both the WRTH and Passport
through AMAZON.com.
I paid USD 29.09 for WRTH and 21.59 for
the Passport, both prices post paid!
You know for sure your prices for those
books, R$ 129,00 and R$ 110,00.

Another example: In the USA the price for
Degen DE1103 is from 50 to 85 US$, in Ebay
49.95 US$ + mailing costs. Your price for the
same product is 6 to 8 times higher in plain
numbers of your R$ (How much is the difference of
those two currencies now?)

When you gave me the prices of your
other products, the value of your R$ had
raised too high, at least IMHO, in relation
to the US$...

Either you value the mailing costs very,
very high, or you mix USD and R$ in a very
odd manner...

Conclusion: Your prices are really too high!
It means, that you seem to be too satisfied with
your sales in your own country, and not willing
to be fair with possible foreign customers?

R$ 1500,00 seems to be a very high price, if
the same type of calculation is in effect for
the SONY ICF-2001D / 2010 (almost 30 year
old receiver). I bought one as new in 1985 for
US$ 500.00 in Finland. It is still in very nice
condition.

Love for money seems to raise prices!

Thank you, but nothing more!

Aimo

De: Renato Uliana <pu2lzb_renato@...>
Para: radioescutas@...; rx-br@yahoogrupos.com.br; lojinhadoradioescuta@...
Enviado: jueves, 12 de marzo, 2009 20:24:39
Asunto: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Olá Pessoal,

Chegaram novos modelos de rádios na lojinha do rádioescuta !

O famoso ANJAN DTS-09 - Lançamento !
Um dos rádios mais luxuosos e super bem acabado da categoria !

O DEGEN DE1123
Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB

WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!

========== ========= ========= ========= ========= ========= ======
========== ========= ========= ========= ========= ========= ======
========== ========= ========= ========= ========= ========= ======

Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que ainda não foram anunciados no site por falta de tempo tais como:

Suportes de acrilico transparente para receptores portáteis:

Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...

Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...

Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
DE951
DE952
DE953

Maiores informações visitem:
http://www.amantesd oradio.com. br/loja_on- line.htm

Um forte 73 e boas escutas !

PU2LZB RENATO ULIANA
Grid Locator: GG66rn

========== ========= ========= ========= ========= ===
DXCB - DX Clube do Brasil - www.ondascurtas. com
Site Amantes do Rádio - www.amantesdoradio. com.br
Fique ligado em: www.radioescutas. com
========== ========= ========= ========= ========= ===

[Non-text portions of this message have been removed]

6420. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 17:48:12 UTC
From: aimo ruoho
Topic: 6420 Message: 6420

This seemed to enter my SPAM1
WHY?

_____
De: aimo ruoho <aimounto@...>
Para: lojinhadoradioescuta-owner@yahoogrupos.com.br;
Shortwave-SWL-Antenna@yahoogroups.com; Loopantennas@yahoogroups.com
Enviado: viernes, 13 de marzo, 2009 18:40:06
Asunto: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Thank you for your emails!

Now I am vey astonished at your policy of
putting prices on certain products.
It seems to me, that you value your R$
almost as high as US $

What might be the corresponding value???

I purchased both the WRTH and Passport
through AMAZON.com.
I paid USD 29.09 for WRTH and 21.59 for
the Passport, both prices post paid!
You know for sure your prices for those
books, R$ 129,00 and R$ 110,00.

Another example: In the USA the price for
Degen DE1103 is from 50 to 85 US$, in Ebay
49.95 US$ + mailing costs. Your price for the
same product is 6 to 8 times higher in plain
numbers of your R$ (How much is the difference of
those two currencies now?)

When you gave me the prices of your
other products, the value of your R$ had
raised too high, at least IMHO, in relation
to the US$...

Either you value the mailing costs very,
very high, or you mix USD and R$ in a very
odd manner...

Conclusion: Your prices are really too high!
It means, that you seem to be too satisfied with
your sales in your own country, and not willing
to be fair with possible foreign customers?

R$ 1500,00 seems to be a very high price, if
the same type of calculation is in effect for
the SONY ICF-2001D / 2010 (almost 30 year
old receiver). I bought one as new in 1985 for
US$ 500.00 in Finland. It is still in very nice
condition.

Love for money seems to raise prices!

Thank you, but nothing more!

Aimo

---------- --------- --------- --
De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
Enviado: jueves, 12 de marzo, 2009 20:24:39
Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Olá Pessoal,

Chegaram novos modelos de rádios na lojinha do rádioescuta !

O famoso ANJAN DTS-09 - Lançamento !
Um dos rádios mais luxuosos e super bem acabado da categoria !

O DEGEN DE1123
Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB

WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!

========== ========= ========= ========= ========= ========= ======
========== ========= ========= ========= ========= ========= ======
========== ========= ========= ========= ========= ========= ======

Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que ainda
não foram anunciados no site por falta de tempo tais como:

Suportes de acrilico transparente para receptores portáteis:

Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...

Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...

Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
DE951
DE952
DE953

Maiores informações visitem:
http://www.amantesd oradio.com. br/loja_on- line.htm

Um forte 73 e boas escutas !

PU2LZB RENATO ULIANA
Grid Locator: GG66rn

============ ========= ========= ========= ========= ===
DXCB - DX Clube do Brasil - www.ondascurtas. com
Site Amantes do Rádio - www.amantesdoradio. com.br
Fique ligado em: www.radioescutas. com
============ ========= ========= ========= ========= ===

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6421. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 18:12:21 UTC
From: Jim Dunstan
Topic: 6395 Message: 6421

At 07:39 AM 3/13/2009 +0000, you wrote:

>JIn the UK years ago we could buy 75 ohm flat twin but having single solid
>conductors it was hopeless for breaking in the wind, hence I always use
>stranded wire for all antenna work.
>The present 40m loop is made of 7 x 0.02mm silver plated PTFE covered wire,
>scrap from aircraft wiring looms hi!
>Regards,
>72, Brian, G0NSL-QRP.

Hi Brian,

Thanks for the interesting response re: 120 ohm balanced line. Just a note on the 75 ohm line I used to use .... it was manufactured by Belden Cable ... es came in 2 versions ... the low power version was quite small in diameter .... smaller than RG58 by a half. I don't recall if it used solid conductors or not. The high power version was referred to as 72 ohm Kilowatt cable .... it looked a lot like chunky TV twin lead. It certainly used flexible copper of about #16 or #18 gauge.

Later when I worked in Northern Canada and the Arctic I noticed that the Native trappers used small portable SSB transceivers for communications between the village and the trap line cabins. They used low slung dipoles fed with the low power 72 ohm cable. the radios they used had twin antenna posts for connection to this type of cable ... not coax. Now that also was about 20 years ago. I have not seen that cable anymore ... and I assume the updated radios now use coax feed lines to the dipoles.

By the way the SSB transceivers operated on batteries and put out 2 or 3 watts .... somewhere in the 5 mhz range. The dipoles were simply hung in low hanging branches or supported as an inverted Vee ... often no more than 5 mtrs high. The home village would be in the 20 to 50 mile distance. I was amazed at how effective the systems were ... with excellent communications.

Jim, VE3CI

6422. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 18:17:17 UTC
From: airchecklover
Topic: 6395 Message: 6422

You've piqued my curiosity.
Are you going to be able to build a reflector loop/element that will work at say 6 mHz? Seems to me the large spacing between elements would be a challenge. Please post results. I've got parts on the bench to build an active variactor-tuned loop but have yet to find the time. If the second element idea works, I'm in!

Mark

==========

--- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@...> wrote:
>
> I sure don't expect one antenna to do it all. Right now I need to know how well these various compact designs actually tune and match. For now it's perfectly fine to have a narrow band antenna, as long as I get some gain out of it. I have a lousy long random wire snaking up through and into the attic to compare my efforts to.
>
> I'm finding encouragement from an article that gives very specific dimensions for loops in the several ghz range. So right now I'm seeing how it scales to 5-60mhz. I'm using all of the loop docs I have found on the various sites, Joe Carr's books and with empiracle testing on the analyzer, for guidance in making the various test loops. The goal being a tuned, broadband loop.
>
> I've found that with a 1ghz loop that adding a solid square reflector of the same size behind the loop, that it can be brought into tune. It's a bit sensitive to tune, but it shows me the concept is possible. I just used a square reflector as it was laying in the junk box.
>
> In one of the articles I have found, it shows great benefit from a parasitic loop added to the same interior plane as the main loop, that the loop becomes very well matched and is tunable without any components. The bandwidth looked to be 2-3 times wider than the same loop without a parasitic element. I roughly proved this one day on the bench. This same article tests a Rhombic pair of loops wired in parallel to make a serious improvement in bandwidth.
>
> Is there a decent loop laying around that I could purchase from someone here in San Jose so I could test a known good loop?
>
> Mike
>
>
>
> --- In loopantennas@yahoogroups.com, "airchecklover" <mdh@> wrote:
> >
> > Mike;
> >

> > Understood about matching. Thing is, SWL means anything from 1.8 mHz to 30 mHz. No single antenna "cut-to-length" antenna will match across that wide a frequency spread. So now you get into design considerations & tricks.... Off-center fed dipole vs. closed-loop dipole with termination resistor (T2FD) vs. multi-element/multi-length dipole vs tuned loops vs untuned loops vs electrically short active verticals and dipoles.
> >
> > If you like to stick with resonance as your guiding design principle, I'd suggest looking at the Chris Trask' paper in the files section "Varactor Tuned Loop Antenna.pdf". It's a good starting point. There's great info in the files section and on the web w/ the help of Google.
> >
> > BTW - I live in a high RF area - lots of AM, FM & TV w/in 10 miles. Tuned antennas (loops in my case) help since they, by nature, act as bandpass filters.
> >
> > Thoughts?
> >
> >
> > Mark
> >
> > ==========
> >
> >
> > --- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@> wrote:
> > >
> > > I hear you. But I can tell you that a matched and tuned antenna also has higher gain. So it will matter on receive as well as transmit, on a given band. At least it shows up that way with Bluetooth. I suspect the band is not important. But I feel that my concept is. Gain is gain weather it's receiving or transmitting.
> > >
> > > I am not looking for an easy way out. I want a matched and tuned antenna even for just a receiver. Although I could very well pick up a transmitter this year.
> > >
> > > This is a very interesting research for me. I sure don't mind the investigative time spent.
> > >
> > > Mike
> > >
> > >
> > >
> > > --- In loopantennas@yahoogroups.com, vaclav sal <vaclav_sal@> wrote:
> > > >
> > > > Mike, since you are looking for a receiving antenna your main objective should be an antenna configuration providing largest possible "capture area". It is not that important to provide feed with "matching impedance" to your receiver. However, a "real" Earth ground is very helpful.
> > > > 73 Vaclav AA7EJ
> > > >
> > > >
> > > >
> > > >

> > > >
> > > >
> > > >
> > > > [Non-text portions of this message have been removed]
> > > >
> > >
> >
>

6423. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 18:28:55 UTC
From: Mike Phillips
Topic: 6395 Message: 6423

I have a half hearted try at a large loop. It's taking up a huge part of my lab space. I have not measured the circumference yet. I'm guessing it's 20-25 feet in cir. It's made from 3/8" copper tubing. Making it match won't be easy because it's coupled to a million things that are just laying around. Also it needs a solid feedpoint installed. Right now it's just some 24ga jumpers from a BNC connector.

I have been experimenting with 3" diameter loops just because it's so easy to make and handle.

If you know of any pics of a gamma matched type of loop where the coax connector is mounted, would help. I have a 75' length of RG8, but that's too unwieldy for my bench. So I use a 3' RG58 piece of coax and BNC connectors.

Mike

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
> You've piqued my curiosity.
> Are you going to be able to build a reflector loop/element that will work at say 6 mHz? Seems to me the large spacing between elements would be a challenge. Please post results. I've got parts on the bench to build an active variactor-tuned loop but have yet to find the time. If the second element idea works, I'm in!
>
> Mark
>
> ==
>
>
> --- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@> wrote:
> >
> > I sure don't expect one antenna to do it all. Right now I need to know how well these various compact designs actually tune and match. For now it's perfectly fine to have a narrow band antenna, as long as I get some gain out of it. I have a lousy long random wire snaking up through and into the attic to compare my efforts to.
> >
> > I'm finding encouragement from an article that gives very specific dimensions for loops in the several ghz range. So right now I'm seeing how it scales to 5-60mhz. I'm using all of the loop docs I have found on the various sites, Joe Carr's books and with empiracle testing on the analyzer, for guidance in making the various test loops. The goal being a tuned, broadband loop.
> >
> > I've found that with a 1ghz loop that adding a solid square reflector of the same size behind the loop, that it can be brought into tune. It's a bit sensitive to tune, but it shows me the concept is possible. I just used a square reflector as it was laying in the junk box.
> >

> > In one of the articles I have found, it shows great benefit from a parasitic loop added to the same interior plane as the main loop, that the loop becomes very well matched and is tunable without any components. The bandwidth looked to be 2-3 times wider than the same loop without a parasitic element. I roughly proved this one day on the bench. This same article tests a Rhombic pair of loops wired in parallel to make a serious improvement in bandwidth.
> >
> > Is there a decent loop laying around that I could purchase from someone here in San Jose so I could test a known good loop?
> >
> > Mike
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "airchecklover" <mdh@> wrote:
> > >
> > > Mike;
> > >
> > > Understood about matching. Thing is, SWL means anything from 1.8 mHz to 30 mHz. No single antenna "cut-to-length" antenna will match across that wide a frequency spread. So now you get into design considerations & tricks.... Off-center fed dipole vs. closed-loop dipole with termination resistor (T2FD) vs. multi-element/multi-length dipole vs tuned loops vs untuned loops vs electrically short active verticals and dipoles.
> > >
> > > If you like to stick with resonance as your guiding design principle, I'd suggest looking at the Chris Trask' paper in the files section "Varactor Tuned Loop Antenna.pdf". It's a good starting point. There's great info in the files section and on the web w/ the help of Google.
> > >
> > > BTW - I live in a high RF area - lots of AM, FM & TV w/in 10 miles. Tuned antennas (loops in my case) help since they, by nature, act as bandpass filters.
> > >
> > > Thoughts?
> > >
> > >
> > > Mark
> > >
> > > ==========
> > >
> > >
> > > --- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@> wrote:
> > > >
> > > > I hear you. But I can tell you that a matched and tuned antenna also has higher gain. So it will matter on receive as well as transmit, on a given band. At least it shows up that way with Bluetooth. I suspect the band is not important. But I feel that my concept is. Gain is gain weather it's receiving or transmitting.
> > > >
> > > > I am not looking for an easy way out. I want a matched and tuned antenna even for just a receiver. Although I could very well pick up a transmitter this year.
> > > >

> > > > This is a very interesting research for me. I sure don't mind the investigative time spent.
> > > >
> > > > Mike
> > > >
> > > >
> > > >
> > > > --- In loopantennas@yahoogroups.com, vaclav sal <vaclav_sal@> wrote:
> > > > >
> > > > > Mike, since you are looking for a receiving antenna your main objective should be an antenna configuration providing largest possible "capture area". It is not that important to provide feed with "matching impedance" to your receiver. However, a "real" Earth ground is very helpful.
> > > > > 73 Vaclav AA7EJ
> > > > >
> > > > >
> > > > >
> > > > >
> > > > >
> > > > >
> > > > >
> > > > > [Non-text portions of this message have been removed]
> > > > >
> > > > >
> > > >
> > >
> >

6424. SWR and gain.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 18:45:00 UTC
From: Mike Phillips
Topic: 6424 Message: 6424

The last few nights, I've been experimenting with loops that I see how they respond to having a sheet of aluminum foil or copper pcb, behind them. It allows some coupling that seems to really increase gain. It's just quick and dirty tests, but it seems to be repeatable.

One thing that I found and remembered from years ago, is that a low swr does not generate a high gain. I was hitting 1.01 swr and yet the gain was low. This is where having a repeatable, mechanically solid loop antenna on my bench would help. That's why I'm looking to buy a completed loop antenna. Maybe the DeAnza swap meet will have one tomorrow.

Making one that can be tested repeatedly is another level of testing that I am aiming for.

Mike

6425. Re: SWR and gain.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 20:34:29 UTC
From: Hiram
Topic: 6424 Message: 6425

Mike,
At frequencies of 1Ghz and up, things behave differently. That is why the feedpoint is critical, a few fractions of an inch equal a significant fraction of a wavelength, where at HF, these are much less critical.
At HF, a two element beam will give around 6db gain over a dipole. In essence, it is a dipole, with a reflector element positioned around 0.2 wavelengths away. Tuning your transmitter away from the antenna's resonant frequency will increase the SWR, and reduce the effective radiated power, thus giving an apparent reduction in gain for the same power output. I really don't see how you can increase the gain AND the SWR, it just doesn't add up.
How are you measuring the gain in your example below? While low SWR doesn't GENERATE gain, high SWR doesn't either! There must be some other effect at work here.
Not to put too fine a point on it, but on this group we have almost a hundred years of accumulative research on antennas at HF.
Your best bet is to put a half wave coax fed dipole in your attic, and then compare everything else to it. The half wave dipole is the "rule of thumb" for comparing antenna performance. A trapped dipole will resonate on more frequencies, but with less gain. A random wire will work fine, especially with a tuner of some sort. The tradeoff is going to be broadband vs. gain. Typically you can have high gain at one frequency, or receive on a wide spectrum at somewhat reduced gain. Other things that affect gain will be height above ground, inside vs. outside, diameter of the conductor, and so on.
Good luck,
Pappy Hiram

--- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@...> wrote:
>
> The last few nights, I've been experimenting with loops that I see how they respond to having a sheet of aluminum foil or copper pcb, behind them. It allows some coupling that seems to really increase gain. It's just quick and dirty tests, but it seems to be repeatable.
>
> One thing that I found and remembered from years ago, is that a low swr does not generate a high gain. I was hitting 1.01 swr and yet the gain was low. This is where having a repeatable, mechanically solid loop antenna on my bench would help. That's why I'm looking to buy a completed loop antenna. Maybe the DeAnza swap meet will have one tomorrow.
>
> Making one that can be tested repeatedly is another level of testing that I am aiming for.
>
> Mike
>

6426. Re: SWR and gain.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 22:37:13 UTC
From: Mike Phillips
Topic: 6424 Message: 6426

--- In loopantennas@yahoogroups.com, "Hiram" <daveleb55@...> wrote:
>
> Mike,
> At frequencies of 1Ghz and up, things behave differently. That is why the feedpoint is critical, a few fractions of an inch equal a significant fraction of a wavelength, where at HF, these are much less critical.

Sure, I can see that.

> At HF, a two element beam will give around 6db gain over a dipole. In essence, it is a dipole, with a reflector element positioned around 0.2 wavelengths away. Tuning your transmitter away from the antenna's resonant frequency will increase the SWR, and reduce the effective radiated power, thus giving an apparent reduction in gain for the same power output. I really don't see how you can increase the gain AND the SWR, it just doesn't add up.

Maybe me using the word increase is incorrect. How about if I said improve the swr and improve the gain?

> How are you measuring the gain in your example below? While low SWR doesn't GENERATE gain, high SWR doesn't either! There must be some other effect at work here.

I'm using a Vector Network Analyser for my tests. An Advantest 3765CG. It shows the swr, gain, and Smith chart of whatever is tied to one of three ports. This unit can find the resonances of anything by sweeping from .3khz to 3.8ghz. With BMC connectors and RG8/RG58 coax there are lots of reflections and anamolies, so I stick to everything in lower range of the analyzer for HF.

> Not to put too fine a point on it, but on this group we have almost a hundred years of accumulative research on antennas at HF.

Understood. I didn't think I was debating anyone, just looking at these designs from the perspective of the analyzer. The data generated by a VNA is something to behold. When used correctly it can lend a critical perspective to any antenna design. After working with VNA's, it's ruined my perspective forever on antenna testing and design. I will try and make a video of what happens while I'm working on an antenna design and show what the analyzer is telling me. It's incredibly informative. I worked with possibly one of the best antenna designers in the world and thought I had found the best job in the world. Have you heard of Rob Hill?

> Your best bet is to put a half wave coax fed dipole in your attic, and then compare everything else to it. The half wave dipole is the "rule of thumb" for comparing antenna performance. A trapped dipole will resonate on more frequencies, but with less gain. A random wire will work fine, especially with a tuner of some sort. The trade off is going to be broadband vs. gain. Typically you can have high gain at one frequency, or receive on a wide spectrum at somewhat reduced gain. Other things that affect gain will be height above ground, inside vs. outside, diameter of the conductor, and so on.

I do need a good reference antenna. Since my old receiver only has the 'antenna' and 'ground' clips on the back, can I use coax to bring the signal down?

Mike

> Good luck,
> Pappy Hiram
>
>
>
> --- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@> wrote:
> >
> > The last few nights, I've been experimenting with loops that I see how they respond to having a sheet of aluminum foil or copper pcb, behind them. It allows some coupling that seems to really increase gain. It's just quick and dirty tests, but it seems to be repeatable.
> >
> > One thing that I found and remembered from years ago, is that a low swr does not generate a high gain. I was hitting 1.01 swr and yet the gain was low. This is where having a repeatable, mechanically solid loop antenna on my bench would help. That's why I'm looking to buy a completed loop antenna. Maybe the DeAnza swap meet will have one tomorrow.
> >
> > Making one that can be tested repeatedly is another level of testing that I am aiming for.
> >
> > Mike
> >
>

6427. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-13 22:03:58 UTC
From: David Towers
Topic: 6395 Message: 6427

Hi Jim
the low dipole aerials are known as NVIS antenna

and some info is shown below from the Yahoo NVIS group files
73
daveG8SZX

NVIS -- Near Vertical Incident Skywave Antenna:
The Emergency Communications Antenna

By Stephen C. Finch, AIØW

Introduction

The antenna axiom, "the higher, the better," is true for working distant stations. Generally antennas that are installed physically high up tend to have more of their radiated energy leaving the antenna at a lower angle . This causes the skip distance of our signal to be as far away as possible. Depending on the sunspot cycle, time of day, and transmitter frequency, that distance can be from 300 miles at 3.5 mhz to worldwide communications at 14-28 mhz.

But what if we need reliable communications with a station 25 or 100 miles away. Regardless of frequency, our signal skips over the close-in station and no communication is possible. Yes, there is ground wave, but in our mountainous terrain, ground wave may be only a few miles, and then not very reliable. What do we do to eliminate this "skip zone?"

Our answer is not to increase power, try to set up VHF repeaters, or other drastic measures. The answer is simple, install an NVIS antenna, select the appropriate operating frequency, and reliable communications from 0 to 300 miles becomes very achievable.

Propagation

As the signals leave the antennas, they travel up and are refracted off the various ionosphere layers. The lower the signal's incident angle and the higher the layer of refraction, the farther away from the transmitter the signal returns to earth.

For most hams' "typical operation," we seldom care where our signal lands. We are interested in communication with anyone. Sometimes, we choose frequencies to increase our chances to "work" a station in a far-distant place. Some hams pour over propagation charts, design elaborate antennas, and operate at all hours of the day and night to "bag that rare one."

When close-in, reliable communications is need, guess-work and luck is not good enough. Our understanding of frequency verses propagation becomes even more critical. What we need is propagation that covers from about 10 miles up to 400 miles with no skip zones.

We can see from the diagram to the left, that signals which leave our antenna in a near-vertical direction will travel up to the ionosphere and are reflected back. It is like spraying a hose in a fine droplet pattern, straight-up. The droplets of water fall back to earth in a pattern that covers the ground evenly with moisture close to where we are standing. The pattern from an NVIS antenna does much the same with the transmitted signal. The majority of the signal is transmitted between 75 and 90 degrees straight-up. In fact the 3D antenna pattern looks like a bowl set upside down.

The Antenna

The simplest NVIS antenna is a dipole cut for resonance on the operating frequency and installed at 1/8 wavelength above the ground. For the ARES ssb frequency of 3928 khz, the antenna would be about 120 feet long and mounted at 30 feet. With our rocky, dry ground, lowering the antenna to 20 feet may be advisable as the effective ground lies below the surface of the actual ground. In fact any height from laying the wire on the ground, to an 1/8 wavelength will work. The main difference between the higher antenna and the lower antenna is the gain or loss of the antenna.

The EZNEC pattern shows the radiation pattern for an antenna mounted 1/8 wavelength off the ground. Notice that most of the energy is between about 30 degrees both sides from vertical. This where we want the energy to go. Notice the gain of the antenna is about 6 db. This over perfect ground. It will be less over actual ground, but ant any rate, the antenna will have a positive gain.

With is this diagram, we have lowered the antenna from 1/8 wavelength (32 ft.) to 9 feet. Notice that the pattern is nearly identical. However, the antenna gain has dropped from 6 dbi to -1.37 dbi. This means that the signal radiated off the 9 ft. high antenna is less than 1/4th the signal radiated off the 32.5 ft. high antenna. While this seems significant, the questions is "Is this loss actually significant in received signal strength?"

Path Losses

Lets take a look at the received signal strength as transmitted by different transmitter output levels. The large table, Very Close-in stations, shows the received signal strength for both the 1/8 wavelength (32.5 ft.) and the 9 ft. antenna height.

Even with the low antenna of only 9 ft., the received signal strength is still an S7. Most receivers have a noise floor of better than -125 dbm. However, the average noise level of 75/80 meters is about -112 dbm or an S3. That means that for a +10 dbm SNR (signal to noise ratio),

the received signal strength must be -102 dbm or an S4-5. Notice that regardless of which antenna is used, the received signal strength is at least -82 dbm or S7 with using one watt at 9 ft. . .So even an inefficient antenna will work quite well for close-in communication.

Distance between Stations in Communication

Both antennas have a -3db bandwidth of approximately 100 degrees or 50 degrees either side of vertical. We can calculate the take-off angles required to communicate with close-in stations at various distances. Once we assume the height of the F2 -layer, simple geometry is all that is needed. The following table summarizes the antenna take-off angles needed when the F2 layer is 250 miles up.

SeparationDistance	Take-offAngle
25.0	87.14
50.0	84.29
75.0	81.47
100.0	78.69
125.0	75.96
150.0	73.30
175.0	70.71
200.0	68.20
225.0	65.77
250.0	63.43

For very close-in stations 2

Transmitting Antenna Height	Total Signal Transmitter	32.5 ft. Out Path	Signal Height 32.5 ft. At Receiver	S-Meter Reading
Output, W	db output	Gain Loss 1	Gain Input	Plus
100.0	50.0	6.2	56.2 -110.0	6.2 -47.6 S9 25
50.0	47.0	6.2	53.2 -110.0	6.2 -50.6 S9 22
25.0	44.0	6.2	50.2 -110.0	6.2 -53.6 S9 19
5.0	37.0	6.2	43.2 -110.0	6.2 -60.6 S9 12
1.0	30.0	6.2	36.2 -110.0	6.2 -67.6 S9 5

Note: -73 db is S9 at 50 ohm input.

1 As calculated by the "TwoHop" propagation program with my adjustments. Does not include transmission line losses.
2 Stations within 50 miles of each other.

Transmitting Antenna Height	Total Signal Transmitter	9 ft. Out Path	Signal Height 9 ft. At Receiver	S-Meter Reading
Output, W	db output	Gain Loss 1	Gain Input	Plus

100.0 50.0 -1.4 48.6 -110.0 -1.4 -62.8 S9 10
50.0 47.0 -1.4 45.6 -110.0 -1.4 -65.8 S9 7
25.0 44.0 -1.4 42.6 -110.0 -1.4 -68.8 S9 4
5.0 37.0 -1.4 35.6 -110.0 -1.4 -75.8 S8
1.0 30.0 -1.4 28.6 -110.0 -1.4 -82.8 S7

Selecting the Correct Frequency

Besides having low antenna height, the next most important factor is selection of the proper operating frequency. We need to select a frequency that is reflected by the F2-layer, but is not absorbed or significantly degraded by the D-layer. The higher the frequency, the less the D-layer will affect the signal. However, too high a frequency, and the signal will pass through the F2-layer.

Fortunately, we can determine the best operating frequency from propagation information on the internet and some relatively simple calculations. A good place to find the F2 critical frequency is at http://www.spacew.com/www/fof2.html. An example is shown to the left.

This map shows the F2 critical frequency, fo for the entire world. It is updated every five minutes so the map is very current. Other good URLs for links to many propagation information sites are http://solar.spacew.com/ and http://www.qsl.net/va3rj/prop_links.html.

Once we know the critical frequency, we can determine the proper operating frequency. The theory behind the selection is straight-forward. We need to select the frequency that is the highest possible without passing through the F2-layer. There are three concepts to recognize.

First, the critical frequency for the F2-layer is foF2 or just fo. This is the highest frequency that will be reflected back to earth from the F2-layer when hitting the F2-layer at a perpendicular angle, i.e. the angle of incidence is 0 degrees.. Go higher in frequency and the signal will pass thorough the F2-layer into space and is lost for communications.

Second, MUF, or maximum useable frequency, the highest frequency we can use and still achieve good reflection/refraction off the F2-layer. The formula for MUF is:

MUF = fo/sin(?)

where fo is the critical frequency and ? is the angle of incidence.

The MUF therefore is a function of the critical frequency and the angle at which the signal hits the F2-layer. Note that the frequency can be increased as the angle of incidence is lowered. In NVIS operations, we want the signal to "hit" the F2-layer at nearly a 90 degree angle. The sine of 90 degrees is 1. In fact the sine does not fall below 0.95 until the incident angle is below 72 degrees. Since nearly all the useable radiation falls within the 90 degrees + or -- 20 degrees, for an NVIS antenna, the MUF is essentially the critical frequency.

The third concept is FOT, frequency of optimum traffic. The FOT is the frequency where nearly 100% communication is achievable. The formula for FOT is:

FOT = MUF * .85
Or for an NVIS antenna
FOT = fo * .85

A amateur radio operators, we are limited to ham bands for operation. Thus, our frequency selection becomes choosing the 160, 80, 60, or 40 meter bands for our communications. As a side note, the importance of the 60 meter band becomes apparent when considering reliable emergency communications. The gap between the 80 and 40 meter bands is very large when there is a need to establish a reliable, close-in communication link.

Finally, the FOT will change from daylight to nighttime. During the day, the F1 and F2-layers separate and the D-layer forms. This favors the use of 40 meters due to much greater absorption of 80 meter signals by the D-layer. During the gray light times, 60 meters may be come the FOT.

At night, the D-layer disappears and the F1-layer merges with the F2-layer. Thus, during the day, FOT will be higher than in the nighttime. During sunspot minimums, the FOT may even be in the 160 meter range during the night. However, using 160 meter, horizontal antennas can be a problem because of size.

Using EZNEC, if the 3.715 mhz dipole is used at 1.8 mhz, the antenna losses at 30 feet height are about -3 to -4 db loss. This still means that the received signal should be greater than 10 db over the noise level when a 25 watt or greater transmitter is used. At`1.8 mhz, even though the SWR of the antenna system is very high, the additional losses due to SWR are minimal.

In Summary

In order to achieve reliable , close-in communications, normal amateur antennas may not work. To achieve reliable communications, NVIS techniques are needed. A simple resonate dipole installed at a height up to 1/8 wavelength works very well as the majority of the radiated signal goes straight up.

This "Near Vertical Incident Skywave" hits the F2-layer and is reflected back to earth equally covering the surface with signals from 10 to about 400 miles from the transmitting station. It is necessary to select the proper operating frequency in order to achieve the optimum NVIS operation. Choosing frequencies near 85% of the F2-layer critical frequency are best for use.

Jim Dunstan wrote:
> At 07:39 AM 3/13/2009 +0000, you wrote:
>
>
>> JIn the UK years ago we could buy 75 ohm flat twin but having single solid

>> conductors it was hopeless for breaking in the wind, hence I always use
>> stranded wire for all antenna work.
>> The present 40m loop is made of 7 x 0.02mm silver plated PTFE covered wire,
>> scrap from aircraft wiring looms hi!
>> Regards,
>> 72, Brian, G0NSL-QRP.
>>
>
>
> Hi Brian,
>
> Thanks for the interesting response re: 120 ohm balanced line. Just a note
> on the 75 ohm line I used to use .... it was manufactured by Belden Cable
> ... es came in 2 versions ... the low power version was quite small in
> diameter .... smaller than RG58 by a half. I don't recall if it used solid
> conductors or not. The high power version was referred to as 72 ohm
> Kilowatt cable .... it looked a lot like chunky TV twin lead. It certainly
> used flexible copper of about #16 or #18 gauge.
>
> Later when I worked in Northern Canada and the Arctic I noticed that the
> Native trappers used small portable SSB transceivers for communications
> between the village and the trap line cabins. They used low slung dipoles
> fed with the low power 72 ohm cable. the radios they used had twin antenna
> posts for connection to this type of cable ... not coax. Now that also was
> about 20 years ago. I have not seen that cable anymore ... and I assume
> the updated radios now use coax feed lines to the dipoles.
>
> By the way the SSB transceivers operated on batteries and put out 2 or 3
> watts .... somewhere in the 5 mhz range. The dipoles were simply hung in
> low hanging branches or supported as an inverted Vee ... often no more than
> 5 mtrs high. The home village would be in the 20 to 50 mile distance. I
> was amazed at how effective the systems were ... with excellent communications.
>
> Jim, VE3CI
>
>
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.

Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>

[Non-text portions of this message have been removed]

6428. Files section?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 03:07:38 UTC
From: Mike Phillips
Topic: 6428 Message: 6428

I thought tonight would be a good night to look at some of the designes in the files section. But I cannot get them to upload from work or from home. Is it our group or is it just Yahoo? It's been like this all day.

Mike

6429. Re: [loopantennas] Files section?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 08:52:55 UTC
From: C. Beijersbergen
Topic: 6428 Message: 6429

At UTC 08.50 it worked fine for me.

Cor Beijersbergen

I thought tonight would be a good night to look at some of the designes in the files section. But I cannot get them to upload from work or from home. Is it our group or is it just Yahoo? It's been like this all day.

Mike

[Non-text portions of this message have been removed]

6430. Re: [loopantennas] Files section?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 07:51:02 UTC
From: David Towers
Topic: 6428 Message: 6430

Hi Mike
working fine here in UK
73
daveG8SZX

Mike Phillips wrote:
> I thought tonight would be a good night to look at some of the designes in the files section. But I cannot get them to upload from work or from home. Is it our group or is it just Yahoo? It's been like this all day.
>
> Mike

6431. Re: [loopantennas] Files section?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 12:00:10 UTC
From: Mel
Topic: 6428 Message: 6431

Maybe it's you Mike, are you right clicking on them. No problem on
this end.

Mel
----- Original Message -----
From: "Mike Phillips" <mikep_95133@...>
To: <loopantennas@yahoogroups.com>
Sent: Friday, March 13, 2009 11:07 PM
Subject: [loopantennas] Files section?

>I thought tonight would be a good night to look at some of the designes in
>the files section. But I cannot get them to upload from work or from home.
>Is it our group or is it just Yahoo? It's been like this all day.
>
> Mike

6432. Re: Files section?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 14:24:20 UTC
From: Steve
Topic: 6428 Message: 6432

Roughly every 30 minutes, Yahoogroups generates a new page with slightly different links to the files. This is to prevent bandwidth leeching (leaching?). So if you go to a file folder, wait a bit, and try to download a file, you'll get errors. Reload the folder page, and you should be able to download.

See all this extra junk? That's what they keep altering:
<http://f1.grp.yahoofs.com/v1/YLi7ScGjzBKH4-KyVgGEETOCs9gQJ3nVRhPDxkYXkSzkRiHrtjor0_tUM3Xo4h1_hHyR_TTn-ytPoGCsavBMpQ/Daves_Loops/LoopAndRadio.jpg>

Those of you attempting to open that within the next 20 to 30 minutes (7:21am PST) will probably be able to open that link, after that it will give a "page not found" error.

But you can get tricky. Copy and paste the folder link:

http://groups.yahoo.com/group/loopantennas/files/Daves_Loops/

Now copy just the file name itself:

LoopAndRadio.jpg

Now put the two together:

<http://groups.yahoo.com/group/loopantennas/files/Daves_Loops/LoopAndRadio.jpg>

Tada! A link that works as long as the file is there.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@...> wrote:
>
> I thought tonight would be a good night to look at some of the designes in the files section. But I cannot get them to upload from work or from home. Is it our group or is it just Yahoo? It's been like this all day.
>
> Mike
>

6433. Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 14:26:48 UTC
From: Steve
Topic: 6420 Message: 6433

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>
>
> _____
> De: aimo ruoho <aimounto@...>
> Para: lojinhadoradioescuta-owner@...; Shortwave-SWL-Antenna@yahoogroups.com;
Loopantennas@yahoogroups.com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport
> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!
> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for
> Degen DE1103 is from 50 to 85 US$, in Ebay
> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain
> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your

> other products, the value of your R$ had
> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing
> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice
> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> ---------- --------- --------- --
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !
>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>
> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>
> ========== ========= ========= ========= ========= ========= ======
> ========== ========= ========= ========= ========= ========= ======
> ========== ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que

ainda não foram anunciados no site por falta de tempo tais como:
>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>
> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ============ ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ============ ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6434. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 17:00:59 UTC
From: Jim Dunstan
Topic: 6395 Message: 6434

At 10:03 PM 3/13/2009 +0000, you wrote:

>Hi Jim
>the low dipole aerials are known as NVIS antenna
>
>and some info is shown below from the Yahoo NVIS group files
>73
>daveG8SZX
>
>NVIS -- Near Vertical Incident Skywave Antenna:
>The Emergency Communications Antenna
>
>By Stephen C. Finch, AIØW

Hi Dave,

Again very interesting .... and nostalgic .... when I mentioned being in the Arctic I was working at a scientific research station and one of the functions we carried out was Ionospheric measurement by sounding the layers vertically and horizontally. We recorded the sounding results on film and I remember rolling the 24 hour film each morning and noting the resultant layers etc... .... We immediately coded the results and sent the results to Ottawa by CW. which in turn was forwarded on to Bolder Colorado which contributed to daily propagation reports.

The vertical hf sounding used a NVIS antenna and the horizontal sounding took place between our camp and Ottawa in the south. For this sounding we use a large rhombic antenna .... pointed south hi hi. Between sounding I often hooked up a small ham transmitter and worked stations in the Antarctic hi hi. HF propagation is interesting stuff.

Close communications ... e.g. 40-75 miles works vy well at 5 mhz with NVIS antenna ... a low dipole seems ideal. One one of my favourite portable antennas is an inverted vee about 35 mtrs long with the centre about 10 mtrs high and the wire ends near the ground. On 80 mtrs it is great at up to 150 miles and on 20m it will work well out to 600 miles.

Jim, VE3CI

6435. Re: [loopantennas] Files section?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 18:29:57 UTC
From: MD3381@AOL.COM
Topic: 6428 Message: 6435

Maybe you need to click on " show images" at the top of the e-mail.

In a message dated 3/14/2009 10:19:37 A.M. Eastern Daylight Time,
robinson4724@... writes:

Maybe it's you Mike, are you right clicking on them. No problem on
this end.

Mel
----- Original Message -----
From: "Mike Phillips" <_mikep_95133@mikep_951_
(mailto:mikep_95133@...) >
To: <_loopantennas@loopantennasloo_ (mailto:loopantennas@yahoogroups.com) >
Sent: Friday, March 13, 2009 11:07 PM
Subject: [loopantennas] Files section?

>I thought tonight would be a good night to look at some of the designes in
>the files section. But I cannot get them to upload from work or from home.
>Is it our group or is it just Yahoo? It's been like this all day.
>
> Mike

**********Worried about job security? Check out the 5 safest jobs in a
recession.
(http://jobs.aol.com/gallery/growing-job-industries?ncid=emlcntuscare00000002)

[Non-text portions of this message have been removed]

6436. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 21:14:42 UTC
From: aimo ruoho
Topic: 6420 Message: 6436

Thanks!
I posted it here and elsewhere for the people to see,
what kind of opportunists there are to eagerly hunting after
our money!
thanks for interest.
Aimo

_____
De: Steve <alienrelics@yahoo.com>
Para: loopantennas@yahoogroups.com
Enviado: sábado, 14 de marzo, 2009 15:26:48
Asunto: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>
> _____ _____ _____ __
> De: aimo ruoho <aimounto@.. .>
> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport

> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!
> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for
> Degen DE1103 is from 50 to 85 US$, in Ebay
> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain
> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your
> other products, the value of your R$ had
> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing
> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice
> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> __________ _________ _________ __
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !

>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !
>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>
> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>
> ========== ========= ========= ========= ========= ========= ======
> ========== ========= ========= ========= ========= ========= ======
> ========== ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que ainda não foram anunciados no site por falta de tempo tais como:
>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>
> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ========== ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ========== ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>

>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

6437. Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-14 23:37:43 UTC
From: David Feldman
Topic: 6437 Message: 6437

Couple of years ago I remember an article in QST that described a magnetic loop built from copper tubing that was mounted to the bed stakes of a pickup truck. My QSTs are scattered and I am having trouble finding the article. Does anyone remember which issue?

Tks,

Dave

6438. Re: Files section?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 04:51:04 UTC
From: Mike Phillips
Topic: 6428 Message: 6438

It cured itself tonight at least. It was odd that I had this download problem with some of my Yahoo groups at work and at home. Maybe a local issue?

Thanks for the help gents.

Mike

--- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@...> wrote:
>
> I thought tonight would be a good night to look at some of the designes in the files section. But I cannot get them to upload from work or from home. Is it our group or is it just Yahoo? It's been like this all day.
>
> Mike
>

6439. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 20:50:10 UTC
From: aimo ruoho
Topic: 6420 Message: 6439

Was this a bad day again for the person, wo decides, what goes to SPAM and what doesn't?
My "thanks" went to spam, but more than 10 emails, which should have gone to spam, didn't!!!
This happens all the time!
Hotmail.com has a very much better, almost perfect control. but here in our yahoogroups I must from day to day be my own controller.
WHY? (If this goes to spam, I'll be very glad to to get out from this kind of a group.)

Without Best Regards,
Aimo Unto Olavi Ruoho

De: aimo ruoho <aimounto@...>
Para: loopantennas@yahoogroups.com
Enviado: sábado, 14 de marzo, 2009 22:14:42
Asunto: Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Thanks!
I posted it here and elsewhere for the people to see,
what kind of opportunists there are to eagerly hunting after
our money!
thanks for interest.
Aimo

De: Steve <alienrelics@ yahoo.com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 15:26:48
Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>

> _____ _____ _____ __
> De: aimo ruoho <aimounto@.. .>
> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport
> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!
> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for
> Degen DE1103 is from 50 to 85 US$, in Ebay
> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain
> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your
> other products, the value of your R$ had
> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing
> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice

> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> _____ _____ _____ __
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !
>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>
> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>
> ========== ========= ========= ========= ========= ========= ======
> ========== ========= ========= ========= ========= ========= ======
> ========== ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que
ainda não foram anunciados no site por falta de tempo tais como:
>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>

> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ============ ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ============ ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6440. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 21:03:36 UTC
From: aimo ruoho
Topic: 6420 Message: 6440

You did it again!

_____
De: aimo ruoho <aimounto@...>
Para: loopantennas@yahoogroups.com
Enviado: domingo, 15 de marzo, 2009 21:50:10
Asunto: Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Was this a bad day again for the person, wo decides, what goes to SPAM and what doesn't?
My "thanks" went to spam, but more than 10 emails, which should have gone to spam, didn't!!!
This happens all the time!
Hotmail.com has a very much better, almost perfect control. but here in our yahoogroups I must from day to day be my own controller.
WHY? (If this goes to spam, I'll be very glad to to get out from this kind of a group.)

Without Best Regards,
Aimo Unto Olavi Ruoho

_____
De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 22:14:42
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Thanks!
I posted it here and elsewhere for the people to see,
what kind of opportunists there are to eagerly hunting after
our money!
thanks for interest.
Aimo

_____
De: Steve <alienrelics@ yahoo.com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 15:26:48
Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>
> __________ _________ _________ __
> De: aimo ruoho <aimounto@.. .>
> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport
> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!
> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for
> Degen DE1103 is from 50 to 85 US$, in Ebay
> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain
> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your
> other products, the value of your R$ had
> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing

> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice
> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> __________ _________ _________ __
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !
>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>
> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que
ainda não foram anunciados no site por falta de tempo tais como:
>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:

> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>
> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ============ ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ============ ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6441. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 21:06:57 UTC
From: aimo ruoho
Topic: 6420 Message: 6441

Now you did for the 3rd time!!!

thanks for interest.
Aimo

_____ _____ _____ __
De: Steve <alienrelics@ yahoo.com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 15:26:48
Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>
>
> _____ _____ _____ __
> De: aimo ruoho <aimounto@.. .>
> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport
> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!
> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for
> Degen DE1103 is from 50 to 85 US$, in Ebay
> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain

> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your
> other products, the value of your R$ had
> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing
> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice
> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> __________ _________ _________ __
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !
>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>
> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>
> ========== ========= ========= ========= ========= ========= ======

> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que ainda não foram anunciados no site por falta de tempo tais como:
>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>
> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ============ ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ============ ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6442. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 21:08:46 UTC
From: aimo ruoho
Topic: 6420 Message: 6442

Do you think, that you can do anything, that you want?

De: aimo ruoho <aimounto@...>
Para: loopantennas@yahoogroups.com
Enviado: domingo, 15 de marzo, 2009 22:03:36
Asunto: Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

You did it again!

De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: domingo, 15 de marzo, 2009 21:50:10
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Was this a bad day again for the person, wo decides, what goes to SPAM and what doesn't?
My "thanks" went to spam, but more than 10 emails, which should have gone to spam, didn't!!!
This happens all the time!
Hotmail.com has a very much better, almost perfect control. but here in our yahoogroups I must from day to day be my own controller.
WHY? (If this goes to spam, I'll be very glad to to get out from this kind of a group.)

Without Best Regards,
Aimo Unto Olavi Ruoho

De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 22:14:42
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Thanks!
I posted it here and elsewhere for the people to see,
what kind of opportunists there are to eagerly hunting after
our money!
thanks for interest.
Aimo

De: Steve <alienrelics@ yahoo.com>

Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 15:26:48
Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>
> __________ _________ _________ __
> De: aimo ruoho <aimounto@.. .>
> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport
> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!
> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for
> Degen DE1103 is from 50 to 85 US$, in Ebay
> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain
> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your
> other products, the value of your R$ had

> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing
> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice
> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> ___________ _________ _________ __
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !
>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>
> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que
ainda não foram anunciados no site por falta de tempo tais como:

>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>
> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ============ ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ============ ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6443. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 21:14:40 UTC
From: aimo ruoho
Topic: 6420 Message: 6443

De: aimo ruoho <aimounto@...>
Para: loopantennas@yahoogroups.com
Enviado: domingo, 15 de marzo, 2009 22:08:46
Asunto: Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Do you think, that you can do anything, that you want?

De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: domingo, 15 de marzo, 2009 22:03:36
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

You did it again!

De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: domingo, 15 de marzo, 2009 21:50:10
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Was this a bad day again for the person, wo decides, what goes to SPAM and what doesn't?
My "thanks" went to spam, but more than 10 emails, which should have gone to spam, didn't!!!
This happens all the time!
Hotmail.com has a very much better, almost perfect control. but here in our yahoogroups I must from day to day be my own controller.
WHY? (If this goes to spam, I'll be very glad to to get out from this kind of a group.)

Without Best Regards,
Aimo Unto Olavi Ruoho

De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 22:14:42
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Thanks!
I posted it here and elsewhere for the people to see,

what kind of opportunists there are to eagerly hunting after
our money!
thanks for interest.
Aimo

---------- --------- --------- --
De: Steve <alienrelics@ yahoo.com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 15:26:48
Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>
> ---------- --------- --------- --
> De: aimo ruoho <aimounto@.. .>
> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport
> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!
> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for
> Degen DE1103 is from 50 to 85 US$, in Ebay

> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain
> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your
> other products, the value of your R$ had
> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing
> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice
> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> __________ _________ _________ __
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !
>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>
> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!

>
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que ainda não foram anunciados no site por falta de tempo tais como:
>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>
> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ============ ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ============ ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6444. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 21:15:30 UTC
From: aimo ruoho
Topic: 6420 Message: 6444

De: aimo ruoho <aimounto@...>
Para: loopantennas@yahoogroups.com
Enviado: domingo, 15 de marzo, 2009 22:06:57
Asunto: Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta
!

Now you did for the 3rd time!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!!
!!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!!
!!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!! !!!!!!!!
!!!!!!!! !!!!!!!! !!!!!!!! !!!!!!??? ????????? ????????? ????????? ????????? ?????????
????????? ????????? ????????? ????????? ????????? ????????? ????????? ????????? ?????????
????????? ????????? ????????? ????????? ????????? ????????? ????????? ????????? ?????????
????????? ????????? ?

De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: domingo, 15 de marzo, 2009 22:03:36
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta
!

You did it again!

De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: domingo, 15 de marzo, 2009 21:50:10
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta
!

Was this a bad day again for the person, wo decides, what goes to SPAM and what doesn't?
My "thanks" went to spam, but more than 10 emails, which should have gone to spam,
didn't!!!
This happens all the time!
Hotmail.com has a very much better, almost perfect control. but here in our yahoogroups I
must from day to day be my own controller.
WHY? (If this goes to spam, I'll be very glad to to get out from this kind of a group.)

Without Best Regards,
Aimo Unto Olavi Ruoho

De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com

Enviado: sábado, 14 de marzo, 2009 22:14:42
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta
!

Thanks!
I posted it here and elsewhere for the people to see,
what kind of opportunists there are to eagerly hunting after
our money!
thanks for interest.
Aimo

_____ _____ _____ __
De: Steve <alienrelics@ yahoo.com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 15:26:48
Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>
> _____ _____ _____ __
> De: aimo ruoho <aimounto@.. .>
> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport
> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!

> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for
> Degen DE1103 is from 50 to 85 US$, in Ebay
> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain
> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your
> other products, the value of your R$ had
> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing
> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice
> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> _____ _____ _____ __
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !

>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>
> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que ainda não foram anunciados no site por falta de tempo tais como:
>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>
> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ============ ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ============ ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6445. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 21:16:36 UTC
From: aimo ruoho
Topic: 6420 Message: 6445

This looks like despotism!
Have you been drinking or used some drug?

_____
De: aimo ruoho <aimounto@...>
Para: loopantennas@yahoogroups.com
Enviado: domingo, 15 de marzo, 2009 22:08:46
Asunto: Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Do you think, that you can do anything, that you want?

_____
De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: domingo, 15 de marzo, 2009 22:03:36
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

You did it again!

_____
De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: domingo, 15 de marzo, 2009 21:50:10
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Was this a bad day again for the person, wo decides, what goes to SPAM and what doesn't?
My "thanks" went to spam, but more than 10 emails, which should have gone to spam, didn't!!!
This happens all the time!
Hotmail.com has a very much better, almost perfect control. but here in our yahoogroups I must from day to day be my own controller.
WHY? (If this goes to spam, I'll be very glad to to get out from this kind of a group.)

Without Best Regards,
Aimo Unto Olavi Ruoho

_____
De: aimo ruoho <aimounto@yahoo. com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 22:14:42
Asunto: Re: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Thanks!
I posted it here and elsewhere for the people to see,
what kind of opportunists there are to eagerly hunting after
our money!
thanks for interest.
Aimo

_____ _____ _____ __
De: Steve <alienrelics@ yahoo.com>
Para: loopantennas@ yahoogroups. com
Enviado: sábado, 14 de marzo, 2009 15:26:48
Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !

Maybe because you cross-posted it to a lot of addresses?

I'm not sure why you posted it here.

Steve Greenfield

--- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
> This seemed to enter my SPAM1
> WHY?
>
>
>
>
> _____ _____ _____ __
> De: aimo ruoho <aimounto@.. .>
> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
> Enviado: viernes, 13 de marzo, 2009 18:40:06
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
>
> Thank you for your emails!
>
> Now I am vey astonished at your policy of
> putting prices on certain products.
> It seems to me, that you value your R$
> almost as high as US $
>
> What might be the corresponding value???
>
> I purchased both the WRTH and Passport
> through AMAZON.com.
> I paid USD 29.09 for WRTH and 21.59 for
> the Passport, both prices post paid!
> You know for sure your prices for those
> books, R$ 129,00 and R$ 110,00.
>
> Another example: In the USA the price for

> Degen DE1103 is from 50 to 85 US$, in Ebay
> 49.95 US$ + mailing costs. Your price for the
> same product is 6 to 8 times higher in plain
> numbers of your R$ (How much is the difference of
> those two currencies now?)
>
> When you gave me the prices of your
> other products, the value of your R$ had
> raised too high, at least IMHO, in relation
> to the US$...
>
> Either you value the mailing costs very,
> very high, or you mix USD and R$ in a very
> odd manner...
>
> Conclusion: Your prices are really too high!
> It means, that you seem to be too satisfied with
> your sales in your own country, and not willing
> to be fair with possible foreign customers?
>
> R$ 1500,00 seems to be a very high price, if
> the same type of calculation is in effect for
> the SONY ICF-2001D / 2010 (almost 30 year
> old receiver). I bought one as new in 1985 for
> US$ 500.00 in Finland. It is still in very nice
> condition.
>
> Love for money seems to raise prices!
>
> Thank you, but nothing more!
>
> Aimo
>
> _____ _____ _____ __
> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
> Enviado: jueves, 12 de marzo, 2009 20:24:39
> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Olá Pessoal,
>
> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>
> O famoso ANJAN DTS-09 - Lançamento !
> Um dos rádios mais luxuosos e super bem acabado da categoria !
>
> O DEGEN DE1123
> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>

> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
> ============ ========= ========= ========= ========= ========= ======
>
> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que ainda não foram anunciados no site por falta de tempo tais como:
>
> Suportes de acrilico transparente para receptores portáteis:
>
> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura
> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>
> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>
> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
> DE951
> DE952
> DE953
>
> Maiores informações visitem:
> http://www.amantesd oradio.com. br/loja_on- line.htm
>
> Um forte 73 e boas escutas !
>
> PU2LZB RENATO ULIANA
> Grid Locator: GG66rn
>
> ============ ========= ========= ========= ========= ===
> DXCB - DX Clube do Brasil - www.ondascurtas. com
> Site Amantes do Rádio - www.amantesdoradio. com.br
> Fique ligado em: www.radioescutas. com
> ============ ========= ========= ========= ========= ===
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6446. Re: [loopantennas] Re: [lojinhado radioescuta] Novos rádios na Lojinha Radioe scuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 21:13:41 UTC
From: David Towers
Topic: 6420 Message: 6446

Hi Aimo
I use Thunderbird as my email client and your messages were not flagged
as spam so I suggest you change your client or check your settings
73
dave G8SZX

aimo ruoho wrote:
> Was this a bad day again for the person, wo decides, what goes to SPAM and what doesn't?
> My "thanks" went to spam, but more than 10 emails, which should have gone to spam,
didn't!!!
> This happens all the time!
> Hotmail.com has a very much better, almost perfect control. but here in our yahoogroups I
must from day to day be my own controller.
> WHY? (If this goes to spam, I'll be very glad to to get out from this kind of a group.)
>
> Without Best Regards,
> Aimo Unto Olavi Ruoho
>
>
>
>
> _____
> De: aimo ruoho <aimounto@yahoo.com>
> Para: loopantennas@yahoogroups.com
> Enviado: sábado, 14 de marzo, 2009 22:14:42
> Asunto: Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha
Radioescuta !
>
>
> Thanks!
> I posted it here and elsewhere for the people to see,
> what kind of opportunists there are to eagerly hunting after
> our money!
> thanks for interest.
> Aimo
>
> _____ _____ _____ __
> De: Steve <alienrelics@ yahoo.com>
> Para: loopantennas@ yahoogroups. com
> Enviado: sábado, 14 de marzo, 2009 15:26:48
> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>
> Maybe because you cross-posted it to a lot of addresses?
>

> I'm not sure why you posted it here.
>
> Steve Greenfield
>
> --- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@.. .> wrote:
>
>> This seemed to enter my SPAM1
>> WHY?
>>
>>
>>
>>
>> _____ _____ _____ __
>> De: aimo ruoho <aimounto@.. .>
>> Para: lojinhadoradioescut a-owner@. ..; Shortwave-SWL- Antenna@yahoogro ups.com;
Loopantennas@ yahoogroups. com
>> Enviado: viernes, 13 de marzo, 2009 18:40:06
>> Asunto: [loopantennas] Re: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta
!
>>
>>
>> Thank you for your emails!
>>
>> Now I am vey astonished at your policy of
>> putting prices on certain products.
>> It seems to me, that you value your R$
>> almost as high as US $
>>
>> What might be the corresponding value???
>>
>> I purchased both the WRTH and Passport
>> through AMAZON.com.
>> I paid USD 29.09 for WRTH and 21.59 for
>> the Passport, both prices post paid!
>> You know for sure your prices for those
>> books, R$ 129,00 and R$ 110,00.
>>
>> Another example: In the USA the price for
>> Degen DE1103 is from 50 to 85 US$, in Ebay
>> 49.95 US$ + mailing costs. Your price for the
>> same product is 6 to 8 times higher in plain
>> numbers of your R$ (How much is the difference of
>> those two currencies now?)
>>
>> When you gave me the prices of your
>> other products, the value of your R$ had
>> raised too high, at least IMHO, in relation
>> to the US$...
>>
>> Either you value the mailing costs very,

>> very high, or you mix USD and R$ in a very
>> odd manner...
>>
>> Conclusion: Your prices are really too high!
>> It means, that you seem to be too satisfied with
>> your sales in your own country, and not willing
>> to be fair with possible foreign customers?
>>
>> R$ 1500,00 seems to be a very high price, if
>> the same type of calculation is in effect for
>> the SONY ICF-2001D / 2010 (almost 30 year
>> old receiver). I bought one as new in 1985 for
>> US$ 500.00 in Finland. It is still in very nice
>> condition.
>>
>> Love for money seems to raise prices!
>>
>> Thank you, but nothing more!
>>
>> Aimo
>>
>> __________ _________ _________ __
>> De: Renato Uliana <pu2lzb_renato@ yahoo.com. br>
>> Para: radioescutas@ yahoogrupos. com.br; rx-br@yahoogrupos. com.br; lojinhadoradioescut
a@yahoogrupos. com.br
>> Enviado: jueves, 12 de marzo, 2009 20:24:39
>> Asunto: [lojinhadoradioescu ta] Novos rádios na Lojinha Radioescuta !
>>
>> Olá Pessoal,
>>
>> Chegaram novos modelos de rádios na lojinha do rádioescuta !
>>
>> O famoso ANJAN DTS-09 - Lançamento !
>> Um dos rádios mais luxuosos e super bem acabado da categoria !
>>
>> O DEGEN DE1123
>> Receptor portátil de bolso OM/OC/FM com DSP e MP3Player 1 GB
>>
>> WRTH e PASSPORT 2009 Ultimas unidades esta no fim !!!!
>>
>> ========== ========= ========= ========= ========= ========= ======
>> ========== ========= ========= ========= ========= ========= ======
>> ========== ========= ========= ========= ========= ========= ======
>>
>> Ainda estarei anunciando esta semana novos produtos que já tenho em estoque mais que
ainda não foram anunciados no site por falta de tempo tais como:
>>
>> Suportes de acrilico transparente para receptores portáteis:
>>
>> Suporte Médio : 20cm largura x 15cm altura x 3mm de espessura

>> Ideal para DE1103, PL-600, PL450, ICF-7600G e GR e etc...
>>
>> Suporte Grande: 30cm largura x 15cm altura x 3mm de espessura
>> Ideal para Eton E1-XM, SONY 2010, 2001D, Satellit 500 e 700, BCL3000 e etc...
>>
>> Fones de ouvido da DEGEN de ótima qualidade e acabamento modelos:
>> DE951
>> DE952
>> DE953
>>
>> Maiores informações visitem:
>> http://www.amantesd oradio.com. br/loja_on- line.htm
>>
>> Um forte 73 e boas escutas !
>>
>> PU2LZB RENATO ULIANA
>> Grid Locator: GG66rn
>>
>> ============ ========= ========= ========= ========= ===
>> DXCB - DX Clube do Brasil - www.ondascurtas. com
>> Site Amantes do Rádio - www.amantesdoradio. com.br
>> Fique ligado em: www.radioescutas. com
>> ============ ========= ========= ========= ========= ===
>>
>> [Non-text portions of this message have been removed]
>>
>>
>>
>>
>>
>>
>>
>> [Non-text portions of this message have been removed]
>>
>>
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>

> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>

[Non-text portions of this message have been removed]

6447. Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-15 22:54:23 UTC
From: markjtaylor73
Topic: 6420 Message: 6447

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> This looks like despotism!
> Have you been drinking or used some drug?
>
>
>
>
> _____
> De: aimo ruoho <aimounto@...>
> Para: loopantennas@yahoogroups.com
> Enviado: domingo, 15 de marzo, 2009 22:08:46
> Asunto: Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !
>
>
> Do you think, that you can do anything, that you want?
>

Dear Aimo,

I can assure you that no one on this message board is responsible for your problems with your computer or your radio. Please do not put the blame on those who do not deserve it. You have become rude and inconsiderate to those of us who only wish to help. Please stop.

Regards

Mark Taylor

6448. Re: SWR and gain.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-16 03:02:34 UTC
From: Hiram
Topic: 6424 Message: 6448

> --- In loopantennas@yahoogroups.com, "Hiram" <daveleb55@> wrote:
I really don't see how you can
increase the gain AND the SWR, it just doesn't add up.

--- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@...> wrote:
>
Maybe me using the word increase is incorrect. How about if I said improve the
swr and improve the gain?

Mike,
Oh, NOW I get it! You meant improve and I was thinking increase, which are really the opposite. Duh. Now I feel like an EEdiot.

I guess I'm jealous now. When I was a youngster climbing towers and building antennas, we didn't have antenna analyzers, other than the SWR meter and some "precision" guesswork!

I'm anxious to hear what you find after all this. Never having had the opportunity to use one myself, I'm curious if anyone else has experience with these antenna analyzers what your feelings are and how accurate are the predictions versus actual antenna performance.

Good Luck!
Pappy Hiram

6449. Re: SWR and gain.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-16 05:01:33 UTC
From: Mike Phillips
Topic: 6424 Message: 6449

My bad! I'll be more specific in the future.

All I ever had in the 70's was a either a home made swr meter or a RS version.

As for analyzer accuracy, since I'm testing the actual antenna, it's hard to do poorly. Of course passing some watts through a design is the acid test. But after seeing and doing this for a time, the difference between the analyzer and the erected antenna is not a lot, since I can put the analyzer at the end of the coax to test the antenna wherever it's installed to make sure it is doing it's job.

Mike

--- In loopantennas@yahoogroups.com, "Hiram" <daveleb55@...> wrote:
>
> > --- In loopantennas@yahoogroups.com, "Hiram" <daveleb55@> wrote:
> I really don't see how you can
> increase the gain AND the SWR, it just doesn't add up.
>
> --- In loopantennas@yahoogroups.com, "Mike Phillips" <mikep_95133@> wrote:
> >
> Maybe me using the word increase is incorrect. How about if I said improve the
> swr and improve the gain?
>
> Mike,
> Oh, NOW I get it! You meant improve and I was thinking increase, which are really the opposite. Duh. Now I feel like an EEdiot.
>
> I guess I'm jealous now. When I was a youngster climbing towers and building antennas, we didn't have antenna analyzers, other than the SWR meter and some "precision" guesswork!
>
> I'm anxious to hear what you find after all this. Never having had the opportunity to use one myself, I'm curious if anyone else has experience with these antenna analyzers what your feelings are and how accurate are the predictions versus actual antenna performance.
>
> Good Luck!
> Pappy Hiram
>

6450. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-16 03:13:33 UTC
From: Bob - K2KI
Topic: 6437 Message: 6450

David Feldman wrote:
> Couple of years ago I remember an article in QST that described a magnetic
> loop built from copper tubing that was mounted to the bed stakes of a pickup
> truck. My QSTs are scattered and I am having trouble finding the article.
> Does anyone remember which issue?
>
> Tks,
>
> Dave
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>
>
>
I would be most interested in this article also. Even jus the month and
year so I can try to find the issue locally.

--
73, cul...
Bob de k2ki

-
Denny Crane

6451. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-16 17:58:30 UTC
From: vy2hf@eastlink.ca
Topic: 6437 Message: 6451

I'm an ARRL member and did a QST article search with no luck. I searched "magnetic," and various combinations of other words that might have fit.

No joy at all.

Any chance it was in CQ?

Brent Taylor
VY2HF
Stratford, PEI, Canada

----- Original Message -----
From: Bob - K2KI <k2ki@...>
Date: Monday, March 16, 2009 0:13 am
Subject: Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

> David Feldman wrote:
> > Couple of years ago I remember an article in QST that described a
> magnetic> loop built from copper tubing that was mounted to the bed
> stakes of a pickup
> > truck. My QSTs are scattered and I am having trouble finding the
> article.> Does anyone remember which issue?
> >
> > Tks,
> >
> > Dave
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it
> in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload
> JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF
> before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links

> >
> >
> >
> >
> >
> >
> >
> I would be most interested in this article also. Even jus the month
> and
> year so I can try to find the issue locally.
>
> --
> 73, cul...
> Bob de k2ki
>
>
> -
> Denny Crane
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in
> the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG
> and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
> uploading.http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

6452. Re: [loopantennas] Re: SWR and gain.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-16 18:41:18 UTC
From: Jim Dunstan
Topic: 6424 Message: 6452

At 03:02 AM 3/16/2009 +0000, you wrote:

> > --- In
> <mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com,
> "Hiram" <daveleb55@> wrote:
>I really don't see how you can
>increase the gain AND the SWR, it just doesn't add up.
>
>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, "Mike
>Phillips" <mikep_95133@...> wrote:
> >
>Maybe me using the word increase is incorrect. How about if I said improve the
>swr and improve the gain?

Hi,

I have to make a comment re: this gain vs SWR thing. First of all they are mutually exclusive.

The gain of an antenna can have different perspectives ... and is always in comparison to some standard.

In its basic perspective the gain of an antenna is how much it radiates in relation to some standard. It is a comment on the antenna .... not the feed line feeding the antenna, let alone whether there are any standing waves on the feed line. Further, this perspective (amount of radiation compared to a standard) makes no reference to the radiation pattern.

The second perspective ... the one most used by antenna manufacturers ... is different than the first perspective ... and describes certain advantages due to radiation distortion. If the antenna radiates more in one direction than another then the difference can be measured in terms of gain (if it is advantageous) or a loss (if it is disadvantageous)... even if the overall radiation is less in total than the standard. So a multi element antenna may actually be less efficient in that it radiates less overall ... but radiates more in one direction than another ... the difference of which being described as gain in terms of a front to back ratio. in the same sense making a vertical antenna longer may lower the radiation pattern putting more radiation out at a useful angle ... this difference in radiation pattern is again described as an increase in gain.

Non of these examples of antenna gain has anything to do with SWR..

Now there is something called ERP Effective Radiated Power ... which takes into account the first 2 perspectives of antenna gain and losses in feeding the antenna. Here SWR will take on some meaning. However, SWR itself does

not equate to power loss. Power loss is more dependent on the loss characteristics of the feed line in conjunction with SWR. Some feed lines with high SWR can have less loss than other lines with much lower SWR. In many cases SWR is a fact of life and is simply a part of the strategy.

Jim, VE3CI

[Non-text portions of this message have been removed]

6453. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-16 19:04:59 UTC
From: brian russell
Topic: 6395 Message: 6453

Jim,
Thanks for the mail and comments.
I assume that the 'Trapper Dipoles ' were all homebrew ???? operating
as an NVIS antenna, now they would use a mobile phone no doubt hi!
Somewhere I have read of a chap called Sainsbury who wandered the Canadian
Arctic region servicing radios, but I never knew if he had an amateur call,
is it a name you have come across ????
Regards,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Friday, March 13, 2009 6:12 PM
Subject: Re: [loopantennas] Loop feed point pics

[Non-text portions of this message have been removed]

6454. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-16 19:40:16 UTC
From: Jim Dunstan
Topic: 6395 Message: 6454

At 07:04 PM 3/16/2009 +0000, you wrote:

>Jim,
>Thanks for the mail and comments.
>I assume that the 'Trapper Dipoles ' were all homebrew ???? operating
>as an NVIS antenna, now they would use a mobile phone no doubt hi!
>Somewhere I have read of a chap called Sainsbury who wandered the Canadian
>Arctic region servicing radios, but I never knew if he had an amateur call,
>is it a name you have come across ????
>Regards,
>72, Brian, G0NSL-QRP.

Hi Brian,

The radios were commercial units ... the ones used many years ago were made by a company called Spillsbury-Tildon ... or something like that. The radios were purchased through the trappers association .... I don't remember whether they belonged to the association or the individual trappers. No mobile phones out on the lines ... unless you use a satellite phone. The antennas were made on site for sure ... simple instructions on how to make and deploy them. I fixed a lot of gear myself up there ... for the association, the Hudson's Bay company, the Joint Arctic Weather people (when you run out of plug-in units you have to fix them hi hi). as well as our own camp.

As I mentioned our camp was a research station with lots of strange equipment .... Nirvana if you are interested in electronics hi hi.

Jim, VE3CI

>----- Original Message -----
>From: Jim Dunstan
>To: <mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com
>Sent: Friday, March 13, 2009 6:12 PM
>Subject: Re: [loopantennas] Loop feed point pics
>
>[Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

6455. Copper loop antenna URL

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-16 22:17:33 UTC
From: WA1IBN
Topic: 6455 Message: 6455

http://www.am-dx.com/loopant.htm

This might be what is wanted

David Feldman wrote:
> Couple of years ago I remember an article in QST that described a magnetic
> loop built from copper tubing that was mounted to the bed stakes of a pickup
> truck. My QSTs are scattered and I am having trouble finding the article.
> Does anyone remember which issue?
>
> Tks,
>
> Dave
>
Herb WA1IBN@...

[Non-text portions of this message have been removed]

6456. [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 01:42:16 UTC
From: Steve
Topic: 6420 Message: 6456

You need to stop posting while you are angry.

No one here can affect where emails show up in your email box, especially not me. You can thank the idiots out there who sign up on Yahoogroups then start marking them as spam, either because they forgot they joined, or don't know how to unsubscribe and won't ask.

Or again, maybe it is because you cross-posted the same message to a bunch of Yahoogroups.

If you think someone is asking too much for something, just don't buy from them.

Steve Greenfield
Your friendly neighborhood moderator

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> This looks like despotism!
> Have you been drinking or used some drug?
>
>

6457. Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 03:00:38 UTC
From: huelbeag
Topic: 6420 Message: 6457

Dear Aimo

*STOP*USING*REPLY*COMMAND!!!!

Sorry for being so hard and typing this message all in caps.

Explanation: when you use the reply command *you are not replying to the author*, *you are replying to the hundreds of people of the lists*. You did this at least half dozen times.

AGAIN: DO NOT USE REPLY FUNCTION FOR PRIVATE MESSAGES, IT WON'T WORK! It will prepare a message to the *list* instead of original author of the list.

If you want to talk directly to the author his name is Renato Uliana, he lives in Brazil and his mail is qapnet at terra dot com dot br (I 'scrambled' the email so Yahoo don't block it).

His figures are high due:
. to buy 1 US dollar you need 2,3 brazilian reals
. every imported equipment is taxed by 100%
. shipping and handling to Brazil is *expensive*, usually US$20-40 or more.

So, an Icom R75 costing US$600 in US will likely to cost R$3000.

Huelbe.

--- In loopantennas@yahoogroups.com, "Steve" <alienrelics@...> wrote:
>
> You need to stop posting while you are angry.
>
> No one here can affect where emails show up in your email box, especially not me. You can thank the idiots out there who sign up on Yahoogroups then start marking them as spam, either because they forgot they joined, or don't know how to unsubscribe and won't ask.
>
> Or again, maybe it is because you cross-posted the same message to a bunch of Yahoogroups.
>
> If you think someone is asking too much for something, just don't buy from them.
>
> Steve Greenfield
> Your friendly neighborhood moderator
>
> --- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@> wrote:
> >
> > This looks like despotism!
> > Have you been drinking or used some drug?
> >
> >

>

6458. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 07:17:33 UTC
From: brian russell
Topic: 6395 Message: 6458

Jim,
Sounds an exciting life hi!
Does snow make a good ground-plane ????
Spilsbury was the name I was referring to not Sainsbury,
he wrote a number of books I believe.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Monday, March 16, 2009 7:40 PM
Subject: Re: [loopantennas] Loop feed point pics

[Non-text portions of this message have been removed]

6459. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 07:23:39 UTC
From: kevin asato
Topic: 6437 Message: 6459

QST has an even older article of a 40 meter loop using muffler tubing over a ground screen. I have a reference to it in an older Antenna Handbook. It as built about 6" over the screen so it looks to be an NVIS type antenna although it was not described as such. Copper pipe can probably be used as well although there may be a cost in transmitted bandwidth.

Unfortunately it is at home and I am at the start of a road trip so I don't have access to it.

73,
kevin
kc6pob

--- On Mon, 3/16/09, vy2hf@... <vy2hf@eastlink.ca> wrote:
From: vy2hf@... <vy2hf@...>
Subject: Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck
To: loopantennas@yahoogroups.com
Date: Monday, March 16, 2009, 10:58 AM

I'm an ARRL member and did a QST article search with no luck. I searched "magnetic," and various combinations of other words that might have fit.

No joy at all.

Any chance it was in CQ?

Brent Taylor

VY2HF

Stratford, PEI, Canada

----- Original Message -----

From: Bob - K2KI <k2ki@...>

Date: Monday, March 16, 2009 0:13 am

Subject: Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

> David Feldman wrote:

> > Couple of years ago I remember an article in QST that described a

> magnetic> loop built from copper tubing that was mounted to the bed

> stakes of a pickup

> > truck. My QSTs are scattered and I am having trouble finding the

> article.> Does anyone remember which issue?

> >

> > Tks,

> >

> > Dave

> >

> >

> >

> > ------------ --------- --------- ------

> >

> > If you've got links, post them in the Links section!

> > http://groups. yahoo.com/ group/loopantenn as/links

> >

> > Post files here. If the file comes from a website, please put it

> in the Links rather than uploading the file.

> > http://groups. yahoo.com/ group/loopantenn as/files

> >

> > You can now view images at higher resolution in Photos. Upload

> JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF

> before uploading.

> > http://ph.groups. yahoo.com/ group/loopantenn as/photos

> >

> > And please trim all this when replying!Yahoo! Groups Links

> >

> >

> >

> >

> >

> >

> >

> I would be most interested in this article also. Even jus the month

> and

> year so I can try to find the issue locally.

>

> --

> 73, cul...

> Bob de k2ki

>

>

> -

> Denny Crane

>

>

>

> ------------ --------- --------- ------

>

> If you've got links, post them in the Links section!

> http://groups. yahoo.com/ group/loopantenn as/links

>

> Post files here. If the file comes from a website, please put it in

> the Links rather than uploading the file.

> http://groups. yahoo.com/ group/loopantenn as/files

>

> You can now view images at higher resolution in Photos. Upload JPG

> and GIF into Photos. Please convert BMP or TIF to JPG or GIF before

> uploading.http: //ph.groups. yahoo.com/ group/loopantenn as/photos

>

> And please trim all this when replying!Yahoo! Groups Links

>

>

>

>

[Non-text portions of this message have been removed]

6460. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 07:48:20 UTC
From: C. Beijersbergen
Topic: 6437 Message: 6460

This the DDRR antenna. Articles appeared in Electronics January 1963, QST July 1972, QST December 1971 and the 13th edition of the ARRL Antenna Book of 1974. I have the last one, so if anyone would like a scan (4 pages) I will be glad to send it.

Cor Beijersbergen van Henegouwen

From: kevin asato
QST has an even older article of a 40 meter loop using muffler tubing over a ground screen. I have a reference to it in an older Antenna Handbook. It as built about 6" over the screen so it looks to be an NVIS type antenna although it was not described as such. Copper pipe can probably be used as well although there may be a cost in transmitted bandwidth.

Unfortunately it is at home and I am at the start of a road trip so I don't have access to it.

73,
kevin
kc6pob

[Non-text portions of this message have been removed]

6461. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 13:10:10 UTC
From: Chris Trask
Topic: 6437 Message: 6461

```
>
>This the DDRR antenna. Articles appeared in Electronics January
> 1963, QST July 1972, QST December 1971 and the 13th edition of
> the ARRL Antenna Book of 1974. I have the last one, so if anyone
> would like a scan (4 pages) I will be glad to send it.
>
```

I would certainl like to obtain a scan of that, and I would gladly convert it to PDF format and add it to the files section.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

6462. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 13:15:59 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6462

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /DDRR ARRL antenna handbook 13th. ed. 1974.pdf
Uploaded by : ts6023 <c.beijersbergen@...>
Description : DDRR antenna from the 1974 ARRL Antenna Handbook

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/DDRR%20ARRL%20antenna%20handbook%2013th.%20ed.%201974.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

ts6023 <c.beijersbergen@...>

6463. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 13:18:34 UTC
From: C. Beijersbergen
Topic: 6437 Message: 6463

Hi Chris,

I made the scan into a pdf file before and on your suggestion to place it in the files section I did that as well, so you can find it there now.

Cor Beijersbergen van Henegouwen

I would certainl like to obtain a scan of that, and I would gladly convert it to PDF format and add it to the files section.

Chris

[Non-text portions of this message have been removed]

6464. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 13:59:58 UTC
From: Chris Trask
Topic: 6437 Message: 6464

>
> I made the scan into a pdf file before and on your suggestion to
> place it in the files section I did that as well, so you can find
> it there now.
>
>Cor Beijersbergen van Henegouwen
>

Can't download it. You may need to rename it and remove the extra periods as those are file name delimiters.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6465. gamma match calculation

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 14:18:36 UTC
From: Paul M Tas
Topic: 6465 Message: 6465

Hello all

I am sitting here and wondering what the calculation is for the gamma match, for a transmitting mag. loop? I know that the coupling loop has a dia. of 1/5 of the loop. So what is the gamma match calculation for X and Y where X is parrallel to the loop and Y the distance from the loop?

Gr Paul M Tas (PD0TAS .--. -.. ----- - .- ...)

No virus found in this outgoing message.
Checked by AVG - www.avg.com
Version: 8.0.237 / Virus Database: 270.11.16/2005 - Release Date: 03/16/09 19:01:00

[Non-text portions of this message have been removed]

6466. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 14:27:17 UTC
From: C. Beijersbergen
Topic: 6437 Message: 6466

I had no problem downloading and reading it again, but anyway I removed the periods and the dots, so hopefully it works now for you.

Cor Beijersbergen van Henegouwen

Can't download it. You may need to rename it and remove the extra periods as those are file name delimiters.

Chris

[Non-text portions of this message have been removed]

6467. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 15:25:23 UTC
From: Chris Trask
Topic: 6437 Message: 6467

```
>
> > Can't download it. You may need to rename it and remove
> > the extra periods as those are file name delimiters.
>
>I had no problem downloading and reading it again, but anyway I
>removed the periods and the dots, so hopefully it works now for you.
>
```

Yes, I can download it now though the files section still does not recognize it as a PDF file.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

6468. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 19:20:03 UTC
From: Jim Dunstan
Topic: 6395 Message: 6468

At 07:17 AM 3/17/2009 +0000, you wrote:

>Jim,
>Sounds an exciting life hi!
>Does snow make a good ground-plane ????
>Spilsbury was the name I was referring to not Sainsbury,
>he wrote a number of books I believe.
>72, Brian, G0NSL-QRP.

Hi Brian,

Well you learn something every day ... I never attached the name Spilsbury to an individual. He was involved in manufacturing small portable SSB units ... and the first time I became aware of the name/company was when I saw the units. I never met him however.

Another tid-bit of radio lore .... The Hudson's Bay Co. .... originally out of the UK ... was the first commercial operation in Canada and operated many 'Northern Stores' through Northern Canada and the Arctic. Many if not most of the store managers came from the UK ... mostly Scotland. Many of my old friends are ex Hudson's Bay men. The Hudson's Bay stores pioneer radio communications in those areas. Before radio the only communications would be letters carried by ship, sled, or snow shoe hihi. The first radio gear was Amateur radio equipment using AM used by individual store men. The old Harvey Wells gear was a favourite.

It become very popular and then sometime after WWII The HBC undertook an experiment in official radio communication from their stores and contracted the manufacture of HBC transmitters (receivers were still general SW types). Whoever got the contract had the foresight to incorporate SSB instead of AM. The first batch used the 'phasing' method .... and the later batches used the Collins mechanical filters. Detailed records were kept re: their performance ... as indeed was just about everything at the stores. The HBC archives is located in Winnipeg. The old store managers kept detailed logs of all events and turned them in each year. these records are the most detailed history of Northern Canada and go back 300 years in some locations.

So you see, the reason the Native Indians and Inuit (Eskimos) adapted so easily to portable radios is that they have experienced them longer than just about anyone. Every HBC store had its radio and schedule for communications with other stores. The radio was out in the open in the store and at sched time there would always be a group huddled around listening to the communications ... about the only time kids were not allowed to make noiser. I know in my travels I often used the HBC radio to get messages out as did others in the community. Wherever you travelled it

was a key strategy to get to know the HBC man hi hi.

The old HBC radios are collectors items now.

Jim, VE3CI

6469. Re: [loopantennas] Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 19:24:46 UTC
From: Jim Dunstan
Topic: 6437 Message: 6469

At 06:10 AM 3/17/2009 -0700, you wrote:

> >
> >This the DDRR antenna. Articles appeared in Electronics January
> > 1963, QST July 1972, QST December 1971 and the 13th edition of
> > the ARRL Antenna Book of 1974. I have the last one, so if anyone
> > would like a scan (4 pages) I will be glad to send it.
> >
>
>I would certainl like to obtain a scan of that, and I would gladly convert
>it to PDF format and add it to the files section.
>
>Chris

Hi,

A friend of mine and I made a 20m DDRR antenna many years ago using old copper. I really don't recall how well it worked ... however I would caution building one today ... be sure to keep it in disguise as the value of the copper would attract undue attention hi hi

Jim

6470. Re: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-17 23:43:08 UTC
From: aimo ruoho
Topic: 6420 Message: 6470

Thank you, Huelbe!
You gave me very valuable information.
Especially the difference between US$
and Brazilian Real was important in the
first place.
I got angry thinking, that the seller was
the greedy one. Now I understand, that
the state, where he lives needs badly
tax money...
Best wishes to you and the group!
Aimo

De: huelbeag <huelbe_garcia@...>
Para: loopantennas@yahoogroups.com
Enviado: martes, 17 de marzo, 2009 4:00:38
Asunto: [loopantennas] Re: [lojinhadoradioescuta] Novos rádios na Lojinha Radioescuta !

Dear Aimo

*STOP*USING* REPLY*COMMAND! !!!

Sorry for being so hard and typing this message all in caps.

Explanation: when you use the reply command *you are not replying to the author*, *you are replying to the hundreds of people of the lists*. You did this at least half dozen times.

AGAIN: DO NOT USE REPLY FUNCTION FOR PRIVATE MESSAGES, IT WON'T WORK! It will prepare a message to the *list* instead of original author of the list.

If you want to talk directly to the author his name is Renato Uliana, he lives in Brazil and his mail is qapnet at terra dot com dot br (I 'scrambled' the email so Yahoo don't block it).

His figures are high due:
. to buy 1 US dollar you need 2,3 brazilian reals
. every imported equipment is taxed by 100%
. shipping and handling to Brazil is *expensive*, usually US$20-40 or more.

So, an Icom R75 costing US$600 in US will likely to cost R$3000.

Huelbe.

--- In loopantennas@ yahoogroups. com, "Steve" <alienrelics@ ...> wrote:
>
> You need to stop posting while you are angry.

>
> No one here can affect where emails show up in your email box, especially not me. You can thank the idiots out there who sign up on Yahoogroups then start marking them as spam, either because they forgot they joined, or don't know how to unsubscribe and won't ask.
>
> Or again, maybe it is because you cross-posted the same message to a bunch of Yahoogroups.
>
> If you think someone is asking too much for something, just don't buy from them.
>
> Steve Greenfield
> Your friendly neighborhood moderator
>
> --- In loopantennas@ yahoogroups. com, aimo ruoho <aimounto@> wrote:
> >
> > This looks like despotism!
> > Have you been drinking or used some drug?
> >
> >
>

[Non-text portions of this message have been removed]

6471. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-18 02:35:55 UTC
From: Mike Heppe
Topic: 6395 Message: 6471

i think snow does a great thing....we only had one snow this year and i hit the airwaves bigtime....dx super....
----- Original Message -----
From: brian russell
To: loopantennas@yahoogroups.com
Sent: Tuesday, March 17, 2009 2:17 AM
Subject: Re: [loopantennas] Loop feed point pics

Jim,
Sounds an exciting life hi!
Does snow make a good ground-plane ????
Spilsbury was the name I was referring to not Sainsbury,
he wrote a number of books I believe.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Monday, March 16, 2009 7:40 PM
Subject: Re: [loopantennas] Loop feed point pics

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6473. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-18 12:24:10 UTC
From: Mike Phillips
Topic: 6395 Message: 6473

I was tuning and tweaking a small loop. About 8.5 inches in diameter. It's resonance was coming in around a few hundred mhz IIRC. Sorry I've forgotten the frequency as I'm not aiming for a particular band, just trying to remove the rust from my skills and to prove a solid concept around robust feed points.

I was using a solid 'reflector' (solid sheet of alum foil) behind it to see if it would affect anything. It sure peaked the gain but narrowband. Although the SWR was very broadband. Hmmm. I was using a piece of 28ga buss wire and an alligator clip as the gamma match. This thing was working well enough that I was going to post results. But then I went and replaced the gamma match lead with a soldered in wire. That ruined it. Adjusting it didn't help. So I soldered the alligator lead back in. Still not back to where it was by a mile. Hmmm. I think the old rule was if it's not repeatable then it's not any good. Shucks. I'll get back to it here another night. But it sure was great to stand several feet away, waving my hand in front of the loop and watching it respond. The loop was very 'hot' or in other words it was acting like a high gain antenna that was very directional. It was so hot I had to mount it to a pvc pole so it would not be influenced by surrounding metallic items. There was some coupling to the coax so I had to add a few ferrites to the coax. It helped a bit, but is still a concern.

Tuning the loop is a bit odd. The loop can resonate at 200-400mhz or at 1ghz depending on the distance to the reflector. I will be making a larger loop to get try all of these feed point and tuning experiments into a ham band. This small loop is just so easy to handle on or near the bench.

Next time I'll work on using a 1 or 2 inch ferrite for transformer type coupling. Maybe it's more repeatable.

I still can't figure out how to save screen shots off of the analyzer.

I feel like such the rookie.

Mike

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
> You've piqued my curiosity.
> Are you going to be able to build a reflector loop/element that will work at say 6 mHz? Seems to me the large spacing between elements would be a challenge. Please post results. I've got parts on the bench to build an active variactor-tuned loop but have yet to find the time. If the second element idea works, I'm in!
>
> Mark
>
> ==
>

6474. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-18 12:51:37 UTC
From: Mike Phillips
Topic: 6395 Message: 6474

Here is a guy's site that seems to have some good test data using a Vector Network Analyzer and a lab. He talks about gamma and omega matching.

http://www.w8ji.com/omega_and_gama_matching.htm

Mike

6475. Re: [loopantennas] Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-18 15:19:29 UTC
From: vaclav sal
Topic: 6395 Message: 6475

Mike,
I have been casually reading your posts. I am wondering if you are testing / shooting for large or small loop antenna and what , if any, specific frequency is of your interest. I think it would help to clarify some of your observations.
 By definition anything less than 1/10 wavelenght in "diameter" is a small loop and I would venture to say that "reflector" in small loop would behave differently that full size antenna reflector. They call small loops "magnetic antennas" for good reason and I am just curious if any metallic object nearby would actually hinder the antenna performance by absorbing the prevalent magnetic field instead of reflecting it. I think pure (static) magnetic field cannot be reflected anyway.
Cheers AA7EJ Vaclav

[Non-text portions of this message have been removed]

6476. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-18 19:20:38 UTC
From: brian russell
Topic: 6395 Message: 6476

Jim,
Thank you for the mail and it's interesting contents.
Spilsbury was also a pilot I believe, the best way to get around the Far North
I guess, best of all a seaplane hi!
I have read a number of books on Arctic exploration stretching back to Franklin's days, there is a fabulous book entitled ' Barrows Boys ', Sir John Barrow was a clerk at the British Admiralty at a time when the organization was run by titled ' posers ' so he cut the red tape and sent expeditions out to the Arctic on a regular basis.
It is amazing how often they were reduced to ' boot sole sandwiches ' when supplies ran out hi!
Of course the HBC figures throughout the book, the store comes over as the
' center of the universe ' to the locals so your comments on the radio links tie in.
A term used in the book is ' contractors / outfitters ' something we never hear in the UK other than in the building / construction field.
I guess that HBC were the ultimate ' outfitters ' !!!!!
My good friend Mike, G4AYO is a confirmed Arctic buff, in particular the Russian scene with Krenkels exploits being the highlight, he even has a G4AYO display at the Krenkel Museum
in Moscow hi!
Regards,
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

6477. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-18 19:39:07 UTC
From: Mike Phillips
Topic: 6395 Message: 6477

In the end I suppose I'm looking at the broadcast bands as the end game. But I really don't have a band to shoot for as there is so much for me to research and prove/disprove. Since most of what I'll be working on uses BNC connectors, then the only other variable is the type of coupling/matching repeatability that works best. A video of what I've seen would really show how the feed point has so much influence on the function of an antenna.

Mostly the size of the loop matters for now as I have limited space to experiment with any amount of repeatability. Once the bench is cleared of the antique receiver I'm aligning, then it will be a bit easier to go after larger loop experiments.

Funny thing. I did make a loop with 3/8" diameter copper tubing that is about 6 feet long and about 4 -5 feet high just to see if I could tune it. About 20-25 feet in circumference. So far the feed point is a disaster so it's no surprise it's not tunable. I even tried an air variable cap too. Not to mention that it will couple to everything in my lab since it's so large. Once I get a solid, repeatable feed point/matching system made, then I'll apply it to this large loop to see if it can be tuned. Also I'm testing loops with the capacitive tuning gap at the top 180 degrees from the feed and also the gap at about 50 degrees up from the feed. They couple to a reflector differently. Plus I have a paper from a group showing how effective the 50 degree gap type is at 2.4 ghz.

I've got a handful of ferrites that I do not have the composition of. But they will be the first round of transformer type matching testing just to help guide me through the concept stages. I will keep an eye out for some type 73 that I read is good for transformer matching.

I also have to come up to speed on Smith charts. The analyzer shows it nicely but I have little experience interpreting it's meaning other than where the 50 ohm point is.

Mike

--- In loopantennas@yahoogroups.com, vaclav sal <vaclav_sal@...> wrote:
>
> Mike,
> I have been casually reading your posts. I am wondering if you are testing / shooting for large or small loop antenna and what , if any, specific frequency is of your interest. I think it would help to clarify some of your observations.
> By definition anything less than 1/10 wavelenght in "diameter" is a small loop and I would venture to say that "reflector" in small loop would behave differently that full size antenna reflector. They call small loops "magnetic antennas" for good reason and I am just curious if any metallic object nearby would actually hinder the antenna performance by absorbing the prevalent magnetic field instead of reflecting it. I think pure (static) magnetic field cannot be reflected anyway.
> Cheers AA7EJ Vaclav
>
>
>

>
>
>
> [Non-text portions of this message have been removed]
>

6478. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-18 19:44:25 UTC
From: Mike Phillips
Topic: 6395 Message: 6478

I just thought of a serious flaw in the large antenna. It has no gap. It's a bit flimsy and will require something at the gap that is strong for support. A dowel of some kind. Man, I've been tired lately. No surprise I that I left out the gap in that large loop.

Mike

6479. Re: [loopantennas] Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-18 22:26:19 UTC
From: Jim Dunstan
Topic: 6395 Message: 6479

At 07:20 PM 3/18/2009 +0000, you wrote:

>Jim,
>Thank you for the mail and it's interesting contents.
>Spilsbury was also a pilot I believe, the best way to get around the Far
>North
>I guess, best of all a seaplane hi!
>I have read a number of books on Arctic exploration stretching back to
>Franklin's days,
>there is a fabulous book entitled ' Barrows Boys ', Sir John Barrow was a
>clerk at the
>British Admiralty at a time when the organization was run by titled '
>posers ' so he cut
>the red tape and sent expeditions out to the Arctic on a regular basis.

Again vy interesting ... There is a Franklin site not far by land from Resolute Bay ... I hiked out to the site ... over a couple of days (24 hr sunlight) and found the cairn. I found a few items ... some old (vy old) cans .... apparently they were already used sealed food cans. I know that local Inuit have visited the site for years and heard of the different items that were found there ... including shoes. The Franklin expedition seems to have left there Arctic location where their ships rested and moved south with the hope of finding their way out. I know that several burial sites have been found much to the south ... almost to Hudson's Bay.

I know nothing about the Arctic exploration on the Russian side ... I am sure there are very interesting stories there as well.

Jim, VE3CI

6480. Re: Need QST year/mo. that had article on a 40M mag loop made of cop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-19 02:31:02 UTC
From: David Feldman
Topic: 6480 Message: 6480

I don't think anyone has found it yet - it may well have been in CQ - I suspect about 1 or 2 years ago because I went out to pick up some copper tubing which I still have (and hence want to build the project). I also receive CQ, but my magazine archives are no tidier than any of my other "archives".

If someone could search their CQ archives and advise, that would be much appreciated.

Thanks,

Dave

###

1b. Re: Need QST year/mo. that had article on a 40M mag loop made of cop
Posted by: "vy2hf@..." vy2hf@... ve1jh
Date: Mon Mar 16, 2009 10:58 am ((PDT))

I'm an ARRL member and did a QST article search with no luck. I searched "magnetic," and various combinations of other words that might have fit.

No joy at all.

Any chance it was in CQ?

Brent Taylor
VY2HF
Stratford, PEI, Canada

6481. Peak to Null Gain?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-19 11:22:00 UTC
From: Pete
Topic: 6481 Message: 6481

Hi Group

Does any body have the value of the Peak to Null gain expected from a well contructed Frame aerial.

I would be interested in measured values from typical aerials. I would also be interested in the theoretical values that can be obtained.

I am seeing about a 20dB max peak to deep null but would like to know what I should expect theoretically.

Many thanks for looking at this Pete M0FMT.

6482. Re: Need QST year/mo. that had article on a 40M mag loop made of cop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-19 13:33:02 UTC
From: dldorrance
Topic: 6480 Message: 6482

Lots of articles on this subject right here:
http://www.google.com/search?q=40+meter+small+loop+antenna&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a

Before you buy materials you will want to consider how you intend to mount the beast, which should be about 6 feet on a side if square.

In my experience the hardest part is the tuning of the sense loop or "gamma match". Either is very critical. I've had better luck with the "gamma match", which is actually an autoformer. In any case you need an antenna analyzer attached directly to the loop to get it right.

Download a small loop calculator to sketch out parameters. You may ballpark component values with a small loop antenna calculator. There are also many on the Internet. Here is one:
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=19510

Dave, WA6YSO

6483. Re: Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-19 13:40:23 UTC
From: dldorrance
Topic: 6437 Message: 6483

Curiously, the DDRR article in the ARRL Antenna Book disappeared one year to never return, leading me to ask why. Perhaps it does not work?

Dave WA6YSO

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 06:10 AM 3/17/2009 -0700, you wrote:
>
> > >
> > >This the DDRR antenna. Articles appeared in Electronics January
> > > 1963, QST July 1972, QST December 1971 and the 13th edition of
> > > the ARRL Antenna Book of 1974. I have the last one, so if anyone
> > > would like a scan (4 pages) I will be glad to send it.
> > >
> >
> > >I would certainl like to obtain a scan of that, and I would gladly convert
> > >it to PDF format and add it to the files section.
> >
> > >Chris
>
>
> Hi,
>
> A friend of mine and I made a 20m DDRR antenna many years ago using old
> copper. I really don't recall how well it worked ... however I would
> caution building one today ... be sure to keep it in disguise as the value
> of the copper would attract undue attention hi hi
>
> Jim
>

6484. Re: [loopantennas] Peak to Null Gain?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-19 18:37:31 UTC
From: Jim Dunstan
Topic: 6481 Message: 6484

At 11:22 AM 3/19/2009 +0000, you wrote:

>Hi Group
>
>Does any body have the value of the Peak to Null gain expected from a well
>contructed Frame aerial.
>
>I would be interested in measured values from typical aerials. I would
>also be interested in the theoretical values that can be obtained.
>
>I am seeing about a 20dB max peak to deep null but would like to know what
>I should expect theoretically.
>
>Many thanks for looking at this Pete M0FMT.

Hi Pete,

Are you talking about MW ?? A well designed frame loop should be able to produce a F/N front to null ratio better than 20 db. The null should be able to reduce a S9+ station to the point you can't hear it ... with abt 6db per S unit. However I don't recall seeing published figures.

Jim, VE3CI

6485. Re: [loopantennas] Re: Need QST year/mo. that had article on a 40M mag loop made of copper tubing mounted to back of pickup truck

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-19 18:51:15 UTC
From: Jim Dunstan
Topic: 6437 Message: 6485

At 01:40 PM 3/19/2009 +0000, you wrote:

>Curiously, the DDRR article in the ARRL Antenna Book disappeared one year
>to never return, leading me to ask why. Perhaps it does not work?
>
>Dave WA6YSO
>
>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
>Dunstan <jdunstan@...> wrote:
> >
> > At 06:10 AM 3/17/2009 -0700, you wrote:
> >
> > > >
> > > >This the DDRR antenna. Articles appeared in Electronics January
> > > > 1963, QST July 1972, QST December 1971 and the 13th edition of
> > > > the ARRL Antenna Book of 1974. I have the last one, so if anyone
> > > > would like a scan (4 pages) I will be glad to send it.
> > > >

Hi,

I mentioned my friend and I tried to build one for 20m ... with mixed results as I recall. I found a description in my 13th Edition of the Antenna Book which was made of 2 inch diameter automobile exhaust pipe (40m version I believe). We used standard 1/2' copper pipe as i recall about 6 ft in diameter mounted a couple of inches over the ground plane. I have never heard of the antenna since then hi hi.

Jim, VE3CI

[Non-text portions of this message have been removed]

6486. Re: Need QST year/mo. that had article on a 40M mag loop made of cop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-20 00:10:05 UTC
From: David Feldman
Topic: 6480 Message: 6486

OK, found it - March 2007:

"Mar 2007 QST 41 Compact 40 Meter HF Loop for Your Recreational Vehicle
Portune, John E., W6NBC"

Dave

###

3a. Re: Need QST year/mo. that had article on a 40M mag loop made of cop
Posted by: "David Feldman" wb0gaz@... dgfaa
Date: Wed Mar 18, 2009 6:31 pm ((PDT))

I don't think anyone has found it yet - it may well have been in CQ - I suspect about 1 or 2 years ago because I went out to pick up some copper tubing which I still have (and hence want to build the project). I also receive CQ, but my magazine archives are no tidier than any of my other "archives".

If someone could search their CQ archives and advise, that would be much appreciated.

Thanks,

Dave

###

1b. Re: Need QST year/mo. that had article on a 40M mag loop made of cop
Posted by: "vy2hf@..." vy2hf@... ve1jh
Date: Mon Mar 16, 2009 10:58 am ((PDT))

I'm an ARRL member and did a QST article search with no luck. I searched "magnetic," and various combinations of other words that might have fit.

No joy at all.

Any chance it was in CQ?

Brent Taylor
VY2HF
Stratford, PEI, Canada

6487. Re: Loop feed point pics

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-20 18:22:53 UTC
From: Mike Phillips
Topic: 6395 Message: 6487

Just a quick note.

I can now save screen shots of the analyzer plots. SWR, Smith chart, and gain each get their own separate screen shots in 640 x 480 bitmap resolution. This will be helpful to post with discussions.

When I get the antique receiver realigned, since the last piece of test equipment arrived yesterday, I can get back to antenna R & D.

Target has a sale on clear plastic totes. I picked the 16 quart versions and they really make lab and project organization. $3 each on sale.

Mike

6488. Arctic !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-20 16:39:57 UTC
From: brian russell
Topic: 6488 Message: 6488

Jim,
Thank you for the mail and very interesting comments on the Franklin saga,
it did last quite some years of course.
As you commented various sites have been discovered as they tried to escape
from the ice.
Tins of biscuits were found from the Captain Scott South Pole expedition of 1912,
still eatable, in fact a UK company is now re-marketing the brand as a special edition hi!
Is the station VE8RCS still operating ???? I listened to them often in the 1970 / 80's
when I was an SWL.
Regards,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Wednesday, March 18, 2009 10:26 PM
Subject: Re: [loopantennas] Loop feed point pics

[Non-text portions of this message have been removed]

6489. Arctic Explorations (was: Loop feed point pics)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-20 21:09:08 UTC
From: chris3trask
Topic: 6395 Message: 6489

>
> Again vy interesting ... There is a Franklin site not far by land from
> Resolute Bay ... I hiked out to the site ... over a couple of days (24 hr
> sunlight) and found the cairn. I found a few items ... some old (vy old)
> cans .... apparently they were already used sealed food cans. I know that
> local Inuit have visited the site for years and heard of the different
> items that were found there ... including shoes. The Franklin expedition
> seems to have left there Arctic location where their ships rested and moved
> south with the hope of finding their way out. I know that several burial
> sites have been found much to the south ... almost to Hudson's Bay.
>

I've also been reading a great deal about Arctic exploration lately. Made the mistake of reading "Actic Dreams" by Barry Lopez last January. Should have saved it for June or July. I later saved "Water and Sky" by Kesselheim for summer reading. This year "Northern Vagabond" and "Ancient Mariner" are set aside for summer reading.

"Ice Master" was one of the more interesting books about exploration disasters and survival that I've read. Shortly after I finished that, I came across a copy of John Muir's "The Cruise of the Corwin" where he had joined an expedition searching for the Jeanette.

>
> I know nothing about the Arctic exploration on the Russian side ... I am
> sure there are very interesting stories there as well.
>

There is a bit of history of Russian Arctic exploration to be found in "Wildest Alaska", and then there's "Bering", which gives considerable details about his exploration of the Alaskan coastline and the Aleutians. He was, or course, Danish but he was working for Catherine the Great at the time.

Chris

6490. Re: [loopantennas] Arctic !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-21 01:46:10 UTC
From: Jim Dunstan
Topic: 6488 Message: 6490

At 04:39 PM 3/20/2009 +0000, you wrote:

>Jim,
>Thank you for the mail and very interesting comments on the Franklin saga,
>it did last quite some years of course.
>As you commented various sites have been discovered as they tried to escape
>from the ice.
>Tins of biscuits were found from the Captain Scott South Pole expedition
>of 1912,
>still eatable, in fact a UK company is now re-marketing the brand as a
>special edition hi!
>Is the station VE8RCS still operating ???? I listened to them often in the
>1970 / 80's
>when I was an SWL.
>Regards,
>72, Brian, G0NSL-QRP.

Hi Brian,

Yes, I knew VE8RCS .... located up in Alert on Ellesmere Island ... Canadian Forces Base. I was up in Resolute Bay on Cornwallis Island during the early 60's. I ran a ham station VE8LG while there. The Canadian Air force supplied us and Alert using the old C-119 (flying boxcar) aircraft ... before the C-130 came on the scene. The peace time flying range of the C-119 wouldn't allow direct flight from Resolute to Alert ... requiring a stop over in Tulle Greenland (US air base) for refueling. Travel on the Air Force plane was quite informal at that time ... which would allow hitching a ride to Thule .... and an overnight at the Sergeant's mess and a trip to the duty free shop hi hi... then pickup the flight home. Never managed to go all the way to Alert hi hi.

Interesting your comment on the Scott expedition to the Antarctic ... es how supplies and other items seem to last for a very long time. When in the Arctic I remember regularly contacting the Antarctic on 20m. We had a large Rhombic antenna pointing South (where else hi). I believe the call is still registered ... but not sure how active it is. The number of gov't presence in the Arctic has been going down ... but I understand there is a new resurgence.

I have some old pictures of VE8LG ham station (in a shack on skiis). If I can dig them out I'll post them.

Jim, VE3CI

6491. 8.5 inch proto loop pics and plots.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-21 05:24:32 UTC
From: Mike Phillips
Topic: 6491 Message: 6491

Since I was going to start testing a couple of other loops, I thought that getting this 8.5 inch one documented was a good idea tonight. I think that even though the 946mhz resonance is not useful for anything I have a receiver for, it proves the concept of coupling a director to a loop can give it super directionality, and some decent gain although a bit narrow band. Testing parasitic loops installed inside of the main loop is also on the drawing board for enhanced broad band effect, since I've seen great data for it already. This loop's bandwidth is about 10mhz on about a 1ghz antenna. We use to call that a 1% antenna, which is nothing special. As opposed to 3% which has far better bandwidth. We'll see if this range of percentages applies to sw and mw band antennas when I eventually get there for testing.

http://rotordesign.com/antennas/8.5inchloop/

Mike

6492. Re: Peak to Null Gain?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-22 15:54:46 UTC
From: Pete
Topic: 6481 Message: 6492

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 11:22 AM 3/19/2009 +0000, you wrote:
>
> >Hi Group
> >
> >Does any body have the value of the Peak to Null gain expected from a well
> >contructed Frame aerial.
> >
> >I would be interested in measured values from typical aerials. I would
> >also be interested in the theoretical values that can be obtained.
> >
> >I am seeing about a 20dB max peak to deep null but would like to know what
> >I should expect theoretically.
> >
> >Many thanks for looking at this Pete M0FMT.
>
>
> Hi Pete,
>
> Are you talking about MW ?? A well designed frame loop should be able to
> produce a F/N front to null ratio better than 20 db. The null should be
> able to reduce a S9+ station to the point you can't hear it ... with abt
> 6db per S unit. However I don't recall seeing published figures.
>
> Jim, VE3CI
>
Hi Jim

Many thanks for the info. You are confirming my belief based upon my trials on 500kc/s.
I have been talking to Lloyd Butler VK5BR an Old Timer who I know from is articles has a lot of knowledge in this area. He said it was a good question!!!
He listed some of the practicle limiting effects that could reduce the difference such as a/ it being a "Box" type antenna b/ the feed leads can pick up the verical element of the wave. c/ the input to the amp not necessarily being fully balanced ...etc. all very good points. He made a statement that 30dBs may be obtainable with a well designed Frame antenna. From the an early Admiralty Handbook it suggested that a "Pancake" design would perform better than the "Box" design. That kind of makes sense ..... so thats what I will do; try and compare the two types of antenna and improve the "Box" design to reduce the undesirable effects listed above.

Well Jim you are the only person on the group that put his head over the parapit and for that I thank you very much it's been a great help.

There may be a PhD in this if Lloyd is right ... but sadly too late in the day to be relevant.... HI.

Thanks Jim GL and 73 Pete M0FMT.

6493. Re: [loopantennas] Arctic Explorations (was: Loop feed point pics)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-22 19:13:48 UTC
From: brian russell
Topic: 6395 Message: 6493

Chris,
Thank you for your comments on this thread, I have noted the books to follow-up.
Thanks to the list moderator, I seem to have ' wandered ' a little from the radio path hi!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: chris3trask
To: loopantennas@yahoogroups.com
Sent: Friday, March 20, 2009 9:09 PM
Subject: [loopantennas] Arctic Explorations (was: Loop feed point pics)

[Non-text portions of this message have been removed]

6494. Re: [loopantennas] Arctic Explorations (was: Loop feed point pics)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-22 20:28:21 UTC
From: Chris Trask
Topic: 6395 Message: 6494

>
> Thank you for your comments on this thread, I have noted the books
to follow-up.
> Thanks to the list moderator, I seem to have ' wandered ' a little from
the radio path hi!
>

Even though it's far off-topic, I enjoyed hearing from others who have an avid interest on Arctic exploration. I have many other books yet to read, and would like to find a copy of one written by Vilhjalmur Stefansson, who was probably the single most incompetent Arctic explorer of record. His disregard for others resulted in the loss of life of the members of the Karluk in 1913-1914.

Another interesting book is "My Polar Flights" by Umberto Nobile, in which he describes the crash and subsequent rescue of the survivors of the airship (dirigible) Italia, which was slammed against the ice cap by a severe storm. The incident was made into a movie named "The Red Tent", which has a very vivid depiction of the crash.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6495. Re: [loopantennas] Re: Peak to Null Gain?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-22 22:57:00 UTC
From: Jim Dunstan
Topic: 6481 Message: 6495

At 03:54 PM 3/22/2009 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
>Dunstan <jdunstan@...> wrote:
> >
> > At 11:22 AM 3/19/2009 +0000, you wrote:
> >
> > >Hi Group
> > >
> > >Does any body have the value of the Peak to Null gain expected from a
> well
> > >contructed Frame aerial.
> > >
> > >I would be interested in measured values from typical aerials. I would
> > >also be interested in the theoretical values that can be obtained.
> > >
> > >I am seeing about a 20dB max peak to deep null but would like to know
> what
> > >I should expect theoretically.
> > >
> > >Many thanks for looking at this Pete M0FMT.
> >
> >
> > Hi Pete,
> >
> > Are you talking about MW ?? A well designed frame loop should be able to
> > produce a F/N front to null ratio better than 20 db. The null should be
> > able to reduce a S9+ station to the point you can't hear it ... with abt
> > 6db per S unit. However I don't recall seeing published figures.
> >
> > Jim, VE3CI
> >
>Hi Jim
>
>Many thanks for the info. You are confirming my belief based upon my
>trials on 500kc/s.
>I have been talking to Lloyd Butler VK5BR an Old Timer who I know from is
>articles has a lot of knowledge in this area. He said it was a good question!!!
>He listed some of the practicle limiting effects that could reduce the
>difference such as a/ it being a "Box" type antenna b/ the feed leads can
>pick up the verical element of the wave. c/ the input to the amp not
>necessarily being fully balanced ...etc. all very good points. He made a
>statement that 30dBs may be obtainable with a well designed Frame antenna.
> From the an early Admiralty Handbook it suggested that a "Pancake" design

>would perform better than the "Box" design. That kind of makes sense
>...... so thats what I will do; try and compare the two types of antenna
>and improve the "Box" design to reduce the undesirable effects listed above.
>
>Well Jim you are the only person on the group that put his head over the
>parapit and for that I thank you very much it's been a great help.
>
>There may be a PhD in this if Lloyd is right ... but sadly too late in the
>day to be relevant.... HI.
>
>Thanks Jim GL and 73 Pete M0FMT.

Hi Again,

VK5BR is correct. The null of the loop is dependent on loop symmetry. This in my view is the main reason for using a 'shield' construction. The shield itself provides the rigid symmetrical construction essential for symmetry ... while the loop winding itself only couples the RF to the radio. The shortcoming of this approach is that the loop itself (the so-called shield) is not tuned. The overall signal may not be as strong ... but the symmetry provides a very defined deep dull.

Extraneous signals ... such as common mode currents on the feed line must be avoided. In direction finding an extraneous signal is added in a controlled manner from a separate 'sense' antenna .... which can determine which null (there are 2 of them 180 deg apart) faces the signal source.

Jim, VE3CI

[Non-text portions of this message have been removed]

6496. Re: Arctic !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-23 00:01:50 UTC
From: Ken
Topic: 6488 Message: 6496

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:

> Yes, I knew VE8RCS .... located up in Alert on Ellesmere Island ...
> Canadian Forces Base. I was up in Resolute Bay on Cornwallis Island > during
> the early 60's. I ran a ham station VE8LG while there. The Canadian > Air
> force supplied us and Alert using the old C-119 (flying boxcar) >aircraft

> I have some old pictures of VE8LG ham station (in a shack on skiis). If I
> can dig them out I'll post them.
>
> Jim, VE3CI

Jim

Did you ever work Harv Clark....VE7TO (I think?)...he was of course
working with a VE8mobile....stationed with the RCAF at Cape Perry or
somewhere like that. The time frame would fit perfectly.
Now forgive my memory but he "may not" have had the VE7TO call at
that time....he may have received it after he got back to Vancouver
and retired. Harv at one time was the oldest RCAF fighter pilot.
He had been an exchange pilot to the USAF in the late '50s. He was
flying the F-101 VooDoo down there and trained RCAF pilots on them
when we transitioned to the CF-101 VooDoo here.

I would have been in my early teens....I sat at his Collins receiver
and listen to him work many...his wife would come into the shack and listen.

Ken

6497. Re: [loopantennas] Re: Arctic !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-23 04:46:01 UTC
From: Jim Dunstan
Topic: 6488 Message: 6497

At 12:01 AM 3/23/2009 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
>Dunstan <jdunstan@...> wrote:
>
> > Yes, I knew VE8RCS .... located up in Alert on Ellesmere Island ...
> > Canadian Forces Base. I was up in Resolute Bay on Cornwallis Island >
> during
> > the early 60's. I ran a ham station VE8LG while there. The Canadian > Air
> > force supplied us and Alert using the old C-119 (flying boxcar) >aircraft
>
> > I have some old pictures of VE8LG ham station (in a shack on skiis). If I
> > can dig them out I'll post them.
> >
> > Jim, VE3CI
>
>Jim
>
>Did you ever work Harv Clark....VE7TO (I think?)...he was of course
>working with a VE8mobile....stationed with the RCAF at Cape Perry or
>somewhere like that. The time frame would fit perfectly.
>Now forgive my memory but he "may not" have had the VE7TO call at
>that time....he may have received it after he got back to Vancouver
>and retired. Harv at one time was the oldest RCAF fighter pilot.
>He had been an exchange pilot to the USAF in the late '50s. He was
>flying the F-101 VooDoo down there and trained RCAF pilots on them
>when we transitioned to the CF-101 VooDoo here.
>
>I would have been in my early teens....I sat at his Collins receiver
>and listen to him work many...his wife would come into the shack and listen.
>
>Ken

Hi Ken,

I don't recall working Harv Clark .... but your right it would have been around the same time. It was a long time ago ... he must have been settled in to have a collins receiver at that time. I used either homebrew or military surplus hi hi. My personal shack was out in a trailer on skiis ... However we did have some nice gear in the regular radio room .... and we had a great antenna .... a Rhombic ... which is a kind of terminated loop. I used to use it on the ham bands every now and then running a qrp tube rig ... which was not very usual in those days. 3 or 4 watts output was all I needed with that big Rhombic antenna !!

Jim, VE3CI

[Non-text portions of this message have been removed]

6498. Re: Need QST year/mo. that had article on a 40M mag loop made of cop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-03-24 02:53:16 UTC
From: shibukiau
Topic: 6480 Message: 6498

I don't know if this is the one you are looking for but look at the Mar, 2007 issue of QST with an article "Compact 40 Meter HF Loop For Your Recreational Vehicle".

Cheers!
Lloyd
VK4ERQ/VE3ERQ

--- In loopantennas@yahoogroups.com, "David Feldman" <wb0gaz@...> wrote:
>
> I don't think anyone has found it yet - it may well have been in CQ - I
> suspect about 1 or 2 years ago because I went out to pick up some copper
> tubing which I still have (and hence want to build the project). I also
> receive CQ, but my magazine archives are no tidier than any of my other
> "archives".
>
> If someone could search their CQ archives and advise, that would be much
> appreciated.
>
> Thanks,
>
> Dave
>
> ###
>
> 1b. Re: Need QST year/mo. that had article on a 40M mag loop made of cop
> Posted by: "vy2hf@..." vy2hf@... ve1jh
> Date: Mon Mar 16, 2009 10:58 am ((PDT))
>
> I'm an ARRL member and did a QST article search with no luck. I searched
> "magnetic," and various combinations of other words that might have fit.
>
> No joy at all.
>
> Any chance it was in CQ?
>
> Brent Taylor
> VY2HF
> Stratford, PEI, Canada
>

6500. Facebook invitation.....

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-01 15:16:46 UTC
From: Sudipta Ghose
Topic: 6500 Message: 6500

By mistake I sent a Facebook invitation and it was really
unintentional. I regret having done what I personally dislike.
I'm really sorry for the goof-up.
Regards

6505. FEMM Finite Element Method Magnetics simulation

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-06 15:30:59 UTC
From: Steve Greenfield
Topic: 6505 Message: 6505

Cool, free (open source) magnetics simulation program. "A Windows finite element solver for 2D and axisymmetric magnetic, electrostatic, heat flow, and current flow problems with graphical pre- and post-processors."

http://femm.foster-miller.net/wiki/HomePage
Runs on Linux under Wine.
Steve Greenfield

6506. test for connection

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-13 00:29:32 UTC
From: WA1IBN
Topic: 6506 Message: 6506

Hello All,
Have not received new messages lately,
just checking to see if the groop still exists
or if I have been disconnected from the loop
antenna group.
Herb wa1ibn@...

[Non-text portions of this message have been removed]

6507. Re: [loopantennas] test for connection

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-13 12:20:37 UTC
From: aimo ruoho
Topic: 6506 Message: 6507

Hello!
At least I am here, just waiting for the others...
Aimo

De: WA1IBN <wa1ibn@...>
Para: loopantennas@yahoogroups.com
Enviado: lunes, 13 de abril, 2009 2:29:32
Asunto: [loopantennas] test for connection

Hello All,
Have not received new messages lately,
just checking to see if the groop still exists
or if I have been disconnected from the loop
antenna group.
Herb wa1ibn@myfairpoint. net

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6508. Hello

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-14 01:02:32 UTC
From: Graeme
Topic: 6508 Message: 6508

I'm still here as well
Graeme

6509. Re: test for connection

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-14 14:24:42 UTC
From: airchecklover
Topic: 6506 Message: 6509

I am here as well.

Question for Aimo:

Aimo, how do you like your small Chinese loop BCL-01?? How does performance compare to other small loops. Do you have an AOR loop too?

-Mark

==========

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Hello!
> At least I am here, just waiting for the others...
> Aimo
>
>
>
>
> _____
> De: WA1IBN <wa1ibn@...>
> Para: loopantennas@yahoogroups.com
> Enviado: lunes, 13 de abril, 2009 2:29:32
> Asunto: [loopantennas] test for connection
>
>
>
>
>
> Hello All,
> Have not received new messages lately,
> just checking to see if the groop still exists
> or if I have been disconnected from the loop
> antenna group.
> Herb wa1ibn@myfairpoint. net
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]

>

6510. Yup we're still here

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-14 01:27:52 UTC
From: amschler_clan
Topic: 6510 Message: 6510

I am just new at building antennas and trying to learn more before I make my first one. Right now I am trying to make a slinky antenna to use inside my apt. with low power CW.

73's Paul
ke7wtk

6511. Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-14 05:36:05 UTC
From: Mike, KD7MG
Topic: 6511 Message: 6511

Greetings,

I'm new to the group and have searched the previous posts, but haven't seen this topic. If it's been covered, I apologize.

I'm about to put up a full-wave 80 Meter horizontal square loop at about 40' elev. and would like some suggestions on the type of wire material that would work best. This will be for a city's ECC, so I would really like it to last for about 10-20 years without fussing with it. It also will have to meet NEC codes, so if I understand them correctly, this will have to be 12awg (or larger) because of the span length on each side.

Here's the options as I see them. (Please add more options if I missed some.)

Option 1) Copper wire or copper-clad steel

Option 2) Solid or stranded

Option 2a) If stranded, roughly how many strands? (Regular, or that really fine stuff?)

Option 3) Bare wire or insulated

Option 3a) If insulated, what material?

I appreciate your help on this.

Mike

[Non-text portions of this message have been removed]

6512. Re: [loopantennas] Re: test for connection

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-15 20:09:11 UTC
From: aimo ruoho
Topic: 6506 Message: 6512

Thanks for remembering my humble person, Mark!
Yes, I like very much my small Chinese Loop BCL-01A
V2.0 (2nd edition) shortwave antenna small ring. Frequency
5 MHz - 19 MHz.
Unfortunately I never had monetary opportunity to buy
the famous AOR Loop... I think, that the AOR models
are more capable but also a lot more expencive, too...
That was the main reason for the Chinese radio amateurs
to try to "copy" the AOR loop, as they say. They did it
quite well in deed!
You may be well aware of the fact, that a ferrite antenna
may be connected with this amplifier to be able to receive
AM frequencies betw. 520 - 1620 kHz? I made some
ferrite rod antennas to test this, with varying results...
My problem is to divide myself in this hobby into too
many pieces. There are so many interesting things to be
made and tested!
I think, that it is a pity, that the Chinese group stopped
producing these loops. They really showed great talent
in constructing these marvellously good and CHEAP
antennae. We may never underestimate these Asian
brothers, as many people do. The latter ones do not give
honour to their own brains...

Thanks again for paying interest.
Aimo

De: aircheckclover <mdh@...>
Para: loopantennas@yahoogroups.com
Enviado: martes, 14 de abril, 2009 16:24:42
Asunto: [loopantennas] Re: test for connection

I am here as well.

Question for Aimo:

Aimo, how do you like your small Chinese loop BCL-01?? How does performance compare to
other small loops. Do you have an AOR loop too?

-Mark
MARKETPLACE
I'm happy I lost my Job. Now I make $12,000/mo online! See how I do it: WealthResource.org.

I make $350/day online. That's over $10,000/mo! Check out how I do it: WealthResource.org.

From kitchen basics to easy recipes - join the Group from Kraft Foods

Change settings via the Web (Yahoo! ID required)
Change settings via email: Switch delivery to Daily Digest | Switch format to Traditional
Visit Your Group | Yahoo! Groups Terms of Use | Unsubscribe
Recent Activity
* 9
New Members
* 1
New LinksVisit Your Group
Yahoo! Groups
Auto Enthusiast Zone
Love cars? Check out the
Auto Enthusiast Zone
Check out the
Y! Groups blog
Stay up to speed
on all things Groups!
Yahoo! Groups
Mom Power
Discover doing more
for your family
.

[Non-text portions of this message have been removed]

6513. Re: [loopantennas] Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-17 01:37:02 UTC
From: Jim Dunstan
Topic: 6511 Message: 6513

At 11:36 PM 4/13/2009 -0600, you wrote:

>Greetings,
>
>I'm new to the group and have searched the previous posts, but haven't seen
>this topic. If it's been covered, I apologize.
>
>I'm about to put up a full-wave 80 Meter horizontal square loop at about 40'
>elev. and would like some suggestions on the type of wire material that
>would work best. This will be for a city's ECC, so I would really like it to
>last for about 10-20 years without fussing with it. It also will have to
>meet NEC codes, so if I understand them correctly, this will have to be
>12awg (or larger) because of the span length on each side.
>
>Here's the options as I see them. (Please add more options if I missed
>some.)
>
>Option 1) Copper wire or copper-clad steel
>
>Option 2) Solid or stranded
>
>Option 2a) If stranded, roughly how many strands? (Regular, or that really
>fine stuff?)
>
>Option 3) Bare wire or insulated
>
>Option 3a) If insulated, what material?
>
>I appreciate your help on this.
>
>Mike

Hi Mike

First, NEC codes do not apply to building an antenna. The best material is copper at #14 gauge minimum. For strength you could use copper clad steel wire (only the surface needs to be copper since RF is limited to the surface). Ordinary #14 copper has no problem giving reasonable life over the kind of spans you mention (65 to 130 ft) I have had those spans up for years with #14 copper (standard electrical insulated wire). I have used bare copper and insulated electrical copper and actually feel the insulated wire seems to last longer. To insure long life ... pay special attention to contact points. If the wire terminates in an insulator it will last many years ... if the wire rubs back and forth ... eg running through an insulator or over a tree branch ... it will have limited life. If you switch to stranded #14 copper it seems to be more durable than solid copper.

For me insulation is incidental ... eg the kind of wire I can get. As far a performance I have detected zero difference in electrical performance. As far as ease of handling ... solid copper is good, stranded copper more difficult, insulated better than non insulated. Very fine (flex wire) is very easy to use (like rope). Copper clad steel the most difficult.

I hope this helps.

Jim, VE3CI

6514. Re: [loopantennas] Re: test for connection

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-17 16:21:09 UTC
From: brian russell
Topic: 6506 Message: 6514

Hi All,
Out of curiosity I did an Internet search on the BCL-01A loop antenna, but all I got was pages of links in Chinese.
Anyone got any better clues to details ????
Regards,

[Non-text portions of this message have been removed]

6515. High-pass (BCB) filter as part of a receiving loop - seeking ideas/recommendations

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-17 23:50:57 UTC
From: David Feldman
Topic: 6515 Message: 6515

General question - I'm looking for ideas on incorporating a high-pass filter (with cut-off at 1.7 MHz or so) into a receive loop so that the loop's preamplifier (at the feedpoint) isn't overwhelmed by BC signals. How would I go about estimating the feedpoint impedance at the loop's feed point so I can incorporate that into filter design? Ideally I'd like a loop that incorporates a wideband preamplifier at the feedpoint but where the preamplifier is protected from BC signals (of which several are quite strong here due to broadcast stations a few miles away).

Thanks,

73 Dave WB0GAZ wb0gaz@...

6516. RE: [loopantennas] Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-18 00:22:30 UTC
From: Mike, KD7MG
Topic: 6511 Message: 6516

>At 11:36 PM 4/13/2009 -0600, you wrote:
>
>>Greetings,
>>
>>I'm new to the group and have searched the previous posts, but haven't
seen
>>this topic. If it's been covered, I apologize.
>>
>>I'm about to put up a full-wave 80 Meter horizontal square loop at about
40'
>>elev. and would like some suggestions on the type of wire material that
>>would work best. This will be for a city's ECC, so I would really like it
to
>>last for about 10-20 years without fussing with it. It also will have to
>>meet NEC codes, so if I understand them correctly, this will have to be
>>12awg (or larger) because of the span length on each side.
>>
>>Here's the options as I see them. (Please add more options if I missed
>>some.)
>>
>>Option 1) Copper wire or copper-clad steel
>>
>>Option 2) Solid or stranded
>>
>>Option 2a) If stranded, roughly how many strands? (Regular, or that really
>>fine stuff?)
>>
>>Option 3) Bare wire or insulated
>>
>>Option 3a) If insulated, what material?
>>
>>I appreciate your help on this.
>>
>>Mike
>
>Hi Mike
>
>First, NEC codes do not apply to building an antenna. The best material is
>copper at #14 gauge minimum. For strength you could use copper clad steel
>wire (only the surface needs to be copper since RF is limited to the
>surface). Ordinary #14 copper has no problem giving reasonable life over
>the kind of spans you mention (65 to 130 ft) I have had those spans up for
>years with #14 copper (standard electrical insulated wire). I have used
>bare copper and insulated electrical copper and actually feel the insulated

>wire seems to last longer. To insure long life ... pay special attention
>to contact points. If the wire terminates in an insulator it will last
>many years ... if the wire rubs back and forth ... eg running through an
>insulator or over a tree branch ... it will have limited life. If you
>switch to stranded #14 copper it seems to be more durable than solid
copper.
>
>For me insulation is incidental ... eg the kind of wire I can get. As far
>a performance I have detected zero difference in electrical
>performance. As far as ease of handling ... solid copper is good, stranded
>copper more difficult, insulated better than non insulated. Very fine
> (flex wire) is very easy to use (like rope). Copper clad steel the most
>difficult.
>
>I hope this helps.
>
>Jim, VE3CI

Thanks for your input, Jim. Regarding the NEC, I was first alerted to it years ago while reading the (many) comments following the following eHam article.

http://www.eham.net/articles/10959

About halfway down, K8MHZ made a reference to the NEC, that I took as fact, until I just looked it up for myself. He said, "Spans over 45 feet must
use either #10 hard drawn copper or #12 copper clad steel, bronze or other high-strength material." This was based on the table shown in 810.52 of the code. When I just now looked it up, it actually said "When maximum open span length is over 45 m", NOT 45 feet, so according to the table, using #14 wire of any type will satisfy code requirements for an 80m loop. (Should have listened to you from the beginning. lol)

Since I've posted this article, I've consulted with several old-timers who agree with you on many points. Here's what I learned.

1. Stranded will typically last longer than solid in most environments like mine (N. Utah) where occasional high wind is a factor.

2. If you go with stranded, they recommend it be insulated with something that's UV resistant. The standard THHN found in hardware stores is OK, but the nylon "skin" cracks and peels after a while. It doesn't change the performance, but it looks kind of ugly. Insulation also keeps ice from forming between the strands which can make loud "crashes" when the wind breaks it up.

3. Copper or copper-clad steel is a matter of preference and availability.

4. Like you mentioned, performance is virtually identical no matter what kind of wire you throw up there. The question is, how long do you need it to stay up?

One recommended the POLYS-13 wire from Davis RF for a good strong stranded copper clad steel wire with a durable UV resistant jacket. This sounds right in the ballpark of what I need. Any other suggestions that's maybe a little less expensive than $0.24/ft?

Thanks,
Mike

[Non-text portions of this message have been removed]

6517. Re: High-pass (BCB) filter as part of a receiving loop - seeking ideas/recommendations

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-18 01:51:20 UTC
From: juanm0wwa
Topic: 6515 Message: 6517

-Hi Dave,

Maybe my BCB filter could give some ideas, please take a look at
http://www.m0wwa.co.uk/page/filters/broadcasting%20band%20rejection%20fi\
lters%20page.html
<http://www.m0wwa.co.uk/page/filters/broadcasting%20band%20rejection%20f\
ilters%20page.html>

To see an implementation and the schematics
http://www.m0wwa.co.uk/PDF/M0WWA_SCR_Preselector.pdf
<http://www.m0wwa.co.uk/PDF/M0WWA_SCR_Preselector.pdf>

Regards.

Juan, M0WWA

-- In loopantennas@yahoogroups.com, "David Feldman" <wb0gaz@...> wrote:
>
> General question - I'm looking for ideas on incorporating a high-pass
filter
> (with cut-off at 1.7 MHz or so) into a receive loop so that the loop's
> preamplifier (at the feedpoint) isn't overwhelmed by BC signals. How
would I
> go about estimating the feedpoint impedance at the loop's feed point
so I
> can incorporate that into filter design? Ideally I'd like a loop that
> incorporates a wideband preamplifier at the feedpoint but where the
> preamplifier is protected from BC signals (of which several are quite
strong
> here due to broadcast stations a few miles away).
>
> Thanks,
>
> 73 Dave WB0GAZ wb0gaz@...
>

[Non-text portions of this message have been removed]

6518. Re: Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-18 05:35:55 UTC
From: revex540
Topic: 6511 Message: 6518

--- In loopantennas@yahoogroups.com, "Mike, KD7MG" <kd7mg@...> wrote:
>
Mike
Equally important as the wire is what you are going to use to hold it up there.
I presume you are going to use halyards in each corner so you will need a good quality UV resistant rope - black seems to be the best.
Hams in your area will no doubt have some information on what lasts the longest.

Bob VK7ZL

6519. Question?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-18 06:01:44 UTC
From: Lone Eagle
Topic: 6519 Message: 6519

I'm going to be living full time in a travel traler running around the country. I was thinking of putting up a loop on top of the trailer. I want to like the FCC use to do running around towns. I want it to be able to rotate it around to p/u on signals. Now what would be a good way to install it. And how would I prevent the lead in cable from getting all twisted up? Thanks
Ted

6520. Re: [loopantennas] Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-18 06:14:22 UTC
From: Jay Heyl
Topic: 6511 Message: 6520

On Tue, Apr 14, 2009 at 12:36 AM, Mike, KD7MG <kd7mg@...> wrote:

>
> I'm about to put up a full-wave 80 Meter horizontal square loop at about
> 40'
> elev. and would like some suggestions on the type of wire material that
> would work best. This will be for a city's ECC, so I would really like it
> to
> last for about 10-20 years without fussing with it. It also will have to
> meet NEC codes, so if I understand them correctly, this will have to be
> 12awg (or larger) because of the span length on each side.
>

In a situation like this, where the labor costs of putting up the wire will greatly exceed the material cost, it doesn't make much sense to use anything but the strongest. I'd go with 12 AWG solid copper clad steel. You'll have no issues with codes so won't have to worry about whether they apply or not. And with a breaking strength of 900lbs or more, it would take a large felled tree or one heck of a big wind to bring down the wire. The Wire Man<http://thewireman.com/antennap.html>sells this stuff for $0.15/foot in the length you'll need.

-- Jay

[Non-text portions of this message have been removed]

6521. Re: Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-18 06:26:14 UTC
From: Mike Groves
Topic: 6511 Message: 6521

So true! They all recommended black Dacron rope with 3/16 being the most common used. I'm planning on using an egg insulator in each corner. One side of the loop will be between 2 towers, with the opposite side between large tree trunks. The towers should be OK, but I know the trees will sway somewhat, even through the trunks are still about 2' across at 40' up. (Big trees!) It will be corner-fed with window line at one of the towers.

I was planning on tensioning it at the feed corner with a weight or spring (hadn't gotten that far yet), with the opposite corner strapped so the wire couldn't slide through the insulator. The 2 other corners would be left to slide free. Something like that anyway.

Mike

--- In loopantennas@yahoogroups.com, "revex540" <vk7krw@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Mike, KD7MG" <kd7mg@> wrote:
>
> Mike
> Equally important as the wire is what you are going to use to hold it up there.
> I presume you are going to use halyards in each corner so you will need a good quality UV resistant rope - black seems to be the best.
> Hams in your area will no doubt have some information on what lasts the longest.
>
> Bob VK7ZL
>

6522. Re: Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-22 07:04:50 UTC
From: Howard
Topic: 6511 Message: 6522

--- In loopantennas@yahoogroups.com, "Mike Groves" <kd7mg@...> wrote:
>
>
> So true! They all recommended black Dacron rope with 3/16 being the most common used. I'm planning on using an egg insulator in each corner. One side of the loop will be between 2 towers, with the opposite side between large tree trunks. The towers should be OK, but I know the trees will sway somewhat, even through the trunks are still about 2' across at 40' up. (Big trees!) It will be corner-fed with window line at one of the towers.
>
> I was planning on tensioning it at the feed corner with a weight or spring (hadn't gotten that far yet), with the opposite corner strapped so the wire couldn't slide through the insulator. The 2 other corners would be left to slide free. Something like that anyway.
>
> Mike
>
>
> --- In loopantennas@yahoogroups.com, "revex540" <vk7krw@> wrote:
> >
> > --- In loopantennas@yahoogroups.com, "Mike, KD7MG" <kd7mg@> wrote:
> >
> > Mike
> > Equally important as the wire is what you are going to use to hold it up there.
> > I presume you are going to use halyards in each corner so you will need a good quality UV resistant rope - black seems to be the best.
> > Hams in your area will no doubt have some information on what lasts the longest.
> >
> > Bob VK7ZL
> >
>
I've constructed and installed several 160M delta loops and use commercial .130 nylon trimmer line - the stuff the landscapers use in their gas powered trimmers. Fabricate a few wood cleats to lag screw into your trees to secure the trimmer line - and be sure to get the ROUND line, not the type with the square edge. It will saw awyay at the branches...the ROUND type kinda rolls.

I've had mine up for a few years. The stuff will stretch but won't break easily. It fades in UV but still remains flexible. Even when an antenna loads up with ice, the trimmer line still holds - of course it will stretch, but when the ice melts, back up goes the antenna. And no damage to the tree branches.

Use leather gloves to pull the trimmer line and 3/4 inch pvc pipe as insulators. I drill a few holes and weave the wire in and out. If you need a "floating" loop, then egg insulators are the way to go - I've got an 80M horizontal loop that is a "floater."

And on a side note: the pneumatic tennis ball launcher is the best method I have fund for putting lines up over the tall trees or covering a wide expanse between trees. With a

weighted tennis ball and 70 or 80 psi of air (I add a few ounces of sand to the inside of mine and reseal them with hot melt glue) I can launch a line over a 100 foot tree with room to spare. With 100 psi and a good 45 degree angle shot I can cover a few hundred feet.

6523. Re: Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-23 06:18:27 UTC
From: Mike Groves
Topic: 6511 Message: 6523

> I've constructed and installed several 160M delta loops and use commercial .130 nylon trimmer line - the stuff the landscapers use in their gas powered trimmers. Fabricate a few wood cleats to lag screw into your trees to secure the trimmer line - and be sure to get the ROUND line, not the type with the square edge. It will saw awyay at the branches...the ROUND type kinda rolls.
>
> I've had mine up for a few years. The stuff will stretch but won't break easily. It fades in UV but still remains flexible. Even when an antenna loads up with ice, the trimmer line still holds - of course it will stretch, but when the ice melts, back up goes the antenna. And no damage to the tree branches.
>
> Use leather gloves to pull the trimmer line and 3/4 inch pvc pipe as insulators. I drill a few holes and weave the wire in and out. If you need a "floating" loop, then egg insulators are the way to go - I've got an 80M horizontal loop that is a "floater."

Interesting. I've read about a lot of materials but not trimmer line. lol Might have a bit too much stretch in it, but certainly something else to look into.

Yes, this will also be an 80M floater and I was already planning on using egg-insulators at the corners. Thanks for the tip though.

> And on a side note: the pneumatic tennis ball launcher is the best method I have fund for putting lines up over the tall trees or covering a wide expanse between trees. With a weighted tennis ball and 70 or 80 psi of air (I add a few ounces of sand to the inside of mine and reseal them with hot melt glue) I can launch a line over a 100 foot tree with room to spare. With 100 psi and a good 45 degree angle shot I can cover a few hundred feet.

I borrowed my son's potato gun once to launch a line with a weighted ball and laughed as I read a recent article about that in QST. Fortunately, I've got something slightly safer at my disposal. A Hi-Ranger bucket truck with a 65' reach! 8^)

6524. Re: Wire material

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-04-23 12:14:45 UTC
From: tenorman1952
Topic: 6511 Message: 6524

--- In loopantennas@yahoogroups.com, "Howard" <virginia_gentleman48@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Mike Groves" <kd7mg@> wrote:
> >
> >
> > So true! They all recommended black Dacron rope with 3/16 being the most common used. I'm planning on using an egg insulator in each corner. One side of the loop will be between 2 towers, with the

(trimmed)

I've found the 500' rolls of 14 ga and 12 ga stranded insulated wire at Home Depot. Available in a variety of colors, I purchased black. The 14 gauge wire is $25/roll. The 12 gauge wire is $40/roll.

For rope, I use black parachute cord. This can be found via Google search. You can buy other colors, but black seems to disappear into the background. I bought a 250' spool.

Paul
AE5JU

6525. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-01 13:27:57 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6525

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6526. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-01 13:27:57 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6526

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6527. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-01 15:55:32 UTC
From: David Towers
Topic: 5136 Message: 6527

Hi
puzzled about the members.cts.com/king etc
clicking-copy and paste comes up with

http://www.concentric.com/professional-services/
73
dave G8SZX

loopantennas@yahoogroups.com wrote:
> Amplifiers for Antennas and Pre-Selectors
> http://members.cts.com/king/j/jlkolb/site/ant.htm
> - presented by John Kolb [KK6IL]
>
> Four(4) Schmatic Diagrams are provided:
>
> * The KRS AA-1 Active Antenna was sold through Radio West
> in the early '70's, and was a good performer.
> http://members.cts.com/king/j/jlkolb/site/aa-1.pdf
>
> * In the '70's, this Circuit was developed suitable for
> use as an Antenna Pre-Amplifier or as the Amplifier for
> a Box Loop Antenna or Ferrite Rod Antenna.
> http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf
>
> * A fancier version, with a Dual-Gate FET, featuring an
> RF Gain Control. Dual-Gate FET's can still be found,
> but not easily. This Schematic is closely related to
> a Pre-Selector sold as the KS Pre-Selector.
> http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf
>
> * Better Nulling is obtained with a Loop Antenna when it
> is Center Tapped and Amplified with a Balanced Amplifier.
> http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

6528. Re:File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-02 19:50:40 UTC
From: Hue Miller
Topic: 6528 Message: 6528

It's a good idea to make sure the links all work, before posting them.
Thanks - Hue Miller

6529. G4HOL Loop details

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-02 20:59:56 UTC
From: M HOLDEN
Topic: 6529 Message: 6529

My golden rules: Avoid the use of coax cable as an H.F. loop feeder. (It will unbalance the system and could therefore produce unwanted received noise [QRN])

The formula 1005/f(MHz) is good from hf through to uhf. This will be the total length of a full wave loop in Feet.

Use medium impedance twin like 300Wslotted if you are going to make one loop work on multiple frequencies, as most of the time the "seen" impedance at the loop feedpoint will also be "medium". The system will remain in balance and therefore reject QRN.

When using a single band full wave loop antenna, the best match to a 50Wtransceiver will be a quarter wave or an odd number of multiple quarter waves of 75 / 80Wpolythene twin. Do not ignore the manufacturer's Velocity Factor of the cable. A VF of say 90% will mean that the feeder length will be 90% of a quarter wave long. Read up and understand the use of quarter wave line impedance transformation. The 234 divided by f (MHz) will give a true quarter wave of copper wire, in Feet. If you make a good 40 metre loop it should work well on 15 metres too.

A current balun at the antenna tuner end of the feeder may not be needed as it could be transforming already low impedances even lower and beyond the range of some tuners capabilities.

I enclose my optimised HF loop design as well as a 2lvhf design which will work well on the lowest budget and with dual polarity.

The Cebik website will go into greater depths, but there is enough here to wet the appetite.

Mike G4HOL

[Non-text portions of this message have been removed]

6530. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-01 17:46:45 UTC
From: aimo ruoho
Topic: 5136 Message: 6530

Thank you for a lot of interesting URLs!
UNFORTUNATELY many didn't open at all...
A few of the first had nothing to do with LOOP ANTENNAS.
Would you kindly check and wipe out those?
Aimo

--- El vie, 1/5/09, loopantennas@yahoogroups.com <loopantennas@yahoogroups.com> escribió:
De: loopantennas@yahoogroups.com <loopantennas@yahoogroups.com>
Asunto: [loopantennas] File - Links.txt
Para: loopantennas@yahoogroups.com
Fecha: viernes, 1 mayo, 2009 3:27

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid
Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop

http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address:
http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>

> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ)
Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH

http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links

http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about

radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq
Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields -

Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of
woven #36 solid copper wires that provide high strength and extreme flexibility.
The most popular version of "Flex-Weave" is the 'equivalent'
of #14 AWG wire size. It can be 'used' for unsupported spans up to 200
ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated,
Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More:
"QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted
together under its Flexible Insulation making it both Strong, Flexible and
Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and
Scanning Enthusiast. Resources such as; Monitoring Police and Fire
Communications, What Antennas to use, Secret Scanner Frequencies, Radio
Programming Software, Radio Mods and Operating Tips, Professional resources for
Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links
rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6531. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-02 21:28:17 UTC
From: Steve
Topic: 5136 Message: 6531

I could use some help with the links. I moderate about twenty groups and I'm a full time student right now. Some have offered to help, but none have come through.

A quick Google shows JLKolb has put his stuff on another site. I started going through the links and correcting them, but I just haven't had time.

Ideally, these would all go into the Links section, but Yahoogroups gives no simple way to get them all in except one at a time.

Steve Greenfield

--- In loopantennas@yahoogroups.com, David Towers <david.towers@...> wrote:
>
>
> Hi
> puzzled about the members.cts.com/king etc
> clicking-copy and paste comes up with
>
> http://www.concentric.com/professional-services/
> 73
> dave G8SZX
>
> loopantennas@yahoogroups.com wrote:
> > Amplifiers for Antennas and Pre-Selectors
> > http://members.cts.com/king/j/jlkolb/site/ant.htm
> > - presented by John Kolb [KK6IL]
> >
> > Four(4) Schmatic Diagrams are provided:
> >
> > * The KRS AA-1 Active Antenna was sold through Radio West
> > in the early '70's, and was a good performer.
> > http://members.cts.com/king/j/jlkolb/site/aa-1.pdf
> >
> > * In the '70's, this Circuit was developed suitable for
> > use as an Antenna Pre-Amplifier or as the Amplifier for
> > a Box Loop Antenna or Ferrite Rod Antenna.
> > http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf
> >
> > * A fancier version, with a Dual-Gate FET, featuring an
> > RF Gain Control. Dual-Gate FET's can still be found,
> > but not easily. This Schematic is closely related to
> > a Pre-Selector sold as the KS Pre-Selector.
> > http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf
> >
> > * Better Nulling is obtained with a Loop Antenna when it
> > is Center Tapped and Amplified with a Balanced Amplifier.

> > http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf
>

6532. Performance of broadband loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-03 03:07:46 UTC
From: greg_ella53
Topic: 6532 Message: 6532

The files section shows two posts from May 2007 for a broadband untuned loop that is square, six feet or more per side, vertically mounted and transformer coupled. I would appreciate hearing from anyone that has built one of these, regarding performance and coverage over the HF band.

Thanks much,

Greg Ella,
Livermore, CA

6533. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-06 17:39:18 UTC
From: Bruce Carter
Topic: 5136 Message: 6533

> Thank you for a lot of interesting URLs!
> UNFORTUNATELY many didn't open at all...
> A few of the first had nothing to do with LOOP ANTENNAS.
> Would you kindly check and wipe out those?

I second that - some scum added online gambling sites to the links section. If I were a moderator here - that creep would be GONE so freakin' fast ---- before his sites victimize anybody.

6534. Re: G4HOL Loop details

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-12 08:31:01 UTC
From: Lee Moore (Gimbert)
Topic: 6529 Message: 6534

Not if a ferrite ring coupling transformer is used ...

Regards.

Lee ... G6ZSG.

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> My golden rules: Avoid the use of coax cable as an H.F. loop feeder. (It will unbalance the system and could therefore produce unwanted received noise [QRN])
> The formula 1005/f(MHz) is good from hf through to uhf. This will be the total length of a full wave loop in Feet.
> Use medium impedance twin like 300Wslotted if you are going to make one loop work on multiple frequencies, as most of the time the "seen" impedance at the loop feedpoint will also be "medium". The system will remain in balance and therefore reject QRN.
> When using a single band full wave loop antenna, the best match to a 50Wtransceiver will be a quarter wave or an odd number of multiple quarter waves of 75 / 80Wpolythene twin. Do not ignore the manufacturer's Velocity Factor of the cable. A VF of say 90% will mean that the feeder length will be 90% of a quarter wave long. Read up and understand the use of quarter wave line impedance transformation. The 234 divided by f (MHz) will give a true quarter wave of copper wire, in Feet. If you make a good 40 metre loop it should work well on 15 metres too.
> A current balun at the antenna tuner end of the feeder may not be needed as it could be transforming already low impedances even lower and beyond the range of some tuners capabilities.
> I enclose my optimised HF loop design as well as a 2lvhf design which will work well on the lowest budget and with dual polarity.
> The Cebik website will go into greater depths, but there is enough here to wet the appetite.
> Mike G4HOL
>
> [Non-text portions of this message have been removed]
>

6535. Re: [loopantennas] Re: G4HOL Loop details

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-12 09:39:00 UTC
From: M HOLDEN
Topic: 6529 Message: 6535

Thanks for that Lee. When you have a simple monoband antenna your solution is sound. When you change frequencies on a multiband loop, you also see large changes in feedpoint impedances. These are in the range of "medium" impedance, and 300 ohm or 450 ohm ladder feeder is far better equipped for that than coax at 50 or 75 ohms. I experimented some years ago with a 150Ft loop using a ferrite ring coupling. I was not too impressed with the heat generated in the ferrite. I know of others who have used the loop on auto tuners at the feedpoint, (and have dispensed with the ladder line) and had great results on 50 ohm cable running back to the rig in the shack. I am sorry that my omega signs and lambdas became W and l in the print up earlier, as this must have caused some confusion. Best wishes, Mike G4HOL

From: Lee Moore (Gimbert) <leemoore500@hotmail.com>
To: loopantennas@yahoogroups.com
Sent: Tuesday, 12 May, 2009 9:31:01 AM
Subject: [loopantennas] Re: G4HOL Loop details

Not if a ferrite ring coupling transformer is used ...

Regards.

Lee ... G6ZSG.

--- In loopantennas@ yahoogroups. com, M HOLDEN <mholden909@ ...> wrote:
>
> My golden rules: Avoid the use of coax cable as an H.F. loop feeder. (It will unbalance the system and could therefore produce unwanted received noise [QRN])
> The formula 1005/f(MHz) is good from hf through to uhf. This will be the total length of a full wave loop in Feet.
> Use medium impedance twin like 300Wslotted if you are going to make one loop work on multiple frequencies, as most of the time the "seen" impedance at the loop feedpoint will also be "medium". The system will remain in balance and therefore reject QRN.
> When using a single band full wave loop antenna, the best match to a 50Wtransceiver will be a quarter wave or an odd number of multiple quarter waves of 75 / 80Wpolythene twin. Do not ignore the manufacturer' s Velocity Factor of the cable. A VF of say 90% will mean that the feeder length will be 90% of a quarter wave long. Read up and understand the use of quarter wave line impedance transformation. The 234 divided by f (MHz) will give a true quarter wave of copper wire, in Feet. If you make a good 40 metre loop it should work well on 15 metres too.
> A current balun at the antenna tuner end of the feeder may not be needed as it could be transforming already low impedances even lower and beyond the range of some tuners capabilities.
> I enclose my optimised HF loop design as well as a 2lvhf design which will work well on the lowest budget and with dual polarity.
> The Cebik website will go into greater depths, but there is enough here to wet the

appetite.
> Mike G4HOL
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

6536. Re: G4HOL Loop details

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-14 21:12:00 UTC
From: jrtow3rd@bellsouth.net
Topic: 6529 Message: 6536

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> Thanks for that Lee. When you have a simple monoband antenna your solution is sound. When you change frequencies on a multiband loop, you also see large changes in feedpoint impedances. These are in the range of "medium" impedance, and 300 ohm or 450 ohm ladder feeder is far better equipped for that than coax at 50 or 75 ohms. I experimented some years ago with a 150Ft loop using a ferrite ring coupling. I was not too impressed with the heat generated in the ferrite. I know of others who have used the loop on auto tuners at the feedpoint, (and have dispensed with the ladder line) and had great results on 50 ohm cable running back to the rig in the shack. I am sorry that my omega signs and lambdas became W and l in the print up earlier, as this must have caused some confusion. Best wishes, Mike G4HOL
>
>
One problem folks learned many moons ago with balanced feeders was that whether sized/spaced for 300, 450, 0r 600 Ohms characteristic impedance was unimportant if the load (aerial) did not match that impedance. Sure, a well thought out balanced tuner could 'match' a pair of bed springs fed with ladder line - or so a VSWR bridge in the coax feed would indicate. The feedline would be part of the load, in the mismatched aerial case, and radiation would commence 'in the shack'. On receive, some signal pickup would occur on the feedline, too. The benefit of the matching ferrite toroidal transformer at the loop's feedpoint is that the coax feed, even with a non-negligible VSWR, is still well-shielded. Also, the Hi-Z winding can be split - with a grounded CT to keep from developing static charges on the loop.

Before 1972, the Marine Band in the USA ran from 2-3 MHz AM. Since then, it has been VHF NBFM - around the NOAA/Marine WX frequencies. Small craft that needed communications in the latter years used a transceiver, often with a single 12V filament sweep tube PA plate modulated by a solid state audio amp, running 30-50W RF. The 'channels' were significantly apart, frequency-wise, and the output Pi-network was adjusted, ie, tapped, for each channel - and the length of 'feedline' (insulated wire) and height of the mast could not be altered for fear of detuning the transmitter. Touching it while it was in use could result in an RF burn, too. Designed 'RF in the shack' - but I digress..John

6538. dumb question for ya all

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-16 19:22:36 UTC
From: ka7nwq
Topic: 6538 Message: 6538

Hey gang.....long time since I have been on here. I ahd a few questions for the group and was hoping that IU could get some input.

I would like to build a vertical loop, mainly for 30 meters. I am leaning towards a vertical oriented loop. I have a 90 foot tower and was going to hang the loop from that. I have enough room to hang a 30 meter loop, however my question is this.....can you use the loop that is cut for 30 on 14, 18, 21, and 28? Or should I cut the loop for 40 meters?

Also, if I go with the verticaly hung loop, fed at the bottom corner with open wire, that should give me a lower angle of radiation, which would be better for DX, right? One more question,,, in your experiences, which loop was better as far as noise was concerned? A horizontal or a vertical loop.

Thanks again to all for your time. I am re-learning the theory aspect of the hobby, primarily antennas. Any input would be greatly appreciated.

Thanks and 73's to you

scott
KA7NWQ

6539. Re: [loopantennas] dumb question for ya all

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-16 20:04:41 UTC
From: Jim Dunstan
Topic: 6538 Message: 6539

At 07:22 PM 5/16/2009 +0000, you wrote:

>Hey gang.....long time since I have been on here. I ahd a few questions
>for the group and was hoping that IU could get some input.
>
>I would like to build a vertical loop, mainly for 30 meters. I am leaning
>towards a vertical oriented loop. I have a 90 foot tower and was going to
>hang the loop from that. I have enough room to hang a 30 meter loop,
>however my question is this.....can you use the loop that is cut for 30
>on 14, 18, 21, and 28? Or should I cut the loop for 40 meters?
>
>Also, if I go with the verticaly hung loop, fed at the bottom corner with
>open wire, that should give me a lower angle of radiation, which would be
>better for DX, right? One more question,,, in your experiences, which loop
>was better as far as noise was concerned? A horizontal or a vertical loop.
>
>Thanks again to all for your time. I am re-learning the theory aspect of
>the hobby, primarily antennas. Any input would be greatly appreciated.
>
>Thanks and 73's to you
>
>scott
>KA7NWQ

Hi,

Generally speaking in harmonically related situations a 1 wavelength loop radiates perpendicular to its plane on the fundamental frequency and off the side of the loop on its harmonics. If you used a 40m vertical loop the radiation pattern would be predictable on 40m and 20-10m. Not sure what it would be on 30m. I suspect it would be more like 40m than 20-10m. Personally I would go for a loop 1 wavelength on 40m .... performance on 30m would probably be similar to 40m while higher harmonics would be off the side.

You definitely have to go for a vertical orientation. If you go for a horizontal orientation and you want reasonable performance on 30m you would need a loop at 1 wavelength at 80 m at least.... anything smaller would give excessive radiation upwards on 40 and 30 rather than reasonable horizontal angles for dx.

Jim, VE3CI

6540. Re: [loopantennas] dumb question for ya all

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-16 20:35:11 UTC
From: M HOLDEN
Topic: 6538 Message: 6540

For what it's worth, I run a 5MHz loop (which is a low slung horizontal) and it works very well from 3.5MHz through to 28MHz. It is fed with 300ohm slotted ribbon, right back to the shack. If I had a 90Ft tower, (I WISH!) I would hang it high as a vertical triangular loop and run the feeder into a bottom corner. Mine is 188ft 6ins circumference. It would be approximately 2 wavelengths on 10 MHz and have low noise receive characteristics. I am unaware that a change of polarization would change the noise performance.
Best wishes, Mike G4HOL
P.S.The dumbest question is the one that is never asked. Seek and ye shall find!

From: ka7nwq <ka7nwq@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, 16 May, 2009 8:22:36 PM
Subject: [loopantennas] dumb question for ya all

Hey gang.....long time since I have been on here. I ahd a few questions for the group and was hoping that IU could get some input.

I would like to build a vertical loop, mainly for 30 meters. I am leaning towards a vertical oriented loop. I have a 90 foot tower and was going to hang the loop from that. I have enough room to hang a 30 meter loop, however my question is this.....can you use the loop that is cut for 30 on 14, 18, 21, and 28? Or should I cut the loop for 40 meters?

Also, if I go with the verticaly hung loop, fed at the bottom corner with open wire, that should give me a lower angle of radiation, which would be better for DX, right? One more question,,, in your experiences, which loop was better as far as noise was concerned? A horizontal or a vertical loop.

Thanks again to all for your time. I am re-learning the theory aspect of the hobby, primarily antennas. Any input would be greatly appreciated.

Thanks and 73's to you

scott
KA7NWQ

[Non-text portions of this message have been removed]

6541. Re: [loopantennas] dumb question for ya all

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-16 20:36:04 UTC
From: M HOLDEN
Topic: 6538 Message: 6541

For what it's worth, I run a 5MHz loop (which is a low slung horizontal) and it works very well from 3.5MHz through to 28MHz. It is fed with 300ohm slotted ribbon, right back to the shack. If I had a 90Ft tower, (I WISH!) I would hang it high as a vertical triangular loop and run the feeder into a bottom corner. Mine is 188ft 6ins circumference. It would be approximately 2 wavelengths on 10 MHz and have low noise receive characteristics. I am unaware that a change of polarization would change the noise performance.
Best wishes, Mike G4HOL
P.S.The dumbest question is the one that is never asked. Seek and ye shall find!

From: ka7nwq <ka7nwq@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, 16 May, 2009 8:22:36 PM
Subject: [loopantennas] dumb question for ya all

Hey gang.....long time since I have been on here. I ahd a few questions for the group and was hoping that IU could get some input.

I would like to build a vertical loop, mainly for 30 meters. I am leaning towards a vertical oriented loop. I have a 90 foot tower and was going to hang the loop from that. I have enough room to hang a 30 meter loop, however my question is this.....can you use the loop that is cut for 30 on 14, 18, 21, and 28? Or should I cut the loop for 40 meters?

Also, if I go with the verticaly hung loop, fed at the bottom corner with open wire, that should give me a lower angle of radiation, which would be better for DX, right? One more question,,, in your experiences, which loop was better as far as noise was concerned? A horizontal or a vertical loop.

Thanks again to all for your time. I am re-learning the theory aspect of the hobby, primarily antennas. Any input would be greatly appreciated.

Thanks and 73's to you

scott
KA7NWQ

[Non-text portions of this message have been removed]

6542. Re: dumb question for ya all

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-16 22:45:35 UTC
From: tenorman1952
Topic: 6538 Message: 6542

--- In loopantennas@yahoogroups.com, "ka7nwq" <ka7nwq@...> wrote:
>
> Hey gang.....long time since I have been on here. I ahd a few questions for the group and was hoping that IU could get some input.
>
> I would like to build a vertical loop, mainly for 30 meters. I am leaning towards a vertical oriented loop. I have a 90 foot tower and was going to hang the loop from that. I have enough room to hang a 30 meter loop, however my question is this.....can you use the loop that is cut for 30 on 14, 18, 21, and 28? Or should I cut the loop for 40 meters?
>

I found this article interesting:

http://www.antennex.com/hws/ws0902/hardline.html

Paul
AE5JU

6543. Re: dumb question for ya all

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-17 15:35:52 UTC
From: Rob - W1AEX
Topic: 6538 Message: 6543

Thanks for posting that Paul. Talk about simplicity of construction! I've got to give this one a try just for the fun of it.

73,

Rob W1AEX

> I found this article interesting:
>
> http://www.antennex.com/hws/ws0902/hardline.html
>
> Paul
> AE5JU

6544. Re: [loopantennas] Re: dumb question for ya all

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-18 20:52:14 UTC
From: Scott Gaylord
Topic: 6538 Message: 6544

Thanks to all for the replies that you sent. I might be able to string a 80 meter loop from the tower, however, I think that it would not end up in a perfect diamond shape, not to mention that the lowest point would be pretty close to the ground. I guess I am looking for options here as far as the best antenna that I could hang and get the best results, ie. dx and noise factor.

To give you a little bit of a description of the tower situation that I have, it is a 90 foot, Rohn 25 guyed 3 x 4. By that I mean that it has 4 anchor points, with 3 levels of guys. These guys are not insulated, which leads me to beleive that the tower / guys will have an impact on the performance of the loop. Currently I have a dipole, basically, cut for 160, with the eastern end up at 15 feet and the western end up about 25 or 30 feet or so, fed with homebrew 600 ohm ladder line. It does a fine job on 20 as well as 30, however the antenna is running basically east and west, with the broadside being north and south. So wanting to work Europe and such, I think it is 'pointed' in the wrong direction.

I was wondering if I should stick with a vertically hung loop, or a horizontally hung loop. If I were to go with the horizontally hung loop, maybe I could get 30 feet up on all four corners. For topband, I know that this will be burning not only worms, but clouds as well. I was also wondering about feedline length. 1/4 wave comes to mind for the lowest band of operation. If my memory serve me right, I think that I have about 230 feet of open wire feedline feeding the dipole. Should I trim it back a few feet? Or, leave it as is.

Again, thanks for all your input. I am still trying to learn the whole aspect of antenna theory. Bear with me!! HI HI Hope you all had a good weekend and thanks again for your advice on this subject.

Scott
KA7NWQ

From: Rob - W1AEX <w1aex.fn31@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, May 17, 2009 8:35:52 AM
Subject: [loopantennas] Re: dumb question for ya all

Thanks for posting that Paul. Talk about simplicity of construction! I've got to give this one a try just for the fun of it.

73,

Rob W1AEX

> I found this article interesting:
>
> http://www.antennex .com/hws/ ws0902/hardline. html
>
> Paul

> AE5JU

[Non-text portions of this message have been removed]

6545. Re: [loopantennas] Re: dumb question for ya all

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-18 21:25:36 UTC
From: M HOLDEN
Topic: 6538 Message: 6545

Hi Scott. To ease your worries, loops are not worried by nearby objects anything like as much as yagis and resonant dipoles etc. Slope, symmetry and shape also pale into virtual insignificance. So you could have a "horizontal" loop with one corner at 90 Ft and others at 30 Ft, if that was available. If you are making a dipole, you have to be accurate. With a loop, you can take a more laid back approach - like suck it and see ! The feed length is not an issue as it is non-radiating and in near-perfect balance at all times on all bands. My rule of thumb is to use a convenient length of feeder, (historically anything from 15 to 60 Ft at various QTHs. There are two schools of thought about actual loop size. One is to use 1005/f and cut for specific resonance, and multiples thereof. The other is to use as much wire as possible, hang it high and bring it to resonance on tuned feeders with the atu or auto atu in the shack. Both work ! Just go for it. You
will not be disappointed. Kind regards de Mike, G4HOL

From: Scott Gaylord <ka7nwq@...>
To: loopantennas@yahoogroups.com
Sent: Monday, 18 May, 2009 9:52:14 PM
Subject: Re: [loopantennas] Re: dumb question for ya all

Thanks to all for the replies that you sent. I might be able to string a 80 meter loop from the tower, however, I think that it would not end up in a perfect diamond shape, not to mention that the lowest point would be pretty close to the ground. I guess I am looking for options here as far as the best antenna that I could hang and get the best results, ie. dx and noise factor.

To give you a little bit of a description of the tower situation that I have, it is a 90 foot, Rohn 25 guyed 3 x 4. By that I mean that it has 4 anchor points, with 3 levels of guys. These guys are not insulated, which leads me to beleive that the tower / guys will have an impact on the performance of the loop. Currently I have a dipole, basically, cut for 160, with the eastern end up at 15 feet and the western end up about 25 or 30 feet or so, fed with homebrew 600 ohm ladder line. It does a fine job on 20 as well as 30, however the antenna is running basically east and west, with the broadside being north and south. So wanting to work Europe and such, I think it is 'pointed' in the wrong direction.

I was wondering if I should stick with a vertically hung loop, or a horizontally hung loop. If I were to go with the horizontally hung loop, maybe I could get 30 feet up on all four corners. For topband, I know that this will be burning not only worms, but clouds as well. I was also wondering about feedline length. 1/4 wave comes to mind for the lowest band of operation. If my memory serve me right, I think that I have about 230 feet of open wire feedline feeding the dipole. Should I trim it back a few feet? Or, leave it as is.

Again, thanks for all your input. I am still trying to learn the whole aspect of antenna theory. Bear with me!! HI HI Hope you all had a good weekend and thanks again for your advice on this subject.

Scott
KA7NWQ

---------- --------- --------- --
From: Rob - W1AEX <w1aex.fn31@gmail. com>
To: loopantennas@ yahoogroups. com
Sent: Sunday, May 17, 2009 8:35:52 AM
Subject: [loopantennas] Re: dumb question for ya all

Thanks for posting that Paul. Talk about simplicity of construction! I've got to give this one a try just for the fun of it.

73,

Rob W1AEX

> I found this article interesting:
>
> http://www.antennex .com/hws/ ws0902/hardline. html
>
> Paul
> AE5JU

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6546. DX Engineering RPA-1

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-21 22:53:07 UTC
From: jamesbisch2001
Topic: 6546 Message: 6546

Hello I just ordered the RPA-1 preamp and was wondering if any of you are using one and what configuration antenna?

I was thinking of using it in a loop setup maybe something like the Wellbrook ALA 100 unit they use maybe a forty foot loop of plain copper wire or they have use a 3 turn 6 foot diameter of wire

basicly a balanced loop

Am interested in the MW band would like a bit of front to side

thanks appreciate any information

Leon

6547. Re: [loopantennas] DX Engineering RPA-1

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-21 23:07:27 UTC
From: Roger Stein
Topic: 6546 Message: 6547

Hi Leon,

I use one with my homebrew K9AY loop for 160m operation as well as BCB listening.
Very effective. I have mine mounted on the wall of the shack right behind my K3.

Antenna is down now for the summer. Mainly a winter time activity for me.

73, Roger
K7SJ

On Thu, May 21, 2009 at 3:53 PM, jamesbisch2001 <leonardp14@...> wrote:

>
>
> Hello I just ordered the RPA-1 preamp and was wondering if any of you are
> using
> one and what configuration antenna?
>
> I was thinking of using it in a loop setup maybe something like the
> Wellbrook
> ALA 100 unit they use maybe a forty foot loop of plain copper wire or they
> have
> use a 3 turn 6 foot diameter of wire
>
> basicly a balanced loop
>
> Am interested in the MW band would like a bit of front to side
>
> thanks appreciate any information
>
> Leon
>
>
>

[Non-text portions of this message have been removed]

6548. Input impedance of Degen 1103.....an external "passive" ferrite antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-24 17:04:08 UTC
From: ciccionews2004
Topic: 6548 Message: 6548

Hi all,
I have same problem with external input impedance of my Degen1103.
In these days I building an external antenna for LF-MW (150k - 1.7M).
In that "ferrite antenna" I want to connect a secondary loop to take signal,but
I don't know the impedance of degen and I don't know how to calculate the turns
ratio between main loop (loop to connect with variable capacitors)and feeding
loop (to connect with external input in Degen)
Below the schematics of my external ferrite antenna.
http://img193.imageshack.us/my.php?image=ferriteantenna.jpg
Sorry for bad drawing....the writen are in italin,but in the left side of
drawing says variable capacitors and in the right side says to degen input.

Who can help me?

regards

Ciccio

6549. Re: [loopantennas] Input impedance of Degen 1103.....an external "passive" ferrite antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-24 19:29:09 UTC
From: Paul V Birke PEng
Topic: 6548 Message: 6549

I would design the loop inductance with ferrite for about 600 ohms at the centre frequency of interest band

Paul in Guelph VE3PVB

From: ciccionews2004 <ciccionews2004@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, May 24, 2009 1:04:08 PM
Subject: [loopantennas] Input impedance of Degen 1103.....an external "passive" ferrite antenna

Hi all,
I have same problem with external input impedance of my Degen1103.
In these days I building an external antenna for LF-MW (150k - 1.7M).
In that "ferrite antenna" I want to connect a secondary loop to take signal,but I don't know the impedance of degen and I don't know how to calculate the turns ratio between main loop (loop to connect with variable capacitors)and feeding loop (to connect with external input in Degen)
Below the schematics of my external ferrite antenna.
http://img193. imageshack. us/my.php? image=ferriteant enna.jpg
Sorry for bad drawing....the writen are in italin,but in the left side of drawing says variable capacitors and in the right side says to degen input.

Who can help me?

regards

Ciccio

[Non-text portions of this message have been removed]

6550. Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-25 01:43:31 UTC
From: Darren Hennig
Topic: 6550 Message: 6550

I Agree with Paul - 500-600ohm should be about right. I use a ferrite rod with mine, and I used ~500ohm for my secondary. Seems to do just fine with my 1103!

Darren
VE6IZ

[Non-text portions of this message have been removed]

6551. Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-25 17:04:42 UTC
From: ciccionews2004
Topic: 6550 Message: 6551

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> I Agree with Paul - 500-600ohm should be about right. I use a ferrite rod with mine, and I used ~500ohm for my secondary. Seems to do just fine with my 1103!
>
> Darren
> VE6IZ
>
> [Non-text portions of this message have been removed]
>
ok! 600ohm in the center of frequeny tuned.but....
I think,
at the resonance ZC and ZL are same.
I choose Q value for the selective. (high Q = High selective)
Zfeed = Q*ZL ?! right?!
Zd is input impedance of Degen (600ohm)
N is turn number of feeding loop

N = radquad((ZC * Q) / Zd)

Right?or not?

Regards

Ale

6552. Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-26 04:59:18 UTC
From: dhennig2
Topic: 6550 Message: 6552

You're confusing tuned resonance with impedances for the application.

Your coil will have an inductive reactance of XL = 2*pi*fL; L is the inductance and f is freq.

ZL = R+XL; R is the wire resistance in ohm. This is the Z for your main winding.

If you don't know the R value, don't worry, it's smll compared to a ferrite winding's XL.

To match your 600 ohm, use the fact that the SQUARE of the turns ratio is the impedance ratio; thus, a 3:1 turn ratio yields a 10:1 impedance ratio [approximately].

Let's say you want to have the unit to tune from 520kHz to 1710kHz, and the median freq is thus 1115kHz. Use 1100, it's close enough. fc=1.1 MHz, which s your design freq for the coil.

The ferrite will have its own characteristics in uH/turn^2 or something similar. Once you know this, assuming the coil is on the centre, then you can determine the number of turns needed to achieve resonance for 1100 kHz, with the tuning capacitor you plan to use.

Knowing this turns ratio and inductance value [best measured, but estimates can be close sometimes!] you can then find XL using 1100kHz as your f value - take XL/600 nd then the sqaure root. This number is your turns ratio. Apply the nearest whole number and you're done.

Darren
VE6IZ

--- In loopantennas@yahoogroups.com, "ciccionews2004" <ciccionews2004@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@> wrote:
> >
> > I Agree with Paul - 500-600ohm should be about right. I use a ferrite rod with mine, and I used ~500ohm for my secondary. Seems to do just fine with my 1103!
> >
> > Darren
> > VE6IZ
> >
> > [Non-text portions of this message have been removed]
> >
> ok! 600ohm in the center of frequeny tuned.but....
> I think,
> at the resonance ZC and ZL are same.
> I choose Q value for the selective. (high Q = High selective)
> Zfeed = Q*ZL ?! right?!
> Zd is input impedance of Degen (600ohm)
> N is turn number of feeding loop

>
> N = radquad((ZC * Q) / Zd)
>
> Right?or not?
>
> Regards
>
> Ale
>

6553. Re: [loopantennas] Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-26 05:30:55 UTC
From: Paul V Birke PEng
Topic: 6550 Message: 6553

that is what I thought but then got to thinking about the interaction effect of the tuned resonant adjacent winding and therefore did not answer

however we agree to try this first the design of the second loop for inductive value near 400 to 800 ohms at the centre frequency of interest

best to use a inductance meter if you have one around

if you do not have one and have 100$+ or so I highly recommend the AADE LC meter purchased assembled and tested, hard to beat this beauty

best wishes

Paul in Guelph VE3PVB

From: dhennig2 <dhennig2@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, May 26, 2009 12:59:18 AM
Subject: [loopantennas] Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

You're confusing tuned resonance with impedances for the application.

Your coil will have an inductive reactance of XL = 2*pi*fL; L is the inductance and f is freq.

ZL = R+XL; R is the wire resistance in ohm. This is the Z for your main winding.

If you don't know the R value, don't worry, it's smll compared to a ferrite winding's XL.

To match your 600 ohm, use the fact that the SQUARE of the turns ratio is the impedance ratio; thus, a 3:1 turn ratio yields a 10:1 impedance ratio [approximately] .

Let's say you want to have the unit to tune from 520kHz to 1710kHz, and the median freq is thus 1115kHz. Use 1100, it's close enough. fc=1.1 MHz, which s your design freq for the coil.

The ferrite will have its own characteristics in uH/turn^2 or something similar. Once you know this, assuming the coil is on the centre, then you can determine the number of turns needed to achieve resonance for 1100 kHz, with the tuning capacitor you plan to use.

Knowing this turns ratio and inductance value [best measured, but estimates can be close sometimes!] you can then find XL using 1100kHz as your f value - take XL/600 nd then the sqaure root. This number is your turns ratio. Apply the nearest whole number and you're done.

Darren
VE6IZ

--- In loopantennas@ yahoogroups. com, "ciccionews2004" <ciccionews2004@ ...> wrote:
>
> --- In loopantennas@ yahoogroups. com, "Darren Hennig" <dhennig2@> wrote:
> >
> > I Agree with Paul - 500-600ohm should be about right. I use a ferrite rod with mine, and I used ~500ohm for my secondary. Seems to do just fine with my 1103!
> >
> > Darren
> > VE6IZ
> >
> > [Non-text portions of this message have been removed]
> >
> ok! 600ohm in the center of frequeny tuned.but... .
> I think,
> at the resonance ZC and ZL are same.
> I choose Q value for the selective. (high Q = High selective)
> Zfeed = Q*ZL ?! right?!
> Zd is input impedance of Degen (600ohm)
> N is turn number of feeding loop
>
> N = radquad((ZC * Q) / Zd)
>
> Right?or not?
>
> Regards
>
> Ale
>

[Non-text portions of this message have been removed]

6554. Crossed MagLoop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-26 08:30:20 UTC
From: oh6bi
Topic: 6554 Message: 6554

Hi All !

In the article

http://www.standpipe.com/w2bri/article1.htm

You cann see fine MagLoop works. I have been
thinking something similar to my cottage attic.
Anyone experienced with this kind crossed loop ?
How it is radiating ? to four directions or omnidir ?

73s de rami, oh6bi

6555. Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-26 16:24:08 UTC
From: gmcjetpilot
Topic: 6550 Message: 6555

WARNING the DE1103 DOES NOT ALLOW EXTERNAL ANTENNA JACK CONNECTION FOR AM BCB/MW. (UNLESS YOU USE THE "TRICK"). THIS IS A HACK AND NOT IN THE MANUAL. THE MW ANTENNA IS A TYPICAL LOOP STICK AND NORMALLY TO ONLY WAY TO COUPLE IS PASSIVELY (WITH OUT THE TRICK).

The antenna input is 400 ohms, pretty well set up for a a 30-foot random wire. The DE1103 has a interesting antenna match system (SEE SOME REF LINKS BELOW). Join the DE1103 Group for more info.

I have a DE1103 (same as KA1103). Highly recommend. The best deal on the market.

The external Antenna Jack is only for SW/FM and does not work for MW, only works for SW. However there is a TRICK to allow the external antenna jack to work on MW and LW. See "TRICK" below:

Here is a review:
http://www.radiointel.com/review-degende1103.htm

Here is the technical info
http://www.ukradio.info/Degen/

Another Review and comparison (CUT THE WHOLE LONG LINK):

http://f1.grp.yahoofs.com/v1/ABIcSlNLc6UL1HlbWJ54kKrnWlRPDmMG-b58JyJYEDMGHyb-uOelj1e1NBfWQ7y_b9BPDxYo6yF6By2W-35AyZSp8-s_LEMqcu0/mtrevumay07.pdf

Manual:

http://f1.grp.yahoofs.com/v1/ABIcSj66stoL1HlbEOZRvpiUj2EL-wZ6yxTaGTTWcXIcKZ3jdSE--MYwks5nA-0R8Xtz2DDBdPOMZVIKDtBBsWmH66aWCY_0TQo/DE1103.pdf

TRICK!

It is possible to tune the 1103 receivers below 100kHz, and to
disconnect the internal ferrite rod antenna on MW + LW, by using
this simple procedure with the SCAN function.

Normally, a 'scan' will remain within the selected band, with
the tuning scale showing progress through the band. If you start
a scan from outside a band, the scan will become 'trapped' within
the next band that is reached. However, starting between 1 & 9kHz
above any band upper edge and scanning down, will bypass the 'band'
system, and will not switch to the ferrite rod in the range 1710 -
100kHz. The tuning will also continue below 100kHz.

So, select 1711 by direct entry:
[1] [7] [1] [1] [band+/AM]
and scan down: hold [BAND-] for 2 seconds.
As soon as the frequency is below 1710kHz you can stop the scan and

use the rotary control, or you can let the scan continue below 100kHz.
The antenna is now switched for the telescopic or external antenna.
I suggest you tune it down to zero and store this in preset 0, or store
99kHz in preset 99. Also store any frequencies for which you wish to
use the external antenna input. You can store any frequency with the
[SSB] mode 'on' for CW reception.
Once you tune above 1710 again, the system will revert to the normal
tuning range with the ferrite rod for MW + LW.

There is another procedure at http://mods.radioscanner.ru/degen/mod29/
for tuning above 30MHz (AM), possibly up to 35 - 37MHz depending on
hardware alignment

JH 17-12-2008

--- In Shortwave-SWL-Antenna@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> Check out the Degen DE1103 - this radio is a bit different, with analog simulated display. Has SSB, AM/FM/SW/LW. VERY sensitive on MW and SW, and is very selective for a sub $100 unit. Would make a great bedside radio. I use mine a lot, and can charge internal NiMHs if so desired also.
>
> Darren
> VE6IZ

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> I Agree with Paul - 500-600ohm should be about right. I use a ferrite rod with mine, and I used ~500ohm for my secondary. Seems to do just fine with my 1103!
>
> Darren
> VE6IZ
>
> [Non-text portions of this message have been removed]
>

6556. Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-26 16:27:31 UTC
From: gmcjetpilot
Topic: 6550 Message: 6556

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> I Agree with Paul - 500-600ohm should be about right. I use a ferrite rod with mine, and I used ~500ohm for my secondary. Seems to do just fine with my 1103!
>
> Darren
> VE6IZ
>
> [Non-text portions of this message have been removed]
>

IT IS about 400 ohms but see my other post (just posted) on how to connect the extenral jack and disconnect the internal MW loop stick. There is a hack or trick.

It is a great radio, join the DE1103 group. There are great links, files and info on the group.

6557. Re: [loopantennas] Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-28 15:10:42 UTC
From: aimo ruoho
Topic: 6550 Message: 6557

Thanks !
What is the exact address, URL, of the 1103 group
Aimo

--- El mar, 26/5/09, gmcjetpilot <gmcjetpilot@...> escribió:

De: gmcjetpilot <gmcjetpilot@...>
Asunto: [loopantennas] Re:Input impedance of Degen 1103.....an external "passive" ferrite ante
Para: loopantennas@yahoogroups.com
Fecha: martes, 26 mayo, 2009 6:27

--- In loopantennas@ yahoogroups. com, "Darren Hennig" <dhennig2@.. .> wrote:

>

> I Agree with Paul - 500-600ohm should be about right. I use a ferrite rod with mine, and I used ~500ohm for my secondary. Seems to do just fine with my 1103!

>

> Darren

> VE6IZ

>

> [Non-text portions of this message have been removed]

>

IT IS about 400 ohms but see my other post (just posted) on how to connect the extenral jack and disconnect the internal MW loop stick. There is a hack or trick.

It is a great radio, join the DE1103 group. There are great links, files and info on the group.

[Non-text portions of this message have been removed]

6558. Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-29 07:11:44 UTC
From: gmcjetpilot
Topic: 6550 Message: 6558

```
--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> Thanks !
> What is the exact address, URL, of the 1103 group
> Aimo
>

http://groups.yahoo.com/group/kaito1103/
```

6559. ALA 100 VS ALA 100M

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-29 20:47:39 UTC
From: jamesbisch2001
Topic: 6559 Message: 6559

Hello all am having a time figuring out the difference between a Woolbrook ALA 100 VS an ALA 100 M I would like to get buy one but am not sure if it matters which one.

Thanks

James

6560. RE: [loopantennas] Re:Input impedance of Degen 1103.....an external "passive" ferrite ante

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-29 10:34:00 UTC
From: Notareal
Topic: 6550 Message: 6560

Maybe this is more active:

http://groups.yahoo.com/group/de1103/

BR

> To: loopantennas@yahoogroups.com
> From: aimounto@...
> Date: Thu, 28 May 2009 15:10:42 +0000
> Subject: Re: [loopantennas] Re:Input impedance of Degen 1103.....an external "passive" ferrite ante
>
> Thanks !
> What is the exact address, URL, of the 1103 group
> Aimo
>
> --- El mar, 26/5/09, gmcjetpilot <gmcjetpilot@...> escribi?:
>
> De: gmcjetpilot <gmcjetpilot@...>
> Asunto: [loopantennas] Re:Input impedance of Degen 1103.....an external "passive" ferrite ante
> Para: loopantennas@yahoogroups.com
> Fecha: martes, 26 mayo, 2009 6:27
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> --- In loopantennas@ yahoogroups. com, "Darren Hennig" <dhennig2@.. .> wrote:
>
> >
>

> > I Agree with Paul - 500-600ohm should be about right. I use a ferrite rod with mine, and I used ~500ohm for my secondary. Seems to do just fine with my 1103!
>
> >
>
> > Darren
>
> > VE6IZ
>
> >
>
> > [Non-text portions of this message have been removed]
>
> >
>
>
>
> IT IS about 400 ohms but see my other post (just posted) on how to connect the extenral jack and disconnect the internal MW loop stick. There is a hack or trick.
>
>
>
> It is a great radio, join the DE1103 group. There are great links, files and info on the group.
>
>
>

>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

Drag n? drop?Get easy photo sharing with Windows Live? Photos.

http://www.microsoft.com/windows/windowslive/products/photos.aspx

[Non-text portions of this message have been removed]

6561. Re: [loopantennas] ALA 100 VS ALA 100M

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-29 22:31:19 UTC
From: Don
Topic: 6559 Message: 6561

Have checked the Wellbrook website???

http://www.wellbrook.uk.com/

I don't see much difference other than the 100 can use a bigger loop.

Don
Upland, CA
34.10 -117.63 1250ft ASL

jamesbisch2001 wrote:
> Hello all am having a time figuring out the difference between a Woolbrook ALA 100 VS an ALA 100 M I would like to get buy one but am not sure if it matters which one.
>
> Thanks
>
> James
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 8.5.339 / Virus Database: 270.12.43/2138 - Release Date: 05/27/09 18:21:00
>
>

6562. [loopantennas] ALA 100 VS ALA 100M

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-30 07:48:23 UTC
From: Dominique KREMP
Topic: 6559 Message: 6562

Hi James,

I've been using both of them for a couple of years.
I agree with Don, I must say I NEVER saw any difference between them, it's like their price.
Same sensivity and same noise (if any !).
Surely a spectrum analyzer might show various 3rd order intercept points, my ears don't !
Just the loop has to be larger for the 100 version than for the 100M.
To sum up: it's the same different, but they are very fine antennas !

Hope it helps !
Have a nice w.e.

Dominique
Normandy, France (the aera where President OBAMA is coming next week to commemorate the Battle of Normandy and the liberation of Europe on June 6th 1944 !)

Perseus/IC-R75
Wellbrook ALA1530/ALA100/ALA100M/ALA100Vert

-----Message d'origine-----
De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de jamesbisch2001
Envoyé : vendredi 29 mai 2009 22:48
À : loopantennas@yahoogroups.com
Objet : ALA 100 VS ALA 100M

Hello all am having a time figuring out the difference between a Woolbrook ALA 100 VS an ALA 100 M I would like to get buy one but am not sure if it matters which one.

Thanks

James

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

6563. McKay Dymek DA100E

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-05-30 22:37:44 UTC
From: Greg Bowne
Topic: 6559 Message: 6563

I have a McKay Dymek DA100E active antenna that needs the AC adapter power plug wall wart that goes to the control box. If anyone has a DA100E could tell me more information about the adapter that comes with it, I would most appreciate it. If not, perhaps someone could tell me where to get the right one. I especially need to know the power requirements for the antenna control box.. The information nearest the power jack was not specific enough.

Thanks,
Greg Bowne
Seattle, WA USA

[Non-text portions of this message have been removed]

6564. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-01 13:09:07 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6564

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6565. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-01 13:09:07 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6565

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6566. Re: ALA 100 VS ALA 100M

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-01 14:01:10 UTC
From: gmcjetpilot
Topic: 6559 Message: 6566

ALA 100 v ALA100M

There web site gives a description of the difference

http://www.wellbrook.uk.com/ALA100Ma.html

6567. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-01 15:01:00 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6567

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Linkstxt.doc
Uploaded by : ts6023 <c.beijersbergen@...>
Description : The famous Links.txt file with the links that are not workinh anymore in red
(49 of them)

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Linkstxt.doc

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

ts6023 <c.beijersbergen@...>

6568. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-01 15:01:37 UTC
From: C. Beijersbergen
Topic: 5773 Message: 6568

On a more or less regular basis we get this mail sent to us. Very often one or more of the members react by saying that a large number of the links are not working any longer. But after that nothing happens.
Now again we receive this list. Because the first one on top of the list looked familiar to me (I sent a correction about a year ago) I cjecked it and indeed it is still not working. This brought me to checking all links. Result: from the about 110 links (a number are doubles) 49 were not working any longer now and most of them have not been working for quite some time.
I think it is a waste of time and energy to send this list every time again unchanged.

I will place my version of the list in the files section with the working files in green and the not working files in red (this is working for me, today June 1st, 2009).

Cor Beijersbergen van Henegouwen

[Non-text portions of this message have been removed]

6569. AEA Isoloop 10-30

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-02 01:10:11 UTC
From: woods135
Topic: 6569 Message: 6569

Pls bear with me! Just got above antenna with included LC-2 controller. May have chance to buy IT-Iso Tuner and am wondering if newer control is compatible. Also, anyone else may know of source of IT-ISO controller for sale?? Thanks much. Paul

6570. Iso-Loop 10-30 HF Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-02 01:16:08 UTC
From: paul
Topic: 6570 Message: 6570

Will IT-ISO Tuner be compatible with above antenna? Currrently have LC-2 Controller.
Also, know of source where to purchase controllers? Thanks.   Paul

[Non-text portions of this message have been removed]

6571. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-02 13:01:02 UTC
From: Steve
Topic: 5773 Message: 6571

I've requested help with this before and several have volunteered, but you are the first to take action. Thank you.

I'm reluctant to just delete the bad links. I find often they are just moved elsewhere.

I've gone through the first four pages, aided by having the bad links marked in red, and found where several have moved, and confirmed that several companies have shut down. JLKolb just has his stuff on a new site, thankfully. A couple of manufacturers have new models so the links to the old models are unworking, but there are replacements.

There are 9 pages left. I'm uploading what I have so far. I'm back in school so my time is very limited, so I'll work on this more as I have a few free minutes.

Thank you,
Steve Greenfield

--- In loopantennas@yahoogroups.com, "C. Beijersbergen" <c.beijersbergen@...> wrote:
>
> On a more or less regular basis we get this mail sent to us. Very often one or more of the members react by saying that a large number of the links are not working any longer. But after that nothing happens.
> Now again we receive this list. Because the first one on top of the list looked familiar to me (I sent a correction about a year ago) I cjecked it and indeed it is still not working. This brought me to checking all links. Result: from the about 110 links (a number are doubles) 49 were not working any longer now and most of them have not been working for quite some time.
> I think it is a waste of time and energy to send this list every time again unchanged.
>
> I will place my version of the list in the files section with the working files in green and the not working files in red (this is working for me, today June 1st, 2009).
>
> Cor Beijersbergen van Henegouwen
>
>
>
> [Non-text portions of this message have been removed]
>

6572. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-02 13:04:44 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6572

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /LinkstxtCorrectedToPg4.doc
Uploaded by : alienrelics <alienrelics@...>
Description : The Links.txt file corrected up to page 4. Thank you to C. Beijersbergen for help in identifying dead links. I've searched to find pages that may have moved and products that have been updated, only deleting the info if there is no other alternative.

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/LinkstxtCorrectedToPg4.doc

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

alienrelics <alienrelics@...>

6573. MFJ-1788 Loop 40-15 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-05 18:07:06 UTC
From: Ya`akov N. Miles
Topic: 6573 Message: 6573

Does anyone have any experience with MFJ-1788 Loop 40-15 Meters?

http://www.mfjenterprises.com/Product.php?productid=MFJ-1788

I am thinking of buying one. How well do they work? Will they
work from INSIDE a wood-frame apartment building? What are the
physical dimensions (MFJ has removed on-line picture and manual)

73 de Yakov, VE7ALQ / Fists #11117, Hooked on Hebrew

Remember the Great Patriotic War!

http://regnum.ru/mywar

Get into the "Swing" of things.

http://members.shaw.ca/yehudi2/ukraine.gif

73 de ?□?¢?§?□ ? ?□?□?□ ?□?□ ?□?□?¨?□?□ ?□?¢?□?¨?□

6574. Re:MFJ-1788 Loop 40-15 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-06 02:48:43 UTC
From: Tom Curtola
Topic: 6573 Message: 6574

=====SNIP====
Does anyone have any experience with MFJ-1788 Loop 40-15 Meters?

http://www.mfjenterprises.com/Product.php?productid=MFJ-1788

I am thinking of buying one. How well do they work? Will they
work from INSIDE a wood-frame apartment building? What are the
physical dimensions (MFJ has removed on-line picture and manual)

73 de Yakov, VE7ALQ
=============

Yes I own one. Bought it almost 2 years ago when I moved from a
house to an apartment. It sits on my balcony on the 30th floor in
the middle of downtown Toronto.

It's a VERY high-Q antenna, especially on the higher bands of 20 and
15 metres. As such it is very easy to spoil the Q if the antenna is
too close to metal or other dense materials. The rebar in the
concrete on my balcony can affect the Q and spoil the SWR if I don't
make sure the antenna is in the middle of the balcony. I can't put
the antenna within 3 or 4 feet of any concrete wall.

This is a fantastic transmitting antenna. I use mine in the
horizontal position so the nulls are pointing up and down therefore
it is acting like an omni directional antenna. If you prefer to use
this antenna in the vertical position, the nulls are pointing out
the sides and the antenna can then be used as a directional antenna.
This might be useful if you have some directional local QRM you
want to null out.

The con with this antenna is that it is not a good antenna for
someone who likes to frequency hop or band scan. When receiving,
this antenna needs to be retuned every 50 - 100 kHz (depending which
band you are on) or the incoming signal strength drops off
drastically. That's why I call it a very high-Q antenna. But if
you like to operate in just a CW portion or SSB portion of a band
you can tune it for the middle and then listen up and down from
there about 50kHz - 75kHz each side, so it's not bad for people who
don't scan all over the HF bands constantly.

It really is excellent for receiving in a noisy (QRM) environment
such as a big city as the magnetic loop doesn't pick up the E-field
as well as it picks up the H-field. Most local man-made noise is
vertically polarize E-field.

I think it is a bit expensive for what you're getting. Aluminum tube, servo motor, capacitor and control box. Mine is holding out well so far and I work DX quite well with it.

Hope that helps.

73,

Tom Curtola
VA3TY

6575. Re: MFJ-1788 Loop 40-15 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-08 17:03:08 UTC
From: shibukiau
Topic: 6573 Message: 6575

Go over to the "MFJLOOPS" Yahoo group site as I just posted my experience with the MFJ 1788!!

Cheers!
Lloyd
VE3ERQ/VK4ERQ

--- In loopantennas@yahoogroups.com, "Ya`akov N. Miles" <ivri@...> wrote:
>
> Does anyone have any experience with MFJ-1788 Loop 40-15 Meters?
>
> http://www.mfjenterprises.com/Product.php?productid=MFJ-1788
>
> I am thinking of buying one. How well do they work? Will they
> work from INSIDE a wood-frame apartment building? What are the
> physical dimensions (MFJ has removed on-line picture and manual)
>
> 73 de Yakov, VE7ALQ / Fists #11117, Hooked on Hebrew
>
> Remember the Great Patriotic War!
>
> http://regnum.ru/mywar
>
> Get into the "Swing" of things.
>
> http://members.shaw.ca/yehudi2/ukraine.gif
>
> 73 de ×□×¢×§×` × ×□×□×□ ×`×□ ×□×`×¨×"×□ ×"×¢×`×¨×□
>

6576. Re: ALA 100 VS ALA 100M

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-11 05:20:37 UTC
From: john_9v1vv
Topic: 6559 Message: 6576

This post may be a little late.... I have used the ALA100M, serial number 1 - it was designed for use with a larger loop, up to 30 feet, but I cannot tell the difference between that and my homebrew loop antenna amplifier. Both are very quiet and don't suffer from cross-modulation.

see

http://9v1vvshack.blogspot.com/search/label/Broadband%20Loop%20Amplifier

Cheers

John

6577. Happy ATSC day, Analog (NTSC) TV is dead

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-12 21:47:56 UTC
From: gmcjetpilot
Topic: 6577 Message: 6577

Happy ATSC day, Analog (NTSC) TV is dead

How did it affect you? Me? I am on digital cable so no big deal.

However I have a few analog TV's. I put the rabbit ears on and took a look today. YEP there are some channels, PBS, Spanish still on. The main network over air stations are off, except one is playing a repeating PSA about the switch to digital TV.

I tried Digital TV (over the air) 6 months ago for grins, and I have to say I am impressed. It is not the content of digital cable, but better picture, audio and more channels than analog could ever hope to be. I think I got 19 over air channels. Most stations have been on digital simultaneously with analog. I have one portable B&W (AC/DC) AM/FM TV I won in a raffle 25 years ago, I keep for sentimental reasons (only thing I ever won, ha ha). It would still work with a converter, but there are no small Digital converters. I tried it with a convert and it worked well. Cheers

6578. Using Loop Calculators???

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-16 04:25:30 UTC
From: down3green
Topic: 6578 Message: 6578

Hello everyone,

My name is Don from N California. I'm new to amateur radio. So new in fact, the ink is still wet on my new technicians license. I'll be operating a K2 from Elecraft at no more than 12 watts. That's all she's got. QRP CW is my main interest. Minimal space brings me to loop antenna's, though the more I read about them, they shouldn't have to take a back seat to any other style, except maybe a yagi at 1 wavelength in height.

Mag loop antenna's really interest me. The file section shows at least 3 very useable design calculators which all seem to be in agreement with each other. My question has to do with which antenna parameters are most important in designing a loop for a specific band. I would like to design my loop specifically for the 15 meter band or 21.1 MHz.

The more I play with these programs, the more I see that I have some control over certain loop characterisics such as loop efficiency, band width, tuning capacitor value and others. I see that there is a tradeoff here, but I wonder what my priorities should be in making the PERFECT 15 meter loop antenna.

Thanks in advance for any input you might have for this newbie.

73,
Don

6579. Re: [loopantennas] Using Loop Calculators???

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-16 19:18:45 UTC
From: Jim Dunstan
Topic: 6578 Message: 6579

At 04:25 AM 6/16/2009 +0000, you wrote:

>Hello everyone,
>
>My name is Don from N California. I'm new to amateur radio. So new in
>fact, the ink is still wet on my new technicians license. I'll be
>operating a K2 from Elecraft at no more than 12 watts. That's all she's
>got. QRP CW is my main interest. Minimal space brings me to loop
>antenna's, though the more I read about them, they shouldn't have to take
>a back seat to any other style, except maybe a yagi at 1 wavelength in height.
>
>Mag loop antenna's really interest me. The file section shows at least 3
>very useable design calculators which all seem to be in agreement with
>each other. My question has to do with which antenna parameters are most
>important in designing a loop for a specific band. I would like to design
>my loop specifically for the 15 meter band or 21.1 MHz.
>
>The more I play with these programs, the more I see that I have some
>control over certain loop characterisics such as loop efficiency, band
>width, tuning capacitor value and others. I see that there is a tradeoff
>here, but I wonder what my priorities should be in making the PERFECT 15
>meter loop antenna.
>
>Thanks in advance for any input you might have for this newbie.
>
>73,
>Don

Hi Don,

A narrow band/frequency use is an ideal situation for a mag-loop. The formulae for such loops is I believe based on a maximum size ... e.g. 1/10 wavelength. the formula usually specifies this. I find that constructing the loop to the maximum acceptable size works the best. As you will see when plugging in the different sizes that the efficiency and useable bandwidth goes up with circumference ... the point of maximum size (for mag-loop). The RF voltage at the tuning point will also be lower compared to a smaller size. How big (circumference) you can go will of course be limited by your personal mechanical circumstances. Another consideration is going to a lower frequency band in the future.
It is also important to make the loop as robust as possible ..... copper tubing or wide strapping works well. i used a rather large 4-6 ft dia. as I recall for 20m. I used it primarily for PSK ... and setting the tuning to the center of the rather narrow PSK band allowed operation without having to touch the loop tuning. It worked very well mounted against a wooden wall only about 3 feet above ground level. A proportionately large

mag loop for 15m would give you a pretty good CW band section on 15m.

Jim, VE3CI

6580. Re: [loopantennas] Using Loop Calculators???

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-16 20:38:29 UTC
From: Don
Topic: 6578 Message: 6580

Hello Jim,

The more I play around with these calculators, the more I believe I would like to maximise the loop circumference to 1/3 wavelength or 14.75'. This results in a loop just under 5' in diameter which makes it at least arguably transportable for use in the field someday. The band width is wide enough to cover my frequencies of interest with a minimum of tuning effort. Thanks for your comments and confirmation.

73,
Don

On Tue, Jun 16, 2009 at 12:18 PM, Jim Dunstan <jdunstan@...> wrote:

>
>
> At 04:25 AM 6/16/2009 +0000, you wrote:
>
> >Hello everyone,
> >
> >My name is Don from N California. I'm new to amateur radio. So new in
> >fact, the ink is still wet on my new technicians license. I'll be
> >operating a K2 from Elecraft at no more than 12 watts. That's all she's
> >got. QRP CW is my main interest. Minimal space brings me to loop
> >antenna's, though the more I read about them, they shouldn't have to take
> >a back seat to any other style, except maybe a yagi at 1 wavelength in
> height.
> >
> >Mag loop antenna's really interest me. The file section shows at least 3
> >very useable design calculators which all seem to be in agreement with
> >each other. My question has to do with which antenna parameters are most
> >important in designing a loop for a specific band. I would like to design
> >my loop specifically for the 15 meter band or 21.1 MHz.
> >
> >The more I play with these programs, the more I see that I have some
> >control over certain loop characterisics such as loop efficiency, band
> >width, tuning capacitor value and others. I see that there is a tradeoff
> >here, but I wonder what my priorities should be in making the PERFECT 15
> >meter loop antenna.
> >
> >Thanks in advance for any input you might have for this newbie.
> >
> >73,
> >Don
>
> Hi Don,

>
> A narrow band/frequency use is an ideal situation for a mag-loop. The
> formulae for such loops is I believe based on a maximum size ... e.g. 1/10
> wavelength. the formula usually specifies this. I find that constructing
> the loop to the maximum acceptable size works the best. As you will see
> when plugging in the different sizes that the efficiency and useable
> bandwidth goes up with circumference ... the point of maximum size (for
> mag-loop). The RF voltage at the tuning point will also be lower compared
> to a smaller size. How big (circumference) you can go will of course be
> limited by your personal mechanical circumstances. Another consideration
> is going to a lower frequency band in the future.
> It is also important to make the loop as robust as possible ..... copper
> tubing or wide strapping works well. i used a rather large 4-6 ft dia. as
> I recall for 20m. I used it primarily for PSK ... and setting the tuning
> to the center of the rather narrow PSK band allowed operation without
> having to touch the loop tuning. It worked very well mounted against a
> wooden wall only about 3 feet above ground level. A proportionately large
> mag loop for 15m would give you a pretty good CW band section on 15m.
>
> Jim, VE3CI
>
>
>

[Non-text portions of this message have been removed]

6581. Re: [loopantennas] Using Loop Calculators???

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-16 23:14:14 UTC
From: M HOLDEN
Topic: 6578 Message: 6581

Hi Don, A full size wire loop for your chosen frequency is a mere 47Ft, 71/2 inches in circumference, and can be a circle, a hex, a square, a triangle if you wish. This can roll up into a sandwich box for portability. If you feed that with a 1/4 wave of 80 ohm twin feeder (NOT coaxial) it will be super efficient and present a brilliant 50 Ohm match to your K2. This feeder is the textbook classic "Impedance transformer" length. Just a reminder that the exact length of feedline will be taking into account the twin cable's "Velocity Factor", which is quoted by the manufacturer. If that VF is say 95, then the exact length will be 95% of an electrical 1/4 wave. An electrical 1/4 wave of wire is found from 234/f, i.e:- 234 / 21.1= 11Ft 1inch. So multiply by 95/100 for the VF shortened 1/4 wave. If you needed a longer feedline, the next available length would have to be 3 times this length, and then half wave increments each time.
For any full wave loop use 1005/f for an answer in Feet. The feedpoint impedance is always around 110 ohms with the loop held wide open. Squash it up and the impedance rises. A folded dipole is around 280 ohms. "f" is the frequency in MHz.
Right now 21MHz is in the bottom of the sunspot cycle and from here onwards, the only way is UP, so you can have 4 years of steadily improving band conditions and greater successes. Welcome to the amateur fraternity Don. Mike, G4HOL, Cornwall, U.K.

From: down3green <N61W160@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, 16 June, 2009 5:25:30 AM
Subject: [loopantennas] Using Loop Calculators???

Hello everyone,

My name is Don from N California. I'm new to amateur radio. So new in fact, the ink is still wet on my new technicians license. I'll be operating a K2 from Elecraft at no more than 12 watts. That's all she's got. QRP CW is my main interest. Minimal space brings me to loop antenna's, though the more I read about them, they shouldn't have to take a back seat to any other style, except maybe a yagi at 1 wavelength in height.

Mag loop antenna's really interest me. The file section shows at least 3 very useable design calculators which all seem to be in agreement with each other. My question has to do with which antenna parameters are most important in designing a loop for a specific band. I would like to design my loop specifically for the 15 meter band or 21.1 MHz.

The more I play with these programs, the more I see that I have some control over certain loop characterisics such as loop efficiency, band width, tuning capacitor value and others. I see that there is a tradeoff here, but I wonder what my priorities should be in making the PERFECT 15 meter loop antenna.

Thanks in advance for any input you might have for this newbie.

73,
Don

[Non-text portions of this message have been removed]

6582. Re: [loopantennas] Using Loop Calculators???

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-16 23:59:07 UTC
From: Don
Topic: 6578 Message: 6582

Hello Mike,

Thank you for your reply and kind welcome to the fraternity. When I saw that you are from the UK, I took a moment to look up your call sign and discovered your website. What your are suggesting for me looks to be a variation of your multi band antenna design. I need to look it over more closely. Your diagram looks very straight forward. I don't think I have ever read about a corner feed method. Very interesting.

73,
Don KI6ZOP

On Tue, Jun 16, 2009 at 4:14 PM, M HOLDEN <mholden909@...> wrote:

>
>
> Hi Don, A full size wire loop for your chosen frequency is a mere 47Ft,
> 71/2 inches in circumference, and can be a circle, a hex, a square, a
> triangle if you wish. This can roll up into a sandwich box for portability.
> If you feed that with a 1/4 wave of 80 ohm twin feeder (NOT coaxial) it will
> be super efficient and present a brilliant 50 Ohm match to your K2. This
> feeder is the textbook classic "Impedance transformer" length. Just a
> reminder that the exact length of feedline will be taking into account the
> twin cable's "Velocity Factor", which is quoted by the manufacturer. If that
> VF is say 95, then the exact length will be 95% of an electrical 1/4 wave.
> An electrical 1/4 wave of wire is found from 234/f, i.e:- 234 / 21.1= 11Ft
> 1inch. So multiply by 95/100 for the VF shortened 1/4 wave. If you needed a
> longer feedline, the next available length would have to be 3 times this
> length, and then half wave increments each time.
> For any full wave loop use 1005/f for an answer in Feet. The feedpoint
> impedance is always around 110 ohms with the loop held wide open. Squash it
> up and the impedance rises. A folded dipole is around 280 ohms. "f" is the
> frequency in MHz.
> Right now 21MHz is in the bottom of the sunspot cycle and from here
> onwards, the only way is UP, so you can have 4 years of steadily improving
> band conditions and greater successes. Welcome to the amateur fraternity
> Don. Mike, G4HOL, Cornwall, U.K.
>
> _____
> From: down3green <N61W160@... <N61W160%40gmail.com>>
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Sent: Tuesday, 16 June, 2009 5:25:30 AM
> Subject: [loopantennas] Using Loop Calculators???
>
> Hello everyone,
>

> My name is Don from N California. I'm new to amateur radio. So new in fact,
> the ink is still wet on my new technicians license. I'll be operating a K2
> from Elecraft at no more than 12 watts. That's all she's got. QRP CW is my
> main interest. Minimal space brings me to loop antenna's, though the more I
> read about them, they shouldn't have to take a back seat to any other style,
> except maybe a yagi at 1 wavelength in height.
>
> Mag loop antenna's really interest me. The file section shows at least 3
> very useable design calculators which all seem to be in agreement with each
> other. My question has to do with which antenna parameters are most
> important in designing a loop for a specific band. I would like to design my
> loop specifically for the 15 meter band or 21.1 MHz.
>
> The more I play with these programs, the more I see that I have some
> control over certain loop characterisics such as loop efficiency, band
> width, tuning capacitor value and others. I see that there is a tradeoff
> here, but I wonder what my priorities should be in making the PERFECT 15
> meter loop antenna.
>
> Thanks in advance for any input you might have for this newbie.
>
> 73,
> Don
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

6583. Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-18 00:54:48 UTC
From: Bill McGraw
Topic: 6583 Message: 6583

Mike, Don and Group,

Your advice to Don is very good but my question is re to the initial length of twin lead from the feed point. You wrote, "If you feed that with a 1/4 wave of 80 ohm twin feeder..." and I followed that OK but you mentioned something about a longer from feed point would be 3 times longer and I got lost at that point. What is appropriate for the initial twin lead from the feed point to the V-Cap and radio. I use a DX 398 previously with a sq. loop of 44 ft, thin copper wire and now a sq dipole of 15 and 19 ft at the top of my office ceiling, no twin-lead. It works up to 6+ MHz but not beyond. I need a good Loop Antenna.

I have looked at the formulas, really don't understand enough of the terms, still studying. How would a copper pipe loop of 4 or 6 feet work? How do you enter that into the formulas? What V-cap is necessary? I have a box full and cannot tell what each are in (mh??).

I'm new at this, studying loops for DX only, not TX, no license--yet, studying slowly for Tech test. I'm 64 and retired, interested in too many things.

Bill McGraw

"Somewhere South of Chicago"

Greenville, MS

6584. Re: [loopantennas] Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-18 03:41:41 UTC
From: Mike Heppe
Topic: 6583 Message: 6584

i am southof tupelo...if you need any help...call me? love to chat
also working on a 160 meter full wave loop...hopefully will resonant all band!...got some room to spread it out!
mike
----- Original Message -----
From: Bill McGraw
To: loopantennas@yahoogroups.com
Sent: Wednesday, June 17, 2009 7:54 PM
Subject: [loopantennas] Loop Antennas

Mike, Don and Group,

Your advice to Don is very good but my question is re to the initial length of twin lead from the feed point. You wrote, "If you feed that with a 1/4 wave of 80 ohm twin feeder..." and I followed that OK but you mentioned something about a longer from feed point would be 3 times longer and I got lost at that point. What is appropriate for the initial twin lead from the feed point to the V-Cap and radio. I use a DX 398 previously with a sq. loop of 44 ft, thin copper wire and now a sq dipole of 15 and 19 ft at the top of my office ceiling, no twin-lead. It works up to 6+ MHz but not beyond. I need a good Loop Antenna.

I have looked at the formulas, really don't understand enough of the terms, still studying. How would a copper pipe loop of 4 or 6 feet work? How do you enter that into the formulas? What V-cap is necessary? I have a box full and cannot tell what each are in (mh??).

I'm new at this, studying loops for DX only, not TX, no license--yet, studying slowly for Tech test. I'm 64 and retired, interested in too many things.

Bill McGraw

"Somewhere South of Chicago"

Greenville, MS

[Non-text portions of this message have been removed]

6585. Re: [loopantennas] Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-18 11:03:53 UTC
From: M HOLDEN
Topic: 6583 Message: 6585

It will work great guns as a multi band loop, but don't use coaxial feedline, I use 300 ohm slotted, as all the bands present medium impedances. 450 ohm line would do much the same !.......... Mike G4HOL

From: Mike Heppe <mheppe@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, 18 June, 2009 4:41:41 AM
Subject: Re: [loopantennas] Loop Antennas

i am southof tupelo...if you need any help...call me? love to chat
also working on a 160 meter full wave loop...hopefully will resonant all band!...got some room to spread it out!
mike
----- Original Message -----
From: Bill McGraw
To: loopantennas@ yahoogroups. com
Sent: Wednesday, June 17, 2009 7:54 PM
Subject: [loopantennas] Loop Antennas

Mike, Don and Group,

Your advice to Don is very good but my question is re to the initial length of twin lead from the feed point. You wrote, "If you feed that with a 1/4 wave of 80 ohm twin feeder..." and I followed that OK but you mentioned something about a longer from feed point would be 3 times longer and I got lost at that point. What is appropriate for the initial twin lead from the feed point to the V-Cap and radio. I use a DX 398 previously with a sq. loop of 44 ft, thin copper wire and now a sq dipole of 15 and 19 ft at the top of my office ceiling, no twin-lead. It works up to 6+ MHz but not beyond. I need a good Loop Antenna.

I have looked at the formulas, really don't understand enough of the terms, still studying. How would a copper pipe loop of 4 or 6 feet work? How do you enter that into the formulas? What V-cap is necessary? I have a box full and cannot tell what each are in (mh??).

I'm new at this, studying loops for DX only, not TX, no license--yet, studying slowly for Tech test. I'm 64 and retired, interested in too many things.

Bill McGraw

"Somewhere South of Chicago"

Greenville, MS

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6586. Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-19 03:25:20 UTC
From: Bill McGraw
Topic: 6586 Message: 6586

Thanks to both Mike's I'm learning about twin lead with loops, still have questions and will keep reading. Thanks again.

Bill McGraw

"Somewhere South of Chicago"

Greenville, MS

6587. Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-20 14:00:24 UTC
From: canondslr71
Topic: 6587 Message: 6587

I'm looking to build a 36 inch or so magnetic loop antenna for listing to medium wave (BCB). Would like to know what the absolute best wire is for this. I currently have 3 different types of enameled copper wire on hand (the type to wind motors), #17, #24, and #30. Are any of these suitable, or do you recommand something else?

6588. Re: [loopantennas] Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-20 15:49:59 UTC
From: John Popelish
Topic: 6587 Message: 6588

canondslr71 wrote:
> I'm looking to build a 36 inch or so magnetic loop
> antenna for listing to medium wave (BCB). Would like to
> know what the absolute best wire is for this. I
> currently have 3 different types of enameled copper wire
> on hand (the type to wind motors), #17, #24, and #30.
> Are any of these suitable, or do you recommand something
> else?

Any could work. But I would probably use the #17, just for
simple ruggedness and low resistance. However, at this
frequency, the skin effect will waste quite a bit of the
copper in this sized wire. If you were really concerned
with wasting copper, you could parallel some strands of #30
and get the same or lower AC resistance with less total
weight of metal. But the result would be a lot more fragile.

--
Regards,

John Popelish

6590. Re: [loopantennas] Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-20 19:31:59 UTC
From: Jim Dunstan
Topic: 6587 Message: 6590

At 02:00 PM 6/20/2009 +0000, you wrote:

>I'm looking to build a 36 inch or so magnetic loop antenna for listing to
>medium wave (BCB). Would like to know what the absolute best wire is for
>this. I currently have 3 different types of enameled copper wire on hand
>(the type to wind motors), #17, #24, and #30. Are any of these suitable,
>or do you recommand something else?

Hi,

Enameled copper wire is fine. A 36" dia. loop (multi-turn and tuned I assume) is quite large. As a consequence mechanical considerations will be first and foremost. The #30 wire is probably out of the question as it will probably not stand the strain of winding on a 36" frame. It is a toss up between the #24 and #17. You can judge which gauge will work best on the frame you are going to use. You will probably be running the wire through holes or around pegs etc ... on your frame in order to space the turns. If you can physically handle the #17 gauge wire ... then I would go with the largest dia. wire you can manage given the construction of your loop project. One way of managing the maximum copper surface while maintaining flexibility is to use 'Litz' wire ... which is a multi strand copper wire with each strand being insulated. It represents the least amount of RF resistance (different from DC resistance) per dia. x. while having the mechanical properties that are 'string-like'.

Jim

6591. Re: [loopantennas] Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-20 19:43:24 UTC
From: Jim Dunstan
Topic: 6587 Message: 6591

At 11:49 AM 6/20/2009 -0400, you wrote:

>canondslr71 wrote:
> > I'm looking to build a 36 inch or so magnetic loop
> > antenna for listing to medium wave (BCB). Would like to
> > know what the absolute best wire is for this. I
> > currently have 3 different types of enameled copper wire
> > on hand (the type to wind motors), #17, #24, and #30.
> > Are any of these suitable, or do you recommand something
> > else?
>
>Any could work. But I would probably use the #17, just for
>simple ruggedness and low resistance. However, at this
>frequency, the skin effect will waste quite a bit of the
>copper in this sized wire. If you were really concerned
>with wasting copper, you could parallel some strands of #30
>and get the same or lower AC resistance with less total
>weight of metal. But the result would be a lot more fragile.
>
>--
>Regards,
>
>John Popelish

Hi,

This is an interesting suggestion. I have created my own 'twisted pair' of insulated wire (for other purposes) by putting the pair in a drill chuck and giving them a twist the length of the run. It might be interesting to put a number of parallel strands of #30 enameled wire in a drill and twisting them to create a cable. Calculate the approx. total length you might need 12' x 8 turns for example parallel 3 to 5 stands, clamp one end in a vise and the other end in the chuck of a drill. Pull taught and apply the drill creating a single strand that certainly would be strong. As John suggests, the purpose is to create the maximum amount of wire surface in order to reduce the RF resistance while creating cable strength hi hi. I would be interested in how this works out if you go this route.

Jim

>

[Non-text portions of this message have been removed]

6592. Re: [loopantennas] Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-20 20:55:07 UTC
From: John Popelish
Topic: 6587 Message: 6592

Jim Dunstan wrote:

> This is an interesting suggestion. I have created my own
> 'twisted pair' of insulated wire (for other purposes) by
> putting the pair in a drill chuck and giving them a twist
> the length of the run. It might be interesting to put a
> number of parallel strands of #30 enameled wire in a
> drill and twisting them to create a cable. Calculate the
> approx. total length you might need 12' x 8 turns for
> example parallel 3 to 5 stands, clamp one end in a vise
> and the other end in the chuck of a drill. Pull taught
> and apply the drill creating a single strand that
> certainly would be strong. As John suggests, the purpose
> is to create the maximum amount of wire surface in order
> to reduce the RF resistance while creating cable strength
> hi hi. I would be interested in how this works out if
> you go this route.

There is another way to twist lots of strands together to make a multi-strand cable. I like to build up the strands by combining three wires, then combine 3 of those to make a 9 strand cable, etc. Simple twisting twists each strand which hardens the copper and stresses the insulation and makes a twist that wants to untwist.

A better (but more difficult) way is to make a tool that cranks each of the wires, individually (think three cranks linked with a block that forces all three cranks to turn at the same time), with the far end of the cable terminating in a bearing. As you twist each of the strands, the far common end turns (in the bearing untwisting each strand, while wrapping the strands around each other. Boy Scouts make their own rope out of twine, this way (which is where I learned about the method). This method also allows you to twist together stranded cables that are springy and will not stay twisted if you just put the end in a drill.

(strands of #30 will have less than half the Ac resistance of a #24 wire and about the same resistance as a #17 wire at 1 MHz, even though the weight will be about half of the #17 wire.

http://www.pupman.com/listarchives/1998/April/msg00222.html
http://en.wikipedia.org/wiki/Skin_effect

--
Regards,

John Popelish

6593. Re: [loopantennas] Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-20 21:34:13 UTC
From: Jim Dunstan
Topic: 6587 Message: 6593

At 04:55 PM 6/20/2009 -0400, you wrote:

>There is another way to twist lots of strands together to
>make a multi-strand cable. I like to build up the strands
>by combining three wires, then combine 3 of those to make a
>9 strand cable, etc. Simple twisting twists each strand
>which hardens the copper and stresses the insulation and
>makes a twist that wants to untwist.

I can see this method would work well. My simple attempts at twisting wire confirm your observation .... too tight and it kinks ... too loose and it comes apart ... needs to be just right. I can see the explanation in that each strand is being twisted as well as being wrapped into a cable.

>A better (but more difficult) way is to make a tool that
>cranks each of the wires, individually (think three cranks
>linked with a block that forces all three cranks to turn at
>the same time), with the far end of the cable terminating in
>a bearing. As you twist each of the strands, the far common
>end turns (in the bearing untwisting each strand, while
>wrapping the strands around each other. Boy Scouts make
>their own rope out of twine, this way (which is where I
>learned about the method). This method also allows you to
>twist together stranded cables that are springy and will not
>stay twisted if you just put the end in a drill.

I took me some time to visualize the technique. I assume the technique is used to manufacture steel support cables of all kind.

>(strands of #30 will have less than half the Ac resistance
>of a #24 wire and about the same resistance as a #17 wire at
>1 MHz, even though the weight will be about half of the #17
>wire.

The figures illustrate the advantage of the technique.

Jim __

6594. Re: [loopantennas] Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 03:22:29 UTC
From: Mike Heppe
Topic: 6587 Message: 6594

i think that everyone is getting too touchy about the resonance and stuff...at that frequency it isn't that critical...try thinking about stuff like 10 meters and up....i have made loops with electric blanket wire!...just for a demonstration...and was directional!
----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Saturday, June 20, 2009 2:43 PM
Subject: Re: [loopantennas] Best wire for medium wave loop

At 11:49 AM 6/20/2009 -0400, you wrote:

>canondslr71 wrote:
> > I'm looking to build a 36 inch or so magnetic loop
> > antenna for listing to medium wave (BCB). Would like to
> > know what the absolute best wire is for this. I
> > currently have 3 different types of enameled copper wire
> > on hand (the type to wind motors), #17, #24, and #30.
> > Are any of these suitable, or do you recommand something
> > else?
>
>Any could work. But I would probably use the #17, just for
>simple ruggedness and low resistance. However, at this
>frequency, the skin effect will waste quite a bit of the
>copper in this sized wire. If you were really concerned
>with wasting copper, you could parallel some strands of #30
>and get the same or lower AC resistance with less total
>weight of metal. But the result would be a lot more fragile.
>
>--
>Regards,
>
>John Popelish

Hi,

This is an interesting suggestion. I have created my own 'twisted pair' of insulated wire (for other purposes) by putting the pair in a drill chuck and giving them a twist the length of the run. It might be interesting to put a number of parallel strands of #30 enameled wire in a drill and twisting them to create a cable. Calculate the approx. total length you might need 12' x 8 turns for example parallel 3 to 5 stands, clamp one end in a vise and the other end in the chuck of a drill. Pull taught and apply the drill creating a single strand that certainly would be strong. As John suggests, the purpose is to create the maximum amount of wire surface in order to reduce the RF resistance while creating cable strength hi hi. I would be interested in how this works out if you go this

route.

Jim

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6595. Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 06:12:39 UTC
From: airchecklover
Topic: 6587 Message: 6595

The absolute best wire would be Litz wire. Lowest resistance (skin effect) and lowest inter-winding capacitance. Will give you tightest bandwidth. Probably a little more gain too. The serious crystal set builders use only Litz wire for these reasons.

==========

--- In loopantennas@yahoogroups.com, "canondslr71" <canondslr71@...> wrote:
>
> I'm looking to build a 36 inch or so magnetic loop antenna for listing to medium wave (BCB). Would like to know what the absolute best wire is for this. I currently have 3 different types of enameled copper wire on hand (the type to wind motors), #17, #24, and #30. Are any of these suitable, or do you recommand something else?
>

6596. Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 06:57:32 UTC
From: gmcjetpilot
Topic: 6587 Message: 6596

USE SOLID COPPER WIRE FOR CHEAP AND EASY.

The problem with wire is the "SKIN AFFECT", so keep the gauge down to about 18 or 16 so with a single wire.

DO NOT USE BRAID or TWIST MULTI (BARE) WIRE TOGETHER (MY OPINION FLAME AWAY)

The reason is again the skin affect (google it).

The BEST WIRE (and hardest to get in a small quantity but some times you get lucky on ebay) is LITZ wire.

That is both a name brand and a type of wire. Originally I think its German invention. These are braided wires in very specific weaves, but each wire has an individual ceramic coating. You get the big wire affect, but with each wire separate the skin affect is low.

You could use the wire you have and twist up your own poor man LITZ wire. Not sure the effort is worth it. That could work. LITZ is not really expensive only that it comes in very long lengths and it tends to be special order. SO you have to scrounge around for left overs or some existing stock they have laying around. May be some one on the list has a 1000' roll of some good right sized LITZ WIRE?

However the easy cheap is big old Hardware home center solid copper wire, just don't get too large of a wire gage, 18 or 16 will do*. You don't get credit for more copper since all the signal is on the outside of the wire, the skin.

You have #17 enameled that would be fine. If you are running it in a PVC conduit you could twist a few #30's together to make an effectively larger Gage wire, say 14 gage with less skin affect than the one #17. It does have a positive affect, but how great I don't know. I doubt you would notice it with out test gear.

*I assume you are RX only? If transmitting that is a different story. I assume than you will need some min copper for the power you are TX'ing with. No comment. If TX I would use copper pipe. In fact I am making a Magnetic RX only antenna now with electronic remote tune (Kind of like the Welbrook).

Cheers George

PS LITZ WIRE ALSO HAS A BIG DRAW BACK. The only way to really connect it and make all the connections is if you have a solder pot with tight controlled temp. This will burn off the ceramic coating and make electrical connections. LITZ is MANY very small small gage wires. Heat too much you anneal it and it becomes too fragile. Not enough heat the coating does not allow good electrical contact.

--- In loopantennas@yahoogroups.com, "canondslr71" <canondslr71@...> wrote:
>
> I'm looking to build a 36 inch or so magnetic loop antenna for listing to medium wave (BCB). Would like to know what the absolute best wire is for this. I currently have 3

different types of enameled copper wire on hand (the type to wind motors), #17, #24, and #30. Are any of these suitable, or do you recommand something else?
>

6597. RE: [loopantennas] Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 10:46:10 UTC
From: Chris Harris
Topic: 6587 Message: 6597

I don't know about the ceramic coating on Litz wire, I have a few rolls here. The individual wires appear to be enamelled, with silk on the bundle. I don't know if this is typical.
I just use a hot soldering iron to burn off the insulation. The stuff has a life of it's own and gets tangle very quickly.
For MW receive the Q doesn't need to be so high. I've had success with any wire I've tried, though it may be a different story for a crystal set where you don't have any extra gain.

Regards, Chris

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of gmcjetpilot
Sent: Sunday, 21 June 2009 6:58 p.m.
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: Best wire for medium wave loop

USE SOLID COPPER WIRE FOR CHEAP AND EASY.

The problem with wire is the "SKIN AFFECT", so keep the gauge down to about 18 or 16 so with a single wire.

DO NOT USE BRAID or TWIST MULTI (BARE) WIRE TOGETHER (MY OPINION FLAME AWAY)

The reason is again the skin affect (google it).

The BEST WIRE (and hardest to get in a small quantity but some times you get lucky on ebay) is LITZ wire.

That is both a name brand and a type of wire. Originally I think its German invention. These are braided wires in very specific weaves, but each wire has an individual ceramic coating. You get the big wire affect, but with each wire separate the skin affect is low.

You could use the wire you have and twist up your own poor man LITZ wire. Not sure the effort is worth it. That could work. LITZ is not really expensive only that it comes in very long lengths and it tends to be special order. SO you have to scrounge around for left overs or some existing stock they have laying around. May be some one on the list has a 1000' roll of some good right sized LITZ WIRE?

However the easy cheap is big old Hardware home center solid copper wire, just don't get too large of a wire gage, 18 or 16 will do*. You don't get credit for more copper since all the signal is on the outside of the wire, the skin.

You have #17 enameled that would be fine. If you are running it in a PVC conduit you could twist a few #30's together to make an effectively larger Gage wire, say 14 gage with less skin affect than the one #17. It does have a positive affect, but how great I don't know. I doubt you would notice it with out test gear.

*I assume you are RX only? If transmitting that is a different story. I assume than you will need some min copper for the power you are TX'ing with. No comment. If TX I would use copper pipe. In fact I am making a Magnetic RX only antenna now with electronic remote tune (Kind of like the Welbrook).

Cheers George

PS LITZ WIRE ALSO HAS A BIG DRAW BACK. The only way to really connect it and make all the connections is if you have a solder pot with tight controlled temp. This will burn off the ceramic coating and make electrical connections. LITZ is MANY very small small gage wires. Heat too much you anneal it and it becomes too fragile. Not enough heat the coating does not allow good electrical contact.

--- In loopantennas@ <mailto:loopantennas%40yahoogroups.com> yahoogroups.com, "canondslr71" <canondslr71@...> wrote:
>
> I'm looking to build a 36 inch or so magnetic loop antenna for listing to medium wave (BCB). Would like to know what the absolute best wire is for this. I currently have 3 different types of enameled copper wire on hand (the type to wind motors), #17, #24, and #30. Are any of these suitable, or do you recommand something else?
>

[Non-text portions of this message have been removed]

6598. Re: [loopantennas] Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 12:20:38 UTC
From: toddroberts2001@aol.com
Topic: 6587 Message: 6598

In a message dated 6/21/2009 6:51:21 A.M. Eastern Daylight Time,
chris.harris@... writes:

I don't know about the ceramic coating on Litz wire, I have a few rolls
here. The individual wires appear to be enamelled, with silk on the
bundle. I don't know if this is typical.
I just use a hot soldering iron to burn off the insulation. The stuff
has a life of it's own and gets tangle very quickly.
For MW receive the Q doesn't need to be so high. I've had success with
any wire I've tried, though it may be a different story for a crystal
set where you don't have any extra gain.

Regards, Chris

Hi,
There are two types of Litz wire insulation. Most of the older Litz wire
has a standard tough enamel coating on the individual strands that will not
melt with ordinary soldering techniques. I have found the best way to
prepare these strands for soldering is to dip the wire ends into a small cup or a
bottlecap filled with a little paint remover. Allow the strands to soak
for about 1/2 hour or so, then wipe with a rag. The dissolved enamel will
wipe right off without hurting the strands, leaving the copper clean and shiny
and ready to solder. Excessive heat can damage the fine strands of Litz
wire.

The newer manufactured Litz wire has a coating on the strands called
Soldereze. This coating will melt off the individual strands when they are hot
enough to solder. Makes soldering to this kind of wire easy and simple.
Almost all newer manufactured Litz wire has this kind of coating.

That being said using Litz wire is usually overkill for a broadcast band
receiving loop as the Q will be too high. This will make the tuning too
sharp and hard to tune and will even hurt the fidelity of the stations you are
listening to by being so sharp it will cut off the high audio frequencies
making the signal sound bassy and mushy. Even some loops made with regular
solid enamel wire include a "Q-Killer" which is a high-value variable pot or
resistor connected across the loop, perhaps a 500K - 1.0 Megohm pot. This
allows the user to adjust the Q or sharpness of the loop if the tuning is
too sharp for listening conditions.

Usually only crystal radio set builders are interested in building extra
hi-Q coils or loops for the broadcast band where every last ounce of signal
level is needed. The crystal detector again lowers the Q so the tuning
usually ends up not being too sharp.

Solid enamel wire size #16-#17-#18 is probably just about right for a
medium wave receiving loop. Some people have had good luck using silver/Teflon

stranded wire of about #16-#18 size also.

73 Todd WD4NGG

**********Download the AOL Classifieds Toolbar for local deals at your fingertips.
(http://toolbar.aol.com/aolclassifieds/download.html?ncid=emlcntusdown00000004)

6599. Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 16:05:26 UTC
From: jrtow3rd@bellsouth.net
Topic: 6587 Message: 6599

--- In
>
> Solid enamel wire size #16-#17-#18 is probably just about right for a
> medium wave receiving loop. Some people have had good luck using silver/Teflon
> stranded wire of about #16-#18 size also.
>
> 73 Todd WD4NGG
>
I am one of those folks who have used #16 stranded & insulated, thanks to a hamfest eons ago, for a 1 meter square MW loop. It has ten turns spaced .5" on centers with a single turn about 4" in for coupling. The tuning of the entire BCB requires a dual gang cap - an old fashioned mixer/LO type works well - but a dual 365-409 pF works better. Running #18 zipcord to the pickup loop - then to a balanced input, either my HF/PR-150 combo or a homebrew BALUN and my R8, etc, yields decent reception with a good enough Q you need a large knob on the cap to tweek it.

I've also killed the Q by hooking it directly to 50 Ohms, as well as removed said coupling loop and fed the bitter ends to a diecast box enclosed balanced jFET amp/remotely tuned (varactors) amp fed via a pair of RG-6 leads to the homebrew head (TenTec box - mini box enclosed amp - very well shielded. It also had penlights to add to the 12V lead acid battery used for receiver power as the varactors needed 16-18 Vr for minimum capacitance.). I had a speck of daytime IMD from a local daytime 50kW-er with it in the attic. Just the loop now has to be in the yard to avoid AC powerline hash & QRM.

Back in the 60's, I think even Belden wire displays had small spools of Litz wire. I know Lafayette and Allied both carried it - and even had 7" ferrite rods... I played more back then. A local ham store carried Amidon - even .33 & .5" x 7" rods - back 'in the day'. I wonder how long it's been since they carried even a 'Philmore' 365 pF air variable? I think they were $7.95 the last time I saw one! I remember picking them up at EDI in Chicago - in '69 - $.19/each! I was studying the Collins R-390A in USN ET school at the time.

Palstar has a new MW/LW ferrite loop antenna (...for receive, obviously!) check their site.

John

6600. Re: [loopantennas] Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 16:09:30 UTC
From: Jim Dunstan
Topic: 6587 Message: 6600

At 10:22 PM 6/20/2009 -0500, you wrote:

>i think that everyone is getting too touchy about the resonance and
>stuff...at that frequency it isn't that critical...try thinking about
>stuff like 10 meters and up....i have made loops with electric blanket
>wire!...just for a demonstration...and was directional!

Hi,

I believe the question was in relation to the construction of a magnetic loop for reception in the MW broadcast band. By definition a magnetic loop is small (in relation to a wavelength) and has a very low radiation resistance (low efficiency). As a result the loop (whether it is tuned or not) should be constructed with 'low loss techniques'. In addition, unless special steps are taken to increase receiver gain with additional low noise amplification, the loop should be 'tuned' to resonance which provides great receiving advantage .... as well as a few disadvantages. The increased 'Q' of a well constructed tuned loop greatly increases signal strength to the receiver, narrows the bandwidth reducing general received noise as well as inter mod. noise, and in my experience it seems to make the dip in the radiation pattern narrower and deeper.

The mag loop is also inherently less susceptible to local noise due to its lower response to the electrical portion of local noise radiation. After going to the trouble of constructing a 3' loop frame I wouldn't recommend going to the electric blanket for appropriate wire hi hi. I also assume that going to the length of construction a 3' loop would indicate weak signal reception. Again, low loss construction would be in order.

However, if the desire is to provide a minimal antenna for casual listening to local MW broadcast stations .... and one is using a receiver without a built in antenna such as a communications receiver or up-scale Hi-Fi receiver then a small loop 8 to 10 inches in diameter is all you need ... or, just clip it to the electric blanket hi. All other MW receivers already have built in (and tuned to resonance) antennas.

So, if one is interested in constructing a loop to provide low level signal reception for receivers without an antenna or provide a 'boost' to the performance of portable receivers with a built-in antenna I recommend using low loss construction techniques .... and unless additional steps are taken to provide additional amplification ... make the loop tuneable .... eg that resonance stuff hi hi.

As an example, there are no more MW broadcast stations in the small community in which I live. The nearest stations are about 200 miles away in the Duluth/Iron Range area. Sitting out on the deck in the morning I enjoy listening to local broadcasting in Northern Minn. and Wisc. Without

the addition of a tuned loop sitting on the coffee table (giving my receiver a signal boost) I wouldn't be able to copy a single station .... and I am certain wire from an old electric blanket wouldn't do the trick either hi hi.

Earlier I mentioned that a 3' loop was pretty large. The loop on my coffee table is a little more than 1 ft square .... I just shuffle the loop and radio around a little for best reception (minimum noise and best coupling) and then the stations 'pop' out of the background and drop back into the background as I tune the loop through their transmit frequency. Even after using the technique for years I am still amazed how the small wood frame, wire, and capacitor can be so dramatically effective. When a friend drops over for coffee (non radio type) they always think there is more to it and can't believe its coming directly from Duluth hi hi.

Each to his own ... in my case if I want to hear anything with my portable MW receiver I need a tuneable loop .... and demonstrates that tuning is critical.

P.S. I can also hear the stations pretty well on my communications receiver down in my Ham station (which is connected to a dipole 60 ft in the air) ... but not a whole lot better than my portable on the coffee table out on the deck.

Jim

> Original Message -----
>From: Jim Dunstan
>To: <mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com
>Sent: Saturday, June 20, 2009 2:43 PM
>Subject: Re: [loopantennas] Best wire for medium wave loop
>
>At 11:49 AM 6/20/2009 -0400, you wrote:
>
> >canondslr71 wrote:
> > > I'm looking to build a 36 inch or so magnetic loop
> > > antenna for listing to medium wave (BCB). Would like to
> > > know what the absolute best wire is for this. I
> > > currently have 3 different types of enameled copper wire
> > > on hand (the type to wind motors), #17, #24, and #30.
> > > Are any of these suitable, or do you recommand something
> > > else?
> >
> >Any could work. But I would probably use the #17, just for
> >simple ruggedness and low resistance. However, at this
> >frequency, the skin effect will waste quite a bit of the
> >copper in this sized wire. If you were really concerned
> >with wasting copper, you could parallel some strands of #30
> >and get the same or lower AC resistance with less total
> >weight of metal. But the result would be a lot more fragile.
> >

> >--
> >Regards,
> >
> >John Popelish
>
>Hi,
>
>This is an interesting suggestion. I have created my own 'twisted pair' of
>insulated wire (for other purposes) by putting the pair in a drill chuck
>and giving them a twist the length of the run. It might be interesting to
>put a number of parallel strands of #30 enameled wire in a drill and
>twisting them to create a cable. Calculate the approx. total length you
>might need 12' x 8 turns for example parallel 3 to 5 stands, clamp one
>end in a vise and the other end in the chuck of a drill. Pull taught and
>apply the drill creating a single strand that certainly would be
>strong. As John suggests, the purpose is to create the maximum amount of
>wire surface in order to reduce the RF resistance while creating cable
>strength hi hi. I would be interested in how this works out if you go this
>route.
>
>Jim
>
> >
>
>----------
>
>[Non-text portions of this message have been removed]
>
>[Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

6601. Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 16:56:59 UTC
From: cank13cat
Topic: 6587 Message: 6601

My MW BCB loop is made from old TV coaxial cable. It's just 25'-30' of cable wrapped twice around a closet door as a frame, so the dimensions are... whatever the size of the closet door is.

The basic design was taken from Joe Carr's "Receiving Antenna Handbook", and I've seen similar designs elsewhere on the web. Nothing fancy but it works. Just check around for any of the diagrams featuring a shielded loop with a small break in the shield.

It deviates from most MW loops in one way - no tuning capacitor. I tried it first without a tuning capacitor (which I already had handy, cannibalized from an old radio), just as a test. It worked well enough that I left it as-is.

Covers the MW frequency range and HF up to 10 MHz, with significant attenuation beyond approximately 7000 kHz. So while it's useful as an all purpose antenna, this passive loop is pretty much limited to fairly strong shortwave stations, not for DXing. But it's much quieter than most indoor antennas I've tried for shortwave.

Using a closet door as a frame helps make it somewhat directional. Just open or close the door. It works well enough to separate XEEP in Mexico on 1060 from WLNO in Louisiana (I'm in Texas). On shortwave it's not directional in terms of receiving signals, but adjusting the door can help minimize the effects of locally generated noise. I'm in an extremely noisy semi-urban area so this is important. Between flickering streetlights, neighbors with appliances, bad powerlines, etc., other antennas pick up too much noise and are painful to listen through, even on MW.

Below approximately 1000 kHz, my portables with internal ferrite antennas beat the loop. Above that, the loop, connected to a Palstar R30C, beats either of the portables (Magnavox D2935, Sony 2010). Helps a lot when trying to separate KXTR in Kansas City from the crowd of same-same-sports cluttering 1660.

--- In loopantennas@yahoogroups.com, "canondslr71" <canondslr71@...> wrote:
>
> I'm looking to build a 36 inch or so magnetic loop antenna for listing to medium wave (BCB)...

6602. Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-21 06:07:33 UTC
From: Ya`akov N. Miles
Topic: 6602 Message: 6602

I have done some in-depth research into small <0.1 Wavelength
Magnetic Loop Antennas. To see a summary of this please click

http://members.shaw.ca/yehudi2/loop

This indicates that a magnetic loop antenna 1 meter (about 1 yard)
in diameter loop on 40 meter amateur radio band (around 7 mHz) is
about 50% For a similar antenna, please click on this link

http://www.mfjenterprises.com/Product.php?productid=MFJ-1788

(I am not in any way connected with MFJ Enterprises incorporated.)

If you have more questions, please post or mailto:ve7alq@...

73 de Yakov, VE7ALQ

6603. Re: [loopantennas] Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-22 08:22:14 UTC
From: Marc Coevoet
Topic: 6602 Message: 6603

Ya`akov N. Miles schreef:
>
>
> I have done some in-depth research into small <0.1 Wavelength
> Magnetic Loop Antennas. To see a summary of this please click
>
> http://members.shaw.ca/yehudi2/loop <http://members.shaw.ca/yehudi2/loop>
>
> This indicates that a magnetic loop antenna 1 meter (about 1 yard)
> in diameter loop on 40 meter amateur radio band (around 7 mHz) is
> about 50% For a similar antenna, please click on this link
>
> http://www.mfjenterprises.com/Product.php?productid=MFJ-1788
> <http://www.mfjenterprises.com/Product.php?productid=MFJ-1788>
>
> (I am not in any way connected with MFJ Enterprises incorporated.)
>

I see items like this on Ebay, and unfortunately , we can't buy it in
Europe (or US) in a shop:
only 15$, and straight design.
http://cgi.ebay.com/TECSUN-AN-200-LOOP-ANTENNA-FOR-MW-MEDIUM-WAVE-AN200_W0QQitemZ260330244
744QQcmdZViewItemQQptZShortwave_Radios?hash=item3c9ce44a88&_trksid=p3286.c0.m14&_trkparms=
65%3A12|66%3A2|39%3A1|72%3A1234|240%3A1318|301%3A1|293%3A1|294%3A50

We can't find variable caps in Europe!

Marc
PS: I've got a loop calculator for meters/cm on
http://users.fulladsl.be/spb13810/

--
Shortwave transmissions in English, Francais, Nederlands, Deutsch, Suid-Afrikaans,
Chinese, Dansk, Urdu, Cantonese, Greek, Spanish, Portuguese, ...
http://users.fulladsl.be/spb13810/swlist/ http://radiolanguages.tk
Stations list: http://users.fulladsl.be/spb13810/txlist/

6604. Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-23 15:26:26 UTC
From: Bruce Carter
Topic: 6587 Message: 6604

> I'm looking to build a 36 inch or so magnetic loop antenna

Here are some ideas --- my former employer was throwing away spools of 24 guage solid hookup wire. I used some for a couple of loops and found - to my surprise I might add - that the resulting loops were very selective! I've gone to no spacing between wires, it seems to boost the Q of the loop tremendously.

Radio Shack used to sell an outdoor shortwave antenna kit that had about 70 or 80 feet of Litz wire. I got one in the late 90's and used it in my backyard. Unfortunately, the Florida climate soon corroded the wire out. But - this could make a readily available source of Litz wire.

I do not recommend doorbell wire, because I haven't had much luck making high Q loops out of it, but they have all been spaced out between turns. Perhaps put tightly spaced, the Q might go up. Doorbell wire comes as a twisted pair, it is a fair amount of effort to separate over 100 feet, but when you do you have enough for two loops.

I've heard of some people using outdoor landscaping light wire for speaker wire and for loops. Pretty smart, because you can get large guage 16 or so relatively inexpensively.

Some people have even used monster speaker wire, but they find they have to put resistance in parallel because the Q is too high!

6605. Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-24 13:39:25 UTC
From: canondslr71
Topic: 6587 Message: 6605

Thanks all for the replies. Now, how would something like the CC Crane or Quantum ferrite loop compare to a 36 inch magnetic loop in terms of pulling in those distant stations?

6606. Re: [loopantennas] Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-24 18:05:42 UTC
From: Jim Dunstan
Topic: 6587 Message: 6606

At 01:39 PM 6/24/2009 +0000, you wrote:

>Thanks all for the replies. Now, how would something like the CC Crane or
>Quantum ferrite loop compare to a 36 inch magnetic loop in terms of
>pulling in those distant stations?

Sensitivity of a tuned loop ..... or how well it manages to transfer signals to the receiver .... either through mutual induction or via a link coil ... depends first on construction .... that is how high the circuit 'Q' .... and second the size .... the capture area. A well constructed High Q tuned loop 1' square with adjustable coupling could outperform a poor quality, low 'Q' loop 3' square even though it, the 3' loop, has almost 10 times the capture area.

However, a 3' tuned loop constructed with reasonable care will run circles around the smaller commercial loops on weak signals. If the signals are relatively strong ... e.g. you can hear the stations without the loop ... then the difference between loops will not be noticeable as the receiver AGC will make up the difference. A 3' loop is a bit awkward to use and works best on signals that you can't hear at all on the receiver without the external antenna.

For example. If I use a receiver of average sensitivity with a 1' loop I can bring 4 daytime distant stations in at a comfortable level. If I use a more sensitive receiver (SRIII) with the same loop I can pickup 2 additional distant stations (the first 4 stations aren't improved very much). However if I use the SRIII receiver and a 3' loop I can add 6 or more additional stations ... not all at a comfortable level but identifiable. However physically the 3' loop is difficult to use. The result is large loop only comes out for special occasions hi hi.

Jim

6607. Re: Best wire for medium wave loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-24 22:11:32 UTC
From: airchecklover
Topic: 6587 Message: 6607

I built a 3.5 ft.8-sided loop from PVC. It was big and awkward and was not leaps and bounds better than a 2 ft. square MTM Scientic loop - except as Jim points out on the incredibly weak signals. So I scrapped it and the wire is now outdoors as an end-fed sloper. The 2ft loop about equals the CCrane T-F (I also have) but doesn't require batteries and has no cables. The Quantum probably will not be beat from what i've heard and read but it is not cheap. Magnetically coupling the loop to the T-F head and the T-F direct to a good radio gives almost double the gain of either antenna alone (with good S/N) and playing the loop against the T-F head, cardoid nulls are achievable. I can get 100% quieting on either of two stations on 570 daytime. They are about 30 degrees apart.

Mark

==========

--- In loopantennas@yahoogroups.com, "canondslr71" <canondslr71@...> wrote:
>
> Thanks all for the replies. Now, how would something like the CC Crane or Quantum ferrite loop compare to a 36 inch magnetic loop in terms of pulling in those distant stations?
>

6608. Re: Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-27 13:56:46 UTC
From: dldorrance
Topic: 6602 Message: 6608

Ya'akov, you might want to "go the extra mile" and calculate the actual (verses theoretical) efficiency of a small loop. Since the radiation resistance is so minute, you need to consider the resistance of the metal out of which the loop is constructed and consider the percent loss. You may calculate the actual radiation efficiency using a small loop calculator program. My favorite is called, loopcalc.exe, which you may download here: http://www.standpipe.com/w2bri/software/

You will find that a small aluminum loop (the MFJ loop) is less efficient that a similar size and diameter small loop made of copper.

WA6YSO

--- In loopantennas@yahoogroups.com, "Ya`akov N. Miles" <ve7alq@...> wrote:
>
> I have done some in-depth research into small <0.1 Wavelength
> Magnetic Loop Antennas. To see a summary of this please click
>
> http://members.shaw.ca/yehudi2/loop
>
> This indicates that a magnetic loop antenna 1 meter (about 1 yard)
> in diameter loop on 40 meter amateur radio band (around 7 mHz) is
> about 50% For a similar antenna, please click on this link
>
> http://www.mfjenterprises.com/Product.php?productid=MFJ-1788
>
> (I am not in any way connected with MFJ Enterprises incorporated.)
>
> If you have more questions, please post or mailto:ve7alq@...
>
> 73 de Yakov, VE7ALQ
>

6609. Loop progress report...

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-27 17:11:51 UTC
From: down3green
Topic: 6609 Message: 6609

Hey everybody,

First off, thanks again to everyone who took the time to offer suggestions in planning my new transmitting loop antenna. Since then I have read every internet link I could click on and even have a copy of "The Practical Antenna Handbook" for reference. There seems to be a lot of conflicting information out there, usually in the form of anecdotal evidence. I did find a research document which corroborated using 1/3 wavelength maximum for the circumference and decided to go with that. A metal fabricator is rolling a copper loop for me using 1.625" OD Type K (heavy) tubing into a 56.34" OD loop. For ease of shipping, two half loops will be made. I may choose to weld the pair together after I experiment a little, but for now, a silver solder joint should be adequate.

Once my loop is together, how do I proceed? I should think that I would need to determine the self resonating frequency of the loop? All the literature agrees that a mag loop's useable frequency should stay below that point. This is where I get a little confused. Confused nothing, I'm stumped :-))) An antenna analyzer is bound to be required here, yes? Thanks in advance for any input.

73,
Don

6610. Re: [loopantennas] Re: Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-27 21:02:37 UTC
From: M HOLDEN
Topic: 6602 Message: 6610

Interesting. Since the best conducting metal is actually silver, perhaps silver plated copper would be a sterling idea.....forgive the pun. The bottom line though must be: "Would it make any detectable difference whatsoever at the receiving end?" I don't think so. G4HOL

_____
From: dldorrance <dldorrance@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, 27 June, 2009 2:56:46 PM
Subject: [loopantennas] Re: Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Ya'akov, you might want to "go the extra mile" and calculate the actual (verses theoretical) efficiency of a small loop. Since the radiation resistance is so minute, you need to consider the resistance of the metal out of which the loop is constructed and consider the percent loss. You may calculate the actual radiation efficiency using a small loop calculator program. My favorite is called, loopcalc.exe, which you may download here: http://www.standpip e.com/w2bri/ software/

You will find that a small aluminum loop (the MFJ loop) is less efficient that a similar size and diameter small loop made of copper.

WA6YSO

--- In loopantennas@ yahoogroups. com, "Ya`akov N. Miles" <ve7alq@...> wrote:
>
> I have done some in-depth research into small <0.1 Wavelength
> Magnetic Loop Antennas. To see a summary of this please click
>
> http://members. shaw.ca/yehudi2/ loop
>
> This indicates that a magnetic loop antenna 1 meter (about 1 yard)
> in diameter loop on 40 meter amateur radio band (around 7 mHz) is
> about 50% For a similar antenna, please click on this link
>
> http://www.mfjenter prises.com/ Product.php? productid= MFJ-1788
>
> (I am not in any way connected with MFJ Enterprises incorporated.)
>
> If you have more questions, please post or mailto:ve7alq@ ...
>
> 73 de Yakov, VE7ALQ
>

[Non-text portions of this message have been removed]

6611. Re: [loopantennas] Loop progress report...

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-27 21:32:20 UTC
From: toddroberts2001@aol.com
Topic: 6609 Message: 6611

In a message dated 6/27/2009 1:12:56 P.M. Eastern Daylight Time,
N61W160@... writes:

Once my loop is together, how do I proceed? I should think that I would
need to determine the self resonating frequency of the loop? All the
literature agrees that a mag loop's useable frequency should stay below that point.
This is where I get a little confused. Confused nothing, I'm stumped :-)))
An antenna analyzer is bound to be required here, yes? Thanks in advance
for any input.

73,
Don

The MFJ-259B is a great antenna analyzer to use for testing a transmitting
loop. It will tell
you the resonant frequency of the loop as well as be a big help in
adjusting the feedpoint
match to the loop. I use a gamma match to feed my loop and the MFJ-259B
will tell you the
optimum length and spacing to make the gamma match for a good 50 ohm match
to the feedline.

Also you will want to decide on the best high-voltage low-loss capacitor to
use for tuning
your loop. In my experience the trombone-type copper-tube sliding capacitor
using Teflon sheet
for insulation is the easiest and best capacitor to build and use for the
money. Others have used
vacuum variables but they cannot normally be welded to or soldered to
without heat destroying
the capacitor so they end up being a clamped on connection to the loop
which reduces their
advantage in the first place.

Other than the size and quality of the tubing used the capacitor is the
second most important
component of the loop. It can make or break the total performance of a
transmitting loop.

73 Todd WD4NGG

**********An Excellent Credit Score is 750. See Yours in Just 2 Easy
Steps!
(http://pr.atwola.com/promoclk/100126575x1222585065x1201462786/aol?redir=http://www.freecr

editreport.com/pm/default.aspx?sc=668072&hmpgID=62&bcd=Jun
eExcfooterNO62)

6612. Re: Loop progress report...

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-27 22:27:49 UTC
From: down3green
Topic: 6609 Message: 6612

Thanks for your reply, Todd. It happens that I was looking at an MFJ analyzer just today. I think I'll have to order one soon.

I agree that a good capacitor is a must when building a mag loop antenna. Max-Gain Systems has the Voltronics Corp. model NMT70 6E vacuum variable capacitor. It is specifically recommended for QRP operation using mag loops. The price is right at $39. I have a couple of these on order. I will be operating a 10 watt Elecraft K2.

Up to now I had been considering using a Faraday loop to energize my antenna. Did you have a reason for going with the gamma match instead?

Don
KI6ZOP

6613. Re: [loopantennas] Re: Loop progress report...

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-27 22:37:46 UTC
From: Paul V Birke PEng
Topic: 6609 Message: 6613

From: down3green <N61W160@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, June 27, 2009 6:27:49 PM
Subject: [loopantennas] Re: Loop progress report...

Thanks for your reply, Todd. It happens that I was looking at an MFJ analyzer just today. I think I'll have to order one soon.
**********==>

take a look at the RIG200

hard to beat

best wishes
Paul VE3PVB

[Non-text portions of this message have been removed]

6614. RIG200 recent eham.net.reviews - antenna analyzer

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-27 22:43:14 UTC
From: Paul V Birke PEng
Topic: 6609 Message: 6614

KD0TRG
Rating: 5/5
Jun 6, 2009 22:00
Send this review to a friend
This unit works
Time owned: 3 to 6 months
I'm a firm believer in "if I need a tool that I will reuse, I buy the best I can research and find" - this unit fits the bill. Using this on my IC-756ProIII with a Hi-Q resting on a tripod. The battery seems to last for ever, but we all know that it needs to be charged eventually. I'm getting 160+ runs of analysis on a single charge. You wont be disappointed.

N3DF
Rating: 5/5
Jun 5, 2009 09:22
Send this review to a friend
Perfect for Buddipole
Time owned: 0 to 3 months
I purchased my AA-200 at the 2009 Dayton Hamvention for the primary purpose of tuning and adjusting my Buddipole portable antenna. It is perfect for that purpose. Although more expensive than the MFJ-259B that I previously used, the AA-200 is faster, easier and more enjoyable to use for this purpose. I highly recommend it to other Buddipole owners.

PAULVBIRKE
Rating: 5/5
Feb 28, 2009 16:24
Send this review to a friend
Super Value for a Good Price
Time owned: 0 to 3 months
Just got mine and already a whole new world is opening up. Now I can see what my antennae are really doing. For antennae development such as my interest in ExH antennae and capacitive antennae, this instrument and its data gathering and output presentations will be invaluable.

thanks Yuri Onipko, VE3DZ Distributor in Toronto ON Canada

yours truly

Paul V Birke PEng
Guelph ON

VE3PVB

[Non-text portions of this message have been removed]

6615. Re: Loop progress report...

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-28 14:37:09 UTC
From: down3green
Topic: 6609 Message: 6615

Thanks Paul,

I have not heard of the RIG200 before. The eham user reports all seem to be in agreement on it as being top notch equipment. I'll look into it. Maybe I can get "management" to OK the expenditure without insisting on matching funds :-)))

Don

6616. Re: Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-28 14:45:40 UTC
From: Ya`akov N. Miles
Topic: 6602 Message: 6616

--- In loopantennas@yahoogroups.com, "dldorrance" <dldorrance@...> wrote:
>
> Ya'akov, you might want to "go the extra mile" and calculate the
> actual (verses theoretical) efficiency of a small loop. Since
> the radiation resistance is so minute, you need to consider the
> resistance of the metal out of which the loop is constructed and
> consider the percent loss. You may calculate the actual radiation
> efficiency using a small loop calculator program. My favorite is
> called, loopcalc.exe, which you may download here:
> http://www.standpipe.com/w2bri/software/
>
> You will find that a small aluminum loop (the MFJ loop) is less
> efficient that a similar size and diameter small loop made of
> copper.
>
> WA6YSO

Sorry, but this program is for Windows, and I only have MS-DOS 6.20

Do you have a version for Microsoft DOS Version 6.2x or Linux?

73 de Yakov, VE7ALQ

6617. Re: [loopantennas] Re: Loop progress report...

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-28 17:34:23 UTC
From: Paul V Birke PEng
Topic: 6609 Message: 6617

it clean out my personal bank account and in lieu of a new radio

but I like to research antennae and thought it was well worth it
there are two of us that bought at the same time with the intro price of 450 USD
we did a week of intensive research starting out with the MFJ

I love it

best wishes Don

Paul VE3PVB

ps it has a feature wherein you can output in real time the swr of 5 frequencies for say looking at the G5RV or the Mystery Antenna (I built one of these for about 60$) and this is my main antenna
not a big deal the multiple swr output but certainly cute

From: down3green <N61W160@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, June 28, 2009 10:37:09 AM
Subject: [loopantennas] Re: Loop progress report...

Thanks Paul,

I have not heard of the RIG200 before. The eham user reports all seem to be in agreement on it as being top notch equipment. I'll look into it. Maybe I can get "management" to OK the expenditure without insisting on matching funds :-)))

Don

[Non-text portions of this message have been removed]

6618. Re: [loopantennas] Re: Loop progress report...

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-28 17:37:24 UTC
From: Paul V Birke PEng
Topic: 6609 Message: 6618

Dear Don

on the XYL der Fheuher front

tell here you will appropriate "Birthday funds" and or "Christmas Funds" for the delta $

again well worth it

we did not buy the UHF version as there is only 70cm antennae of interest here

again you will be most pleased

the Ukrainians did a great job on this product, thanks goodness for world trade

---
From: down3green <N61W160@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, June 28, 2009 10:37:09 AM
Subject: [loopantennas] Re: Loop progress report...

Thanks Paul,

I have not heard of the RIG200 before. The eham user reports all seem to be in agreement on it as being top notch equipment. I'll look into it. Maybe I can get "management" to OK the expenditure without insisting on matching funds :-)))

Don

[Non-text portions of this message have been removed]

6619. RE: [loopantennas] Re: Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-28 21:06:00 UTC
From: Chris Harris
Topic: 6602 Message: 6619

Google 'Reg Edwards g4fgq loop' or just go to
http://www.zerobeat.net/G4FGQ/
C

> Sorry, but this program is for Windows, and I only have MS-DOS 6.20

6620. Re: [loopantennas] Re: Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-28 21:49:45 UTC
From: Marc Coevoet
Topic: 6602 Message: 6620

Chris Harris schreef:
>
>
> Google 'Reg Edwards g4fgq loop' or just go to
> http://www.zerobeat.net/G4FGQ/ <http://www.zerobeat.net/G4FGQ/>
> C
>
> > Sorry, but this program is for Windows, and I only have MS-DOS 6.20
>

I managed to compile one of these files grndwav3.pas, on a linux system
with freepascal.org ("fpc grndwav3.pas" and now I see a working binary !)

So, on DOS, you should be able to do the same ... just use the free
compiler environment..
http://www.freepascal.org/

Marc

--
Shortwave transmissions in English, Francais, Nederlands, Deutsch, Suid-Afrikaans,
Chinese, Dansk, Urdu, Cantonese, Greek, Spanish, Portuguese, ...
http://users.fulladsl.be/spb13810/swlist/ http://radiolanguages.tk
Stations list: http://users.fulladsl.be/spb13810/txlist/

6621. Re: RIG200 recent eham.net.reviews - antenna analyzer

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-28 22:17:32 UTC
From: airchecklover
Topic: 6609 Message: 6621

Paul; I am interested in capacitive antennas for transmitting too. Have you checked out the RoomCap Antenna by Felix, HB9ABX? He's a Swiss loop antenna expert who may have built a better mouse trap. I have not yet built one but an itching to do so. (btw, have yet to build the Langford active antenna either - have you?) I'm hoping the RoomCap is "for real" since it will solve my restricted space problems. Test results are impressive. Here is the link for more info ...

http://home.datacomm.ch/hb9abx/ant--abx-e.htm

Mark

=-==========

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:

For antennae development such as
> my interest in ExH antennae and capacitive antennae, this instrument
> and its data gathering and output presentations will be invaluable.
>
> thanks Yuri Onipko, VE3DZ Distributor in Toronto ON Canada
>
> yours truly
>
> Paul V Birke PEng
> Guelph ON
>
> VE3PVB

6622. Re: Radiation Efficiency, etc. of Small <0.1 Wavelength Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-28 23:35:38 UTC
From: Ya`akov N. Miles
Topic: 6602 Message: 6622

--- In loopantennas@yahoogroups.com, Marc Coevoet <sintsixtus@...> wrote:
>
> Chris Harris schreef:
> >
> >
> > Google 'Reg Edwards g4fgq loop' or just go to
> > http://www.zerobeat.net/G4FGQ/ <http://www.zerobeat.net/G4FGQ/>
> > C
> >
> > > Sorry, but this program is for Windows, and I only have MS-DOS 6.20
> >
> I managed to compile one of these files grndwav3.pas, on a linux
> system with freepascal.org ("fpc grndwav3.pas" and now I see a
> working binary !)
>
> So, on DOS, you should be able to do the same ... just use the free
> compiler environment..
> http://www.freepascal.org/
>
>
> Marc
>
>
> --
> Shortwave transmissions in English, Francais, Nederlands, Deutsch, Suid-Afrikaans,
Chinese, Dansk, Urdu, Cantonese, Greek, Spanish, Portuguese, ...
> http://users.fulladsl.be/spb13810/swlist/ http://radiolanguages.tk
> Stations list: http://users.fulladsl.be/spb13810/txlist/
>

Thank you. I have Turbo-Pascal (Legally) for MS-DOS so there
should be no problem getting it to work on my computer(s).

I still wonder why even a hand calculator is needed to figure

R=19246*((D/L)**4)

R is radiation resistance in Ohms
D is diameter of circular loop
L is wavelength in same units as D (if D in meters, L in meters)
* is times
** is to the power of in ForTran, symbol ^ in Basic

For elaboration on this Formula and my research, refer to

http://members.shaw.ca/yehudi2/loop.html

When I went to school, I was only allowed to use a *slide rule*
after I had demonstrated basic arithmetic skills, and also
convinced the teacher that I knew how to use a slide rule.

http://english.ruvr.ru/index.php?lng=eng

Teach the children well...

http://members.shaw.ca/yehudi2/tim.jpg

The Former(?) Soviet Union had over 130 languages. They were
experts in translation. Ambassador to United Nations, Yakov Malik.

73 de Yakov, VE7ALQ

6623. Re: [loopantennas] Re: RIG200 recent eham.net.reviews - antenna analyzer

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-29 00:50:53 UTC
From: Paul V Birke PEng
Topic: 6609 Message: 6623

Dear Mark

hard to gleam the working principle

does you have any ideas, like the Microvert or other cap antennae

very best wishes
Paul VE3PVB

From: aircheckIover <mdh@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, June 28, 2009 6:17:32 PM
Subject: [loopantennas] Re: RIG200 recent eham.net.reviews - antenna analyzer

Paul; I am interested in capacitive antennas for transmitting too. Have you checked out the RoomCap Antenna by Felix, HB9ABX? He's a Swiss loop antenna expert who may have built a better mouse trap. I have not yet built one but an itching to do so. (btw, have yet to build the Langford active antenna either - have you?) I'm hoping the RoomCap is "for real" since it will solve my restricted space problems. Test results are impressive. Here is the link for more info ...

http://home. datacomm. ch/hb9abx/ ant--abx- e.htm

Mark

=-========== ========= ========= ==

--- In loopantennas@ yahoogroups. com, Paul V Birke PEng <nonlinear@. ..> wrote:

For antennae development such as
> my interest in ExH antennae and capacitive antennae, this instrument
> and its data gathering and output presentations will be invaluable.
>
> thanks Yuri Onipko, VE3DZ Distributor in Toronto ON Canada
>
> yours truly
>
> Paul V Birke PEng
> Guelph ON
>
> VE3PVB

[Non-text portions of this message have been removed]

6624. Re: [loopantennas] RIG200 recent eham.net.reviews - antenna analyzer

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-29 01:19:06 UTC
From: toddroberts2001@aol.com
Topic: 6609 Message: 6624

One of the reviews on eham.net said the RIG200 antenna analyzer was easily susceptible to static damage and one should be careful using it with wire antennas or antennas that can build a static charge. I would wait until the manufacturer can guarantee the problem is fixed before spending $500 bucks on one.

73 Todd WD4NGG

**********An Excellent Credit Score is 750. See Yours in Just 2 Easy Steps!
(http://pr.atwola.com/promoclk/100126575x1221323006x1201367222/aol?redir=http://www.freecreditreport.com/pm/default.aspx?sc=668072&hmpgID=62&bcd=JuneExcfooterNO62)

6625. Re: [loopantennas] RIG200 recent eham.net.reviews - antenna analyzer

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-06-29 02:33:48 UTC
From: Paul V Birke PEng
Topic: 6609 Message: 6625

yes this is true

I am very careful grounding all inputs before plugging in to bleed off charge

a good point you make

best wishes
Paul VE3PVB

From: "toddroberts2001@..." <toddroberts2001@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, June 28, 2009 9:19:06 PM
Subject: Re: [loopantennas] RIG200 recent eham.net.reviews - antenna analyzer

One of the reviews on eham.net said the RIG200 antenna analyzer was easily
susceptible to static damage and one should be careful using it with wire
antennas or antennas that can build a static charge. I would wait until the
manufacturer can guarantee the problem is fixed before spending $500 bucks
on one.

73 Todd WD4NGG

********** **An Excellent Credit Score is 750. See Yours in Just 2 Easy
Steps!
(http://pr.atwola. com/promoclk/ 100126575x122132 3006x1201367222/ aol?redir= http://www.
freecreditreport .com/pm/default. aspx?sc=668072& hmpgID=62& bcd=Jun
eExcfooterNO62)

[Non-text portions of this message have been removed]

6626. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-01 13:33:02 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6626

Amplifiers for Antennas and Pre-Selectors
http://members.cts.com/king/j/jlkolb/site/ant.htm
- presented by John Kolb [KK6IL]

Four(4) Schmatic Diagrams are provided:

* The KRS AA-1 Active Antenna was sold through Radio West
in the early '70's, and was a good performer.
http://members.cts.com/king/j/jlkolb/site/aa-1.pdf

* In the '70's, this Circuit was developed suitable for
use as an Antenna Pre-Amplifier or as the Amplifier for
a Box Loop Antenna or Ferrite Rod Antenna.
http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf

* A fancier version, with a Dual-Gate FET, featuring an
RF Gain Control. Dual-Gate FET's can still be found,
but not easily. This Schematic is closely related to
a Pre-Selector sold as the KS Pre-Selector.
http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf

* Better Nulling is obtained with a Loop Antenna when it
is Center Tapped and Amplified with a Balanced Amplifier.
http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf

Justice AM Antenna With Twin Coil Ferrite
Justice AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/justice_antenna.asp

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern
with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar?s Loop Antenna gives superb performance on the AM medium-wave broadcast band. The
loop rotates and tilts to give deep nulls so you can eliminate local interference. It also
allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

Q-Stick+
The Quantum Stick Plus+ by DX-Tools Ferrite Rod Antenna Tuner Coupler
http://www.dx-tools.com/QStick.htm

Quantum QX Loop and other DX-Tools Products
The Quantum QX Loop 7.5" Ferrite Rod Antenna Plus 40 dB FET Amp
http://www.dx-tools.com/PRODUCTS.htm

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by maartenhagg
Wideband Magnetic Loop 10kHz - 30MHz
http://home.hetnet.nl/~maartenmiriam/index.html

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
http://www.selectatenna.com

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
http://www.torustuner.com

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Justice AM Loop Antenna (Active)
- - - http://www.ccrane.com/justice_antenna.asp

* Torus Tuner 27" Loop Antenna (Passive)
- - - http://www.torustuner.com/

* Select-A-Tenna Model #541M (Passive)
- - - http://www.selectatenna.com/

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - http://www.ccrane.com/justice_antenna.asp
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - http://www.torustuner.com/
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - http://www.selectatenna.com/
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Plumbers's Loop Antenna {Broad-Band 'Single' Turn}
A 'different' twist on the "Broad-Band " (4.8MHZ to 24.5MHZ) Loop Antenna using a Single Turn of Copper Tubing within a Plastic Hula Hoop and a Variable Capacitor *All-in-One-Unit* + Photos + Schematic + Loop Pre-Amplifier ~ Presented by Nicolae Santean
http://www.csd.uwo.ca/~nic/radio/radio.shtml

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.mitedu.freeserve.co.uk/Circuits/RF/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://www.imagenisp.ca/jsm/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

Kowalski AM/MW Loop Antenna
The Kowalski Loop is similar to the Radio West Loop in that it is an amplified ferrite rod type loop. It only tunes the medium wave band. It was built and sold on a very limited basis by former National Radio Club member Paul Kowalski. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Kowalski-Loop.html

Radio West LW/MW Loop Antenna
Radio West Loop Antenna was the commercially available Low (LW) and Medium AM/MW) Frequency Antenna available. It was a improvement over the Space Magnet Loop Antenna, which was the rage among medium wave DXers in the early-mid 70's. Presented by Robert Kramer NV8V
http://members.aol.com/RKDX/Radio-West.html

VEA MW-1812 Loop Antenna Users Guide
High Performance Tunable Loop Antenna VEA MW-1812VE
http://www.dobe.com/vea/Loops/1812Guide/index.htm

18-inch Box Loop for MW
Relatively easy-to-build MW loop that is small enough to fit on a desk, yet large enough to accommodate radios the size of a Sangean ATS-803A or smaller. For best nulling, place antenna/radio combination on a turntable/platter.
http://www.clearsail.net/~n5wbi/radio/PonderLoop.html

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.mitedu.freeserve.co.uk/Circuits/RF/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop.

Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DX zones results on loop antennas and projects
Reference links on some loop antenna projects for you to build
http://www.dxzone.com/catalog/Technical_Reference/Antennas/Loop/

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.qsl.net/k5dkz/4loop.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

Very Low Frequency (VLF) Up-Converter
STORMWISE: Palomar VLF Converter allows you to use your ordinary ShortWave Radio to listen below the AM Broadcast Band. Directly Tune VLF Stations of 10 KHz to 500 KHz using your existing ShortWave Radio. The VLF Converter easily connects between the Antenna and the Radio.
http://www.stormwise.com/vlfconv.htm

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

WHY? Use a Shielded Loop Antenna?
Read Message #384 and learn about the Shielded Loop Antenna's - Gain - Directivity - Apparent Gain due to Directivity - Noise - Noise Reduction - written by Brian Greer aka "progman22000" ~ (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antenna Modeling Software and more...
Original, high-quality, radio engineering/modelling programs. Not freeware -- just free gifts -- please help yourself -- no catch. Download in a few seconds -- not zipped-up -- run immediately -- user friendly. Presented by R.J.Edwards (G4FGQ) Software
http://www.btinternet.com/~g4fgq.regp/page3.html

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/looptheo.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

AM Radio Listening
This is the group for the AM radio DXer, who wants to post logs and talk about loop antennas for AM only
http://groups.yahoo.com/group/amradiolistening

Longwave Radio Listening
This group is dedicated to members that are into longwave radio listening and transmitting
http://groups.yahoo.com/group/longwaveradiolistening/

Magnetic Loop - German web site focuses on SW Loop Antennas. Contributed by radiohighfreq Posting are in German and English. Claims to be Non-Commercial and Pop-Up Add Free.
http://www.magnetic-loop.de/main.html

Radio DX World
This groups cares about you and your DXing, and also can help you with many resources of DX. Its by a radio group called the Global Communications Commission that devotes the hobby of radio DXing
http://groups.yahoo.com/group/RadioDxWorld/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

Radio Science Observing
Are you curious like Art Bell,and into radio phenomica, and propagation heres the place to come and join.
http://groups.yahoo.com/group/radioscience/?yguid=74346996

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters
Four interesting and nice looking Shielded SW Loop Antenna webpages: * Low Noise Coax-Shielded Faraday Loop Antennas for 80 - 40 Meters * Coax-Shielded Faraday Loop Antennas Research Notes * Schematic of Coax-Shielded Faraday Loop Antennas - Website presented by "ProgMan22000" (GreerTech.Com)
http://www.greertech.com/hfloop/mymagloop.html

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

OctoLoop Antenna (Shielded)
LWCA - The "OctoLoop" stands out in performance and ease of construction. Description and Drawing of the OctoLoop Antenna - Presented by William E. Payne, N4YWK
http://www.lwca.org/library/articles/ywk/octoloop.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded Loop Antenna WebPage presented by Doug "K8RFT"
This personal webpage describes How To Make a Loop Antenna with Seven Feet of Six-Conductor Shielded Cable formed into a Circle and with the conductors connected in series to form a Six-Turn Loop Antenna. Original "Plans" from BeRadio.Com
http://user.netonecom.net/~swordman/Radio/shloopant.htm

Shielded-Loop AM Antenna
BeRadio.Com presents the "AM Loop Shielded Antenna for AM Reception:The loop self resonates approximately in the middle of the AM band, and by adding or subtracting turns it can be optimized higher or lower in the band.
http://notebook.beradio.com/ar/radio_shieldedloop_am_antenna/index.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Justice AM Antenna a Review by RadioCorner.Com
Developed by Chris Justice from the C. Crane Company, the Justice AM antenna is the best solution for pulling in a weak or, in some cases a station you never thought existed. The antenna uses a new patented technology called "Twin Coil Ferrite" that uses a regular ferrite rod antenna in a very unusual fashion.
http://www.radiocorner.com/amradio/amantennas.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna

http://www.fairradio.com/airvar.htm

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM
http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

"SW-Radio Galaxy International"
Free Radio From The Netherlands
http://www.swrgalaxy.tk

11 meter band
rsn is a radio group on 11 meter for rad-oper world wide rsn truckers
http://rsn11meterbandtex2div.bravehost.com/

Stormwise - Supplier of large VLF ferrite rods.
http://www.stormwise.com/vlf.htm
Amidon Ferrite rods, bars, plates, and tubes.
http://www.amidoncorp.com/aai_ferriterods.htm

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6627. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-01 13:33:02 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6627

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6628. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-01 13:51:51 UTC
From: Chris Trask
Topic: 5773 Message: 6628

```
>
>
>Amplifiers for Antennas and Pre-Selectors
>http://members.cts.com/king/j/jlkolb/site/ant.htm
>- presented by John Kolb [KK6IL]
>

<<SNIP>>

Those links send you to a site for Concentric Professional Services.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

6629. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-01 14:09:43 UTC
From: Chris Trask
Topic: 5773 Message: 6629

```
>
>* The KRS AA-1 Active Antenna was sold through Radio West
>in the early '70's, and was a good performer.
>http://members.cts.com/king/j/jlkolb/site/aa-1.pdf
>

Should be:

http://jlkolb.cts.com/site/ant.htm

>
>* In the '70's, this Circuit was developed suitable for
>use as an Antenna Pre-Amplifier or as the Amplifier for
>a Box Loop Antenna or Ferrite Rod Antenna.
>http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf
>

Should be:

http://jlkolb.cts.com/site/fet_pre.pdf

>
>* A fancier version, with a Dual-Gate FET, featuring an
>RF Gain Control. Dual-Gate FET's can still be found,
>but not easily. This Schematic is closely related to
>a Pre-Selector sold as the KS Pre-Selector.
>http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf
>

Should be:

http://jlkolb.cts.com/site/dual_fet.pdf

>
>* Better Nulling is obtained with a Loop Antenna when it
>is Center Tapped and Amplified with a Balanced Amplifier.
>http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf
>

Should be:

http://jlkolb.cts.com/site/dif_fet.pdf

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
```

\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6630. My 6m - 80m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-01 18:52:04 UTC
From: mwsmith65857
Topic: 6630 Message: 6630

I've been playing with loops a bit and put together a reasonably successful one with 32' of wire made into an 8' square and hung off a fence. From the lofty altitude of four inches, I made a contact into Venezuela, and worked stations across the states.

So, I figured I had to refine my design a bit so I could take this thing to field day. First off, I needed to get away from a square, for efficiency's sake. A circle would be best, but difficult to build and easily transport. An octagon was the next best choice. Also, it had to be made out of PVC, just for ease of construction, strength and availability of materials.

Cruising the internet one day, I saw this loop design:

http://www.arrl.org/news/features/2008/02/05/1/

That was exactly what I needed for the basis of my loop framework. I simplified it, and got rid of the convoluted sections (although that might go in later for experimental purposes) and rigged one up.

My loop ended up 9.6' across and is tuned by a Icom AT-2 coupler. I'm driving it with an IC-706MKIIG, at 100w. On field day I worked 25 states with it in a 21 hour period from Katy, TX, including one on 15m out to Hawaii. That's 3,700 miles from an antenna about 2' off the ground, not too shabby! :)

I've posted pictures of what it looks like in the photo area.

http://groups.yahoo.com/group/loopantennas/photos/album/2130309806/pic/list

I would have posted the pics inline, but I'm not exactly sure how to do that, haha!

Next steps include:
1. See the effects of reducing the diameter by increasing the turns
2. Mount it on an antenna rotator so I don't have to run out to the back yard to spin it.
3. See if the convoluted design works for this type of antenna, which would hopefully allow me to reach 160m, and also be more efficient on the lower bands

Michael
N5TGL

6631. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-02 12:30:08 UTC
From: mwsmith65857
Topic: 6630 Message: 6631

So it occurs to me that possibly my loop isn't a magnetic variety since it's not magnetically coupled with a Faraday loop? Not sure. I was under the impression that anything under a full wave loop qualifies as a magnetic loop, maybe I am mistaken.

Any guidance is appreciated!

Ok, so last night I decided to shrink the loop. I went from the monster 9.6' diameter to a 3.2' diameter. This meant I went from a single turn loop to a three turn loop. Results? Well, it works just fine. Still tunes up from 6m to 80m. Had a good long QSO with my dad (who lives just a couple miles down the road) and he said that my signal was the strongest it has ever been, so that's something to get excited about. I went from S7 to S9, and that's a pretty significant improvement. I'm going to post the new picture of what it looks like in the photo album that I linked earlier.

So, now the plan for the weekend is to rehabilitate an old HAM-M rotor to work with this antenna. More turns = more directivity, so the rotor becomes more important. Nice thing is that I think I'll be able to shrink this down nicely to fit in the attic, and have a rotatable antenna up there without anything exposed that might freak the local HOA out.

I'll keep y'all posted with results from this weekend.
N5TGL
Michael

6632. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-03 03:03:38 UTC
From: Don
Topic: 6630 Message: 6632

--- In loopantennas@yahoogroups.com, "mwsmith65857" <radion5tgl@...> wrote:
>
> So it occurs to me that possibly my loop isn't a magnetic variety since it's not magnetically coupled with a Faraday loop? Not sure. I was under the impression that anything under a full wave loop qualifies as a magnetic loop, maybe I am mistaken.
>
> Any guidance is appreciated!
>
> Ok, so last night I decided to shrink the loop. I went from the monster 9.6' diameter to a 3.2' diameter. This meant I went from a single turn loop to a three turn loop. Results? Well, it works just fine. Still tunes up from 6m to 80m. Had a good long QSO with my dad (who lives just a couple miles down the road) and he said that my signal was the strongest it has ever been, so that's something to get excited about. I went from S7 to S9, and that's a pretty significant improvement. I'm going to post the new picture of what it looks like in the photo album that I linked earlier.
>
> So, now the plan for the weekend is to rehabilitate an old HAM-M rotor to work with this antenna. More turns = more directivity, so the rotor becomes more important. Nice thing is that I think I'll be able to shrink this down nicely to fit in the attic, and have a rotatable antenna up there without anything exposed that might freak the local HOA out.
>
> I'll keep y'all posted with results from this weekend.
> N5TGL
> Michael
>

Hi Michael,

What polarization is your Dad's antenna? If the antenna is operating in a electromagnetic loop mode, the antenna is going to be horizontally polarized, fed from the bottomm, vertical fed from the side, when the plane of the loop is vertical. Such a loop will have pattern nulls in the plane of the loop along the horizon. If the antenna is operating as a magnetic loop mode, and again the plane of the loop is vertical, the antenna will be veritically polarized, and have a peak in pattern gain in the plane of the loop.

The shape of the wire has an effect. If its a coiled shaped, then the loop will be magnetic when the circumference of a winding is less than .125 wavelength, I believe. The extra wire acts to increase the inductance of the antenna.

If the wire is in the maltese cross shape as the wire gets longer characteristics will transistion to that of a folded dipole, and then to that of a full wave loop. Here the transmission line shape of the wire will create capacitance in the winding. If the length of the wire is longer than about .25 lambda, electrical effects are most likely happening.

There is a practical difference. At low frequencies you may get allot of heating in your tuner. As the radiation resistance of the radiating element are very low. So, the loss

resistances in the tuner become a much greater fraction. Or in other words, the current is so high in the element (as the radiation resistance is so low), that being in series the losses in the tunner have a much higher I^2R losses.

6633. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-03 16:35:07 UTC
From: mwsmith65857
Topic: 6630 Message: 6633

Don,

Thanks for your response! My dad's antenna is a trapped dipole, which is horizontal.

I just posted a recent pic of the antenna outside during the daylight. Much easier to see what's going on like that. Here's a link: http://groups.yahoo.com/group/loopantennas/photos/album/2130309806/pic/566933347/view?picmode=&mode=tn&order=ordinal&start=1&count=20&dir=asc

The circumference of the current loop is ~10', but since it is 3 turns, the total wire length is 32'. Not sure if I'm just repeating what you already know here. :) I do know that the tuner tunes it very fast on 10m, it gets slower and slower as I go lower. 10m seems to be the sweet spot, as 6m takes quite a while too.

Very interesting comments on the maltese cross setup. The great thing with this antenna design is that it is very flexible where experiments are concerned. None of the radial arms are glued, they are all held in by the loop itself. I can swap out from long arms to short arms and anything in between. I may try the maltese cross thing, as all I'd need to do is buy some more tees and a set of 1/2" PVC crosses and then weave the wire in between them. The toughest thing is going to be calculating what length to make everything so I can end up with an complete turn at the end!

I agree with you on the lower bands and the low radiation resistance. I know it's not very effective on 80m, but it seems to do ok on 40m. 20m and up is a walk in the park.

All in all, very exciting times here. :) I'm hoping I can end up with something that will fit nicely in the attic and be relatively inexpensive to acquire.

Michael
N5TGL

--- In loopantennas@yahoogroups.com, "Don" <donver@...> wrote:
> Hi Michael,
>
> What polarization is your Dad's antenna? If the antenna is operating in a electromagnetic loop mode, the antenna is going to be horizontally polarized, fed from the bottomm, vertical fed from the side, when the plane of the loop is vertical. Such a loop will have pattern nulls in the plane of the loop along the horizon. If the antenna is operating as a magnetic loop mode, and again the plane of the loop is vertical, the antenna will be veritically polarized, and have a peak in pattern gain in the plane of the loop.
>
> The shape of the wire has an effect. If its a coiled shaped, then the loop will be magnetic when the circumference of a winding is less than .125 wavelength, I believe. The extra wire acts to increase the inductance of the antenna.
>
> If the wire is in the maltese cross shape as the wire gets longer characteristics will transistion to that of a folded dipole, and then to that of a full wave loop. Here the

transmission line shape of the wire will create capacitance in the winding. If the length of the wire is longer than about .25 lambda, electrical effects are most likely happening.
>
> There is a practical difference. At low frequencies you may get allot of heating in your tuner. As the radiation resistance of the radiating element are very low. So, the loss resistances in the tuner become a much greater fraction. Or in other words, the current is so high in the element (as the radiation resistance is so low), that being in series the losses in the tunner have a much higher I^2R losses.
>

6634. Re: [loopantennas] Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-04 05:08:17 UTC
From: brian russell
Topic: 6630 Message: 6634

Hi,
The ' Maltese Cross ' format sounds like the Pfeiffer Quad in QST
some years back, an excellent antenna ???
Just a thought.
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

6635. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-04 15:54:34 UTC
From: mwsmith65857
Topic: 6630 Message: 6635

Yep, the article that I read in QST cited the Pfeiffer quad as inspiration.

Was pressed for time yesterday, but was able to make a contact on 17m to Virginia yesterday, so that was ~1,000 miles. QSB got the better of me, but the other fellow was fading too. Got tied up in the restoration of an old HAM-M rotor, so didn't get a chance to log any more contacts. 10m was open yesterday too!! Doggone it.

Michael
N5TGL

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...> wrote:
>
> Hi,
> The ' Maltese Cross ' format sounds like the Pfeiffer Quad in QST
> some years back, an excellent antenna ???
> Just a thought.
> 72, Brian, G0NSL-QRP.
>
>
> [Non-text portions of this message have been removed]
>

6636. Re: [loopantennas] Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-04 17:49:39 UTC
From: Jim Dunstan
Topic: 6630 Message: 6636

At 12:30 PM 7/2/2009 +0000, you wrote:

>So it occurs to me that possibly my loop isn't a magnetic variety since
>it's not magnetically coupled with a Faraday loop? Not sure. I was under
>the impression that anything under a full wave loop qualifies as a
>magnetic loop, maybe I am mistaken.
>
>Any guidance is appreciated!
>
>Ok, so last night I decided to shrink the loop. I went from the monster
>9.6' diameter to a 3.2' diameter. This meant I went from a single turn
>loop to a three turn loop. Results? Well, it works just fine. Still tunes
>up from 6m to 80m. Had a good long QSO with my dad (who lives just a
>couple miles down the road) and he said that my signal was the strongest
>it has ever been, so that's something to get excited about. I went from S7
>to S9, and that's a pretty significant improvement. I'm going to post the
>new picture of what it looks like in the photo album that I linked earlier.

Hi Michael,

The kind of loop you are describing is not what is generally known as a 'magnetic loop'. It is a loop alright. the SGC company who are known for manufacturing automatic antenna couplers marketed what they called an all band 80-10m 'stealth' antenna which consisted of 80' of antenna wire to be formed into a loop of 1, 2, 3, or 4 turns ... depending on local physical opportunities. the antenna could be tuned/matched/coupled with one of their antenna couplers at the feed point and feed the xcvr with standard 50 ohm coax. For normal operation the antenna works best 1. as a single turn loop 80' in dia. and 2. the higher you can mount it the better.

The lower you mount the loop the higher the angle of radiation and the more turns you put the smaller the capture area.

Now, you can counter-act the effect of reducing the capture area by making the loop high-Q ..... which basically makes the loop a small (1/10 wavelength or less) at the frequency of operation and tuning it to resonance .... employing 'low-loss' construction techniques ... generally referred to as 'magnetic loop construction'. This of course immediately makes the antenna not only a single band antenna ... but also gives it a narrow band-width. It takes a lot of complicated electro/mechanical manufacturing to enable 80-10m operation.

Getting back to the kind of loop/antenna you are describing it is basically taking a standard antenna and using techniques to reduce it's physical size. There are myriad ways to shorten dipoles or loops ... using multiple turns (in loops), using folding techniques, stubs, etc. .... P.S. "more

turns = more directivity" is not very well founded in fact hi hi .... in fact it can be the reverse.

Let's take an example ... a loop 70' in circumference (naturally resonant in the 20m band). Mount it vertically on a tower 70' above ground ... and you have a dynamite antenna ... it is efficient, low angle of radiation, broadband (but effectively tuned 40-10m if you wish ..... and quite directional (front to side ratio) at or near to its natural resonance frequency. Now lets compromise ... lets take the original loop 17.5 ft per side and form it as a 3 turn loop 5.8' per side. The natural resonance will be lowered considerably due to added inter-turn capacitance .... however it could be easily matched with open wire line and a balanced antenna tuner .... or an SGC antenna coupler at the feed point fed with coax. It will still be an effective antenna although the antenna gain will be down considerably and the radiation pattern will be less directional (much less defined front to side ratio) ... but still generally broadside to the loop. The vertical angle of radiation will still be very good as it largely a function of height above ground.

Now, take the same antenna (3 turn loop 5.8' per side) and mount it against your wood fence 1' above ground and you will find that it becomes near vertical in its radiation pattern and totally ineffective to communications at a distance ..... although it loads quite nicely with the antenna tuner .... and the front-side ratio will be barely detectable.

Unfortunately bigger and higher (especially higher) really counts.

Jim, VE3CI

6637. Re: [loopantennas] Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-04 18:51:58 UTC
From: Greg Bowne
Topic: 6630 Message: 6637

I would like a loop for 80, 40 and 20.

Greg
>>> The information contained in this e-mail transmission is privileged and/or confidential intended solely for the exclusive use of the individual addressee. If you are not the intended addressee you are hereby notified that any retention, disclosure or other use is strictly prohibited. If you have received this notification in error, please immediately contact the sender and delete the material.

From: Jim Dunstan <jdunstan@...t>
To: loopantennas@yahoogroups.com
Sent: Saturday, July 4, 2009 10:49:39 AM
Subject: Re: [loopantennas] Re: My 6m - 80m loop

At 12:30 PM 7/2/2009 +0000, you wrote:

>So it occurs to me that possibly my loop isn't a magnetic variety since
>it's not magnetically coupled with a Faraday loop? Not sure. I was under
>the impression that anything under a full wave loop qualifies as a
>magnetic loop, maybe I am mistaken.
>
>Any guidance is appreciated!
>
>Ok, so last night I decided to shrink the loop. I went from the monster
>9.6' diameter to a 3.2' diameter. This meant I went from a single turn
>loop to a three turn loop. Results? Well, it works just fine. Still tunes
>up from 6m to 80m. Had a good long QSO with my dad (who lives just a
>couple miles down the road) and he said that my signal was the strongest
>it has ever been, so that's something to get excited about. I went from S7
>to S9, and that's a pretty significant improvement. I'm going to post the
>new picture of what it looks like in the photo album that I linked earlier.

Hi Michael,

The kind of loop you are describing is not what is generally known as a 'magnetic loop'. It is a loop alright. the SGC company who are known for manufacturing automatic antenna couplers marketed what they called an all band 80-10m 'stealth' antenna which consisted of 80' of antenna wire to be formed into a loop of 1, 2, 3, or 4 turns ... depending on local physical opportunities. the antenna could be tuned/matched/ coupled with one of their antenna couplers at the feed point and feed the xcvr with standard 50 ohm coax. For normal operation the antenna works best 1. as a single turn loop 80' in dia. and 2. the higher you can mount it the better.

The lower you mount the loop the higher the angle of radiation and the more turns you put the smaller the capture area.

Now, you can counter-act the effect of reducing the capture area by making the loop high-Q ..... which basically makes the loop a small (1/10 wavelength or less) at the frequency of operation and tuning it to resonance .... employing 'low-loss' construction techniques ... generally referred to as 'magnetic loop construction' . This of course immediately makes the antenna not only a single band antenna ... but also gives it a narrow band-width. It takes a lot of complicated electro/mechanical manufacturing to enable 80-10m operation.

Getting back to the kind of loop/antenna you are describing it is basically taking a standard antenna and using techniques to reduce it's physical size. There are myriad ways to shorten dipoles or loops ... using multiple turns (in loops), using folding techniques, stubs, etc. .... P.S. "more turns = more directivity" is not very well founded in fact hi hi .... in fact it can be the reverse.

Let's take an example ... a loop 70' in circumference (naturally resonant in the 20m band). Mount it vertically on a tower 70' above ground ... and you have a dynamite antenna ... it is efficient, low angle of radiation, broadband (but effectively tuned 40-10m if you wish ..... and quite directional (front to side ratio) at or near to its natural resonance frequency. Now lets compromise ... lets take the original loop 17.5 ft per side and form it as a 3 turn loop 5.8' per side. The natural resonance will be lowered considerably due to added inter-turn capacitance .... however it could be easily matched with open wire line and a balanced antenna tuner .... or an SGC antenna coupler at the feed point fed with coax. It will still be an effective antenna although the antenna gain will be down considerably and the radiation pattern will be less directional (much less defined front to side ratio) ... but still generally broadside to the loop. The vertical angle of radiation will still be very good as it largely a function of height above ground.

Now, take the same antenna (3 turn loop 5.8' per side) and mount it against your wood fence 1' above ground and you will find that it becomes near vertical in its radiation pattern and totally ineffective to communications at a distance ..... although it loads quite nicely with the antenna tuner .... and the front-side ratio will be barely detectable.

Unfortunately bigger and higher (especially higher) really counts.

Jim, VE3CI

[Non-text portions of this message have been removed]

6638. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-04 20:39:28 UTC
From: tenorman1952
Topic: 6630 Message: 6638

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...> wrote:
>
> Hi,
> The ' Maltese Cross ' format sounds like the Pfeiffer Quad in QST
> some years back, an excellent antenna ???
> Just a thought.
> 72, Brian, G0NSL-QRP.
>
>
> [Non-text portions of this message have been removed]
>

Here is a link to the Pfeiffer site with all of his antennas, including the Maltese Cross.

http://pages.cthome.net/ampfeiffer/index.htm

73
Paul
AE5JU

6639. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-05 00:06:10 UTC
From: mwsmith65857
Topic: 6630 Message: 6639

Jim,

Thank you for your comments. They are definitely appreciated!

I did look at SGC's stealth book, and that's where I realized I could put multiple turns in the loop. The only adjustment I made was to use the lengths suggested by the AH-4 tuner spreadsheet, and 80' was right at a "bad length." I was looking (initially) to make a single-turn loop, so 32' was about as big as I wanted to go and have it fit somewhat nicely in the backyard.

Interesting what you say about multiple turns not necessarily getting more directional. I'm restoring a HAM-M rotor, so within a week I'll be able to see how much spinning the thing makes a difference. I do think that the multiple-turn loop does lose some gain though. Everything seems a bit more quiet than I've been hearing lately. This falls in line with your "smaller capture area" comment. Sometimes hard to tell with changing band conditions though. I can swap back and forth from single-turn to triple-turn easily, but the change probably takes 30 minutes to reconfigure...not much good for an A/B test! I will say it's likely it's a high-q type setup. 3.2' connected directly to the tuner. After a tune cycle, the noise level definitely goes up, so it's working in that respect at least, hi hi.

Funny you mention the fence-mounted antenna. I built one of those. It was an 8' square, mounted somewhat off of vertical, probably about a 20 degree lean. One single loop of wire, 32' long. I had it strung from the fence to the wooden deck, so that put it right at about 4" off the ground. I worked Venezuela on 6/4/09 on 17m with that setup! I was pretty surprised it got out that far. Signal report was a 44, but still, pretty cool stuff.

On my 3.2' loop this afternoon, I worked Puerto Rico on 17m and got a signal report of 55. That one is about 5' off the ground. That honestly surprised me. He came back to me on the second call.

So, I've got a bit more experimentation ahead of me. Going to work this small loop for a while, see how it goes. Need to play with the rotor, see how that may improve stuff. Next will be playing with the maltese cross stringing of the wire, that may reap some good benefits too, if the less turns=more capture area holds true. Definitely worth a try, and easy enough with PVC.

Michael
N5TGL

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 12:30 PM 7/2/2009 +0000, you wrote:
>
>
> > >So it occurs to me that possibly my loop isn't a magnetic variety since
> > >it's not magnetically coupled with a Faraday loop? Not sure. I was under
> > >the impression that anything under a full wave loop qualifies as a

> >magnetic loop, maybe I am mistaken.
> >
> >Any guidance is appreciated!
> >
> >Ok, so last night I decided to shrink the loop. I went from the monster
> >9.6' diameter to a 3.2' diameter. This meant I went from a single turn
> >loop to a three turn loop. Results? Well, it works just fine. Still tunes
> >up from 6m to 80m. Had a good long QSO with my dad (who lives just a
> >couple miles down the road) and he said that my signal was the strongest
> >it has ever been, so that's something to get excited about. I went from S7
> >to S9, and that's a pretty significant improvement. I'm going to post the
> >new picture of what it looks like in the photo album that I linked earlier.
>
> Hi Michael,
>
> The kind of loop you are describing is not what is generally known as a
> 'magnetic loop'. It is a loop alright. the SGC company who are known for
> manufacturing automatic antenna couplers marketed what they called an all
> band 80-10m 'stealth' antenna which consisted of 80' of antenna wire to be
> formed into a loop of 1, 2, 3, or 4 turns ... depending on local physical
> opportunities. the antenna could be tuned/matched/coupled with one of
> their antenna couplers at the feed point and feed the xcvr with standard 50
> ohm coax. For normal operation the antenna works best 1. as a single turn
> loop 80' in dia. and 2. the higher you can mount it the better.
>
> The lower you mount the loop the higher the angle of radiation and the more
> turns you put the smaller the capture area.
>
> Now, you can counter-act the effect of reducing the capture area by making
> the loop high-Q ..... which basically makes the loop a small (1/10
> wavelength or less) at the frequency of operation and tuning it to
> resonance .... employing 'low-loss' construction techniques ... generally
> referred to as 'magnetic loop construction'. This of course immediately
> makes the antenna not only a single band antenna ... but also gives it a
> narrow band-width. It takes a lot of complicated electro/mechanical
> manufacturing to enable 80-10m operation.
>
> Getting back to the kind of loop/antenna you are describing it is basically
> taking a standard antenna and using techniques to reduce it's physical
> size. There are myriad ways to shorten dipoles or loops ... using multiple
> turns (in loops), using folding techniques, stubs, etc. .... P.S. "more
> turns = more directivity" is not very well founded in fact hi hi .... in
> fact it can be the reverse.
>
> Let's take an example ... a loop 70' in circumference (naturally resonant
> in the 20m band). Mount it vertically on a tower 70' above ground ... and
> you have a dynamite antenna ... it is efficient, low angle of radiation,
> broadband (but effectively tuned 40-10m if you wish ..... and quite
> directional (front to side ratio) at or near to its natural resonance
> frequency. Now lets compromise ... lets take the original loop 17.5 ft

> per side and form it as a 3 turn loop 5.8' per side. The natural resonance
> will be lowered considerably due to added inter-turn capacitance ....
> however it could be easily matched with open wire line and a balanced
> antenna tuner .... or an SGC antenna coupler at the feed point fed with
> coax. It will still be an effective antenna although the antenna gain will
> be down considerably and the radiation pattern will be less directional
> (much less defined front to side ratio) ... but still generally broadside
> to the loop. The vertical angle of radiation will still be very good as it
> largely a function of height above ground.
>
> Now, take the same antenna (3 turn loop 5.8' per side) and mount it against
> your wood fence 1' above ground and you will find that it becomes near
> vertical in its radiation pattern and totally ineffective to communications
> at a distance ..... although it loads quite nicely with the antenna tuner
> .... and the front-side ratio will be barely detectable.
>
> Unfortunately bigger and higher (especially higher) really counts.
>
> Jim, VE3CI
>

6640. Loop on house roof?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-05 06:53:38 UTC
From: Bill McGraw
Topic: 6640 Message: 6640

I'm still new about loops and very weak on the electronics parts, still can follow some of it. I cannot climb a ladder or put up a tower but might get someone to put a loop on my roof or roof to shop to patio and back to my window. I cannot get into my attic anymore, too weak to climb the damn ladder.

How would TV cable work as a 21 foot diameter (66 ft circumference) loop on a slanted roof for 80, 40 and 20 Meters? If it would work, how should it be fed into a receiver? I only have several V-caps and a RS DX-398 and a shallow ground, no other equipment, no antenna tuners other than the several V-caps.

I really don't want or have room in my "office" for any other equipment. It is full of computor equipment, 3 desks full of stuff, guns and my "gunsmithing" working desk where I fix anything needs fixing.

Or I might be able to run the TV coax from my roof to my shop about 30 feet away and from there to my patio roof, another 25 feet and back to my roof, another 10 feet for a rough triangle of about 65 feet, really needing about 66 ft if the formula is correct for 15 MHz, the highest frequency. Does that sound right?

If anyone could offer an explanation, be graphic in details about running any connections from the antenna and to my receiver.

Bill McGraw

"Somewhere South of Chicago"

Greenville, MS

6641. V-caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-05 08:35:52 UTC
From: Chris Harris
Topic: 6641 Message: 6641

Hi

What are these V-caps I've seen mentioned here a few times?

Cheers, Chris

6642. Re: [loopantennas] V-caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-05 11:59:04 UTC
From: toddroberts2001@aol.com
Topic: 6641 Message: 6642

In a message dated 7/5/2009 4:39:20 A.M. Eastern Daylight Time,
chris.harris@... writes:

Hi
What are these V-caps I've seen mentioned here a few times?

Cheers, Chris

I think V-caps is short for Variable Caps.

73 - Todd WD4NGG
**********An Excellent Credit Score is 750. See Yours in Just 2 Easy
Steps!
(http://pr.atwola.com/promoclk/100126575x1222887319x1201497660/aol?redir=http://www.freecr
editreport.com/pm/default.aspx?sc=668072&hmpgID=62&bcd=Jul
yExcfooterNO62)

6643. Re: [loopantennas] Loop on house roof?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-05 13:10:12 UTC
From: Jim Dunstan
Topic: 6640 Message: 6643

At 11:53 PM 7/4/2009 -0700, you wrote:

>I'm still new about loops and very weak on the electronics parts, still
>can follow some of it. I cannot climb a ladder or put up a tower but might
>get someone to put a loop on my roof or roof to shop to patio and back to
>my window. I cannot get into my attic anymore, too weak to climb the damn
>ladder.
>
>How would TV cable work as a 21 foot diameter (66 ft circumference) loop
>on a slanted roof for 80, 40 and 20 Meters? If it would work, how should
>it be fed into a receiver? I only have several V-caps and a RS DX-398 and
>a shallow ground, no other equipment, no antenna tuners other than the
>several V-caps.
>
>I really don't want or have room in my "office" for any other equipment.
>It is full of computor equipment, 3 desks full of stuff, guns and my
>"gunsmithing" working desk where I fix anything needs fixing.
>
>Or I might be able to run the TV coax from my roof to my shop about 30
>feet away and from there to my patio roof, another 25 feet and back to my
>roof, another 10 feet for a rough triangle of about 65 feet, really
>needing about 66 ft if the formula is correct for 15 MHz, the highest
>frequency. Does that sound right?
>
>If anyone could offer an explanation, be graphic in details about running
>any connections from the antenna and to my receiver.
>
>Bill McGraw
>
>"Somewhere South of Chicago"
>
>Greenville, MS

Hi Bill,

I take it you want to use the loop for receiving SW broadcast and other signals on your DX-398 receiver. The kind of loop you describe is more or less full-size ... and not a tuned small loop. You will not need a tuner or your v-caps. You will have more than enough signal for your radio without precise tuning or matching. You mention laying out TV cable as the antenna .... a good choice as it is insulated and should do good service over a long period of time. You will treat the whole cable (shield and center conductor) as a single conductor. I would not worry about exact length ... you mention 66' which indeed is approximately resonant at 15mhz and present a reasonably low impedance value at the feed point which can be fed with another length of TV cable as the feed line. It would be best

from a physical point of view if your cable is terminated at each end with a TV connector. I would simply use another piece of standard TV cable as a feed line. The project would then be to layout the first length in a more or less circular pattern so the two ends are almost together. At that point (feed point) place one end of the second piece of TV coax (feed-line) with the other end at your listening position .. next to the DX398.

The trick will be to fabricate an appropriate junction at the feed point of the loop and at the receiver. At the loop feed point you want your junction to make a connection between the shield of the feed line with one end of the loop .... and ..... the center conductor of the feed line to the other side of the loop feed point. Then, at the receiver you will have to fabricate a junction that will connect the end of the TV feed line to the connector on your RS DX-398. There are various TV cable hardware adapters available and you will have to use your imagination and mechanical skills to manufacture the two junctions (at the loop feed point and at the receiver). Be sure the junction at the feed point (on the roof) is weather proof. The antenna will provide all the SW signals your receiver can handle without any tuning required.

If you were planning to transmit with the loop then other strategies would have to be employed which would more precisely match the impedance at the feed point to the feed line and more precisely match the feed line to the radio for maximum efficiency. However for SW listening these mismatches are of minor concern and your radio has more than enough gain to compensate.

Jim, VE3CI

6644. Re: [loopantennas] V-caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-05 19:11:51 UTC
From: Don
Topic: 6641 Message: 6644

More likely they are variable capacitors under a vacuum. Sometimes this
can be in a glass tube or metal case. Google search is your friend and
will bring up many images.

Don
Upland, CA

toddroberts2001@... wrote:
> In a message dated 7/5/2009 4:39:20 A.M. Eastern Daylight Time,
> chris.harris@... writes:
>
> Hi
> What are these V-caps I've seen mentioned here a few times?
>
> Cheers, Chris
> ~~~~~~
>
> I think V-caps is short for Variable Caps.
>
> 73 - Todd WD4NGG
> **********An Excellent Credit Score is 750. See Yours in Just 2 Easy
> Steps!
> (http://pr.atwola.com/promoclk/100126575x1222887319x1201497660/aol?redir=http://www.free
creditreport.com/pm/default.aspx?sc=668072&hmpgID=62&bcd=Jul
> yExcfooterNO62)
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --

>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 8.5.374 / Virus Database: 270.13.1/2211 - Release Date: 06/30/09 11:37:00
>
>

6645. RE: [loopantennas] V-caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-07 11:37:24 UTC
From: Chris Harris
Topic: 6641 Message: 6645

The more I googled, the more confused I got, so I popped over to the electronic workshop and asked the techies there. The consensus was that v-caps are probably vacuum variable capacitors although one quiet dissenting voice offered that they were perhaps voltage controlled capacitors. Then the senior technician walked in and stated boldly and unequivocally that a v-cap is any variable capacitor with vanes which I guess excludes the vacuum variable capacitor as that uses cylinders instead of vanes.
I think I will just avoid the term :-)

Cheers, Chris

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of Don
Sent: Monday, 6 July 2009 7:12 a.m.
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] V-caps

More likely they are variable capacitors under a vacuum. Sometimes this can be in a glass tube or metal case. Google search is your friend and will bring up many images.

Don
Upland, CA

toddroberts2001@ <mailto:toddroberts2001%40aol.com> aol.com wrote:
> In a message dated 7/5/2009 4:39:20 A.M. Eastern Daylight Time,
> chris.harris@ <mailto:chris.harris%40actrix.gen.nz> actrix.gen.nz writes:
>
> Hi
> What are these V-caps I've seen mentioned here a few times?
>
> Cheers, Chris
> --
>
> I think V-caps is short for Variable Caps.
>
> 73 - Todd WD4NGG
> **********An Excellent Credit Score is 750. See Yours in Just 2 Easy
> Steps!
> (http://pr.atwola.
<http://pr.atwola.com/promoclk/100126575x1222887319x1201497660/aol?redir=http://www.freecreditreport.com/pm/default.aspx?sc=668072&hmpgID=62&bcd

=Jul>
com/promoclk/100126575x1222887319x1201497660/aol?redir=http://www.freecr
editreport.com/pm/default.aspx?sc=668072&hmpgID=62&bcd=Jul
> yExcfooterNO62)
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups. <http://groups.yahoo.com/group/loopantennas/links>
yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in
the Links rather than uploading the file.
> http://groups. <http://groups.yahoo.com/group/loopantennas/files>
yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and
GIF into Photos. Please convert BMP or TIF to JPG or GIF before
uploading.
> http://ph.groups.
<http://ph.groups.yahoo.com/group/loopantennas/photos>
yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 8.5.374 / Virus Database: 270.13.1/2211 - Release Date:
06/30/09 11:37:00
>
>

[Non-text portions of this message have been removed]

6646. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-08 00:25:43 UTC
From: mwsmith65857
Topic: 6630 Message: 6646

An update from this weekend's operation.

First off, small loop = poor RX. It goes back to capture area, just like Jim said. I just wasn't hearing what I heard before with the 9.6' loop. I switched back to the large loop and heard the stations I was missing. The bands just sounded absolutely dead with the small loop.

With the small loop, TX is as good, or better than the large loop. This was confirmed with a short-range contact. I figure that comes from the small loop is easier to keep one loop diameter off of the ground. The large loop can't measure up on TX because it's only about 0.25 dia off of the ground. I just lose too much into the ground, and that's even with a much better power supply!

What it seems like to me is that on TX, coiling the loop just doesn't matter. Wether it's 3 turns or 1 turn, you're going to get out the same. The big difference is on RX. It feels as if even though it's 32' of wire coiled 3 times, it feels like a 3.2' diameter loop, or 10' of wire around the perimeter.

So, the small loop is out. Just not worth a darn on RX. The big loop (for backyard use) is out, because it's just too big. Too big to take up and down every day, and way too big for the Homeowner's Association to ignore. Just one of those things you have to deal with when you live where you want to live. (That means "Move, stupid!" is is not an option!)

So the next step is to go the route of the convoluted/maltese cross loop ala W7PTL and K1KLO (the originator.) A bit of math shows that I should be able to weave 38' of wire on a 4'4" diameter frame. This will all be with a single-pass of wire, so I shouldn't feel (as much) the loss of capture area. If so, this could be a really good thing, and I might even be able to fit it into my attic.

Hopefully the motor start capacitor will get here for my rotor, and I can play with this a bit this weekend. I sure am glad I got the PVC snips instead of relying on a hacksaw! I can't tell ya how many feet of PVC I've run through already...maybe 40' or so?

Michael
N5TGL

6647. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-08 00:27:32 UTC
From: mwsmith65857
Topic: 6630 Message: 6647

It's pretty easy with an antenna coupler and some wire. 40m and 20m will come easy, but to be efficient on 80m, you're going to want to go as large as you can.

Michael
N5TGL

--- In loopantennas@yahoogroups.com, Greg Bowne <gbowne1@...> wrote:
>
> I would like a loop for 80, 40 and 20.
>
> Greg

6648. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-08 07:55:41 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6648

--- In loopantennas@yahoogroups.com, "mwsmith65857" <radion5tgl@...> wrote:
>
> An update from this weekend's operation.
>
> First off, small loop = poor RX. It goes back to capture area, just
> like Jim said. I just wasn't hearing what I heard before with the
> 9.6' loop. I switched back to the large loop and heard the stations
> I was missing. The bands just sounded absolutely dead with the small
> loop.
> Michael
> N5TGL
>

I must take exception to small loop = poor RX. What matters on
receive is the SIGNAL/NOISE ratio, not the absolute SIGNAL value.

To prove my point, I have beside me a "Playmate" AM-only broadcast
radio. It tunes from 600 meters down to 200 meters (0.5 - 1.5 mHz)
The loop is really tiny, many turns in a coil about 1/2 an inch in
diameter, wound on a ferrite rod. The radio receives "real well"
and I have heard all over the United States at night, when the
ionospheric "D" layer with its absorption is absent. Since the
antenna is a small (much much less than a wavelength) magnetic
(ferrite is magnetic!) loop, it is directional as h-ll, and I can
rotate the whole radio (thereby rotating the loop) to null out
any noise sources.

If I want a loop which is efficient as a radiator, I am interested
in its EFFECTIVE capture area, not its actual size. A simple
calculator for the radiation resistance of a one turn circular
loop which is 0.1 wavelength or smaller is given in this link

http://members.shaw.ca/yehudi2/loop.html

One such antenna is a yard (about a meter) in diameter, and is
capable of working from 40-15 meters. It is manufactured by
MFJ enterprises, uses thick aluminum pipe, and has a "butterfly"
capacitor (no sliding contacts for contact loss). The transmitter
is "coupled" into the loop by a much smaller "parasitic" loop,
and the circulating current in the bigger (yard diameter) loop
is of the order of tens of amperes. Adobe acrobat of Manual is at

http://www.mfjenterprises.com/man/pdf/MFJ-1786.pdf

and the antenna in question is actually an MFJ-1788 - to order

http://www.mfjenterprises.com/Product.php?productid=MFJ-1788

On 40 meters the radiation resistance is about 1/100 of an Ohm, so with the circulating current being of the order of 100 Amperes, the radiation resistance is of the order of 50% or greater. Note that to have this much circulating current, the "Q" or quality factor must be very high, and the antenna is very low bandwidth. Please read the Manual for more details...

I have one on order. I will mount it indoors in my wood frame ground level apartment, vertical plane, and report back how it works out. In passing I should note that the Loop is Magnetic, and the Magnetic field does not transform into a Radio Wave until a distance of about 1/3 of a wavelength, so it is relatively immune to (electrostatic) noise sources closer than this distance, which works out to about 50 feet on 40 meters. Ideal inside, and because of reciprocity, it won't couple into most electronic items that we Amateurs frequently interfere with, such as unshielded amplified speaker leads which sense Electric, not Magnetic fields.

73 de Yakov, VE7ALQ, Fists #11117

http://members.shaw.ca/yehudi2/vibros.jpg

6649. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-08 12:53:18 UTC
From: mwsmith65857
Topic: 6630 Message: 6649

Ok, you can take exception if you like. :) If I can't hear any signals in the noise, it's not a good RX antenna, plain and simple. What really matters on receive is . . . can you hear the stations?

All I can tell you is that with the smaller loop, I only heard 1 - 2 stations. Once I switched to the large one, I heard more than I can count. Could band conditions changed in the 30 minutes it took to reconfigure the antenna? Sure. Could all of the bands changed equally remarkably, possible, but not probable.

I was listening to one station around LAX that I was trying to contact. I heard him talking after he signed with one guy as if he was working a pileup. I could hear nothing of the other stations. Once I switched to the big loop, and heard him call again, I could hear about 6 stations calling him. That made it pretty clear-cut to me. Sure, there can be other reasons for it, but it would be a pretty big coincidence I think.

I'm familiar with the MFJ loop. I'm also familiar with the impressively high price, and the tendency of the tuner box to self-destruct. No need to run an informercial about it for me, ahah! I've already evaluated it and discarded it as a solution. Maybe if I find a used one at a hamfest for ~$100 I might give it a try.

I'm a bit confused on how you're relating capture area to TX effectiveness, maybe you're thinking more about RX? As I stated before, my small loop (3.2', or 0.97m) works perfectly fine for TX. Electrically, it still tunes like it's a 9.6 (2.92m) loop. Since it's just a coiled inductor, electrically it's the same length, even those physically it appears smaller. My 2,000+ mile contact to Puerto Rico proved that.

I would be very interested to know a side-by-side comparison of the MFJ loop RX to a dipole. If the MFJ is able to pull in the same signals at the same signal level, then I'll rethink how I think about small loops. Yes, I realize loops are quieter, but if the signal level is so low you can't hear it, even with the low noise level, it's not much good now, is it? You can use a preamp to increase the gain, but then you're also adding more noise to the signal.

In closing, please watch your tone. I realize you may be very passionate about what you are doing (particularly since you dropped $400+ on a new antenna) but there's no need to talk to me like I just fell off the turnip truck.

73,
N5TGL
Michael

--- In loopantennas@yahoogroups.com, "Ya`akov N. Miles" <ve7alq@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "mwsmith65857" <radion5tgl@> wrote:
> >
> > An update from this weekend's operation.
> >

> > First off, small loop = poor RX. It goes back to capture area, just
> > like Jim said. I just wasn't hearing what I heard before with the
> > 9.6' loop. I switched back to the large loop and heard the stations
> > I was missing. The bands just sounded absolutely dead with the small
> > loop.
> > Michael
> > N5TGL
> >
>
> I must take exception to small loop = poor RX. What matters on
> receive is the SIGNAL/NOISE ratio, not the absolute SIGNAL value.

6650. Re: [loopantennas] Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-08 19:53:01 UTC
From: Jim Dunstan
Topic: 6630 Message: 6650

At 07:55 AM 7/8/2009 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com,
>"mwsmith65857" <radion5tgl@...> wrote:
> >
> > An update from this weekend's operation.
> >
> > First off, small loop = poor RX. It goes back to capture area, just
> > like Jim said. I just wasn't hearing what I heard before with the
> > 9.6' loop. I switched back to the large loop and heard the stations
> > I was missing. The bands just sounded absolutely dead with the small
> > loop.
> > Michael
> > N5TGL
> >
>
>I must take exception to small loop = poor RX. What matters on
>receive is the SIGNAL/NOISE ratio, not the absolute SIGNAL value.

Very true. I often hear people spousing "reciprocity" between receiving and transmitting with the same antenna. Designing an antenna for receiving is different to designing an antenna for transmission. One just has to look at the AM reception with the automobile radio. I would hate to estimate the capture area of the 3' whip ... let alone modern 10 inch antennas common these days. However they demonstrate excellent MW broadcast reception. If I locate in quiet area ... like a park .... I can receive weak daytime MW stations with the same efficiency as my portable with the assistance of a small tuned loop (sitting on the park bench).

Of course when you move into town ... local RFI makes the small tuned loop superior by virtue of its ability to null the noise while the 10 inch whip on the car (parked in the drive) becomes useless.

Small antennas are infinitely interesting and provide very specialized and surprising results.

Getting back to capture area of near full size antennas. I recall reading the results of tests performed by a recognized antenna guru on doublet/dipole size vs gain. The results were very surprising (to me) ... in that they indicated that the difference in efficiency (gain) of an full size (1/2 wave dipole) and one reduced in size by half was only a couple of DB. In other words the gain of a half size doublet 16 ft in length at 20M is down only a couple of DB from a full size 1/2w dipole 32 ft in length. However, the problem is coupling a feed line to a shortened antenna is difficult when delivering RF power is the objective.

The example above demonstrates that using a 16 ft dipole for 20m is a different problem for transmitting than it is for receiving. It is a different problem getting power into the antenna effectively than it is to get received signals into a high gain receiver effectively.

I have a rotatable dipole 42 ft in length that I feed with open wire line 40 - 10 mtrs. I have no difficulty feeding the antenna up to 100w on all bands using 450 ohm ladder line. I started out with the antenna being 32 ft in length and feeding it on 40m was touch and go and it was only possible to feed about 20 watts. Adding the 10' of electrical length greatly improved the efficiency and full 100 w power is achieved with reliability. The added 10 ft increased the efficiency not due to increased capture area, but brought the feed point impedance at 40m into a reasonable range for the feed system.

Reducing the capture area does reduce gain .... but on a rather slowly declining slope. For receiving the decline is compensated for by the receiver gain. When the antenna becomes really small (vis-a-vis) a wavelength then surrounding noise becomes the problem and the antenna design strategy must be directed at increasing the signal to noise ratio. If the small antenna is to be used for transmission of RF power then the design strategy is to maximize coupling efficiency.

Designing antennas is a non ending battle of picking design strategies to meet circumstances and objectives.

Jim, VE3CI

[Non-text portions of this message have been removed]

6651. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-08 21:01:54 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6651

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 07:55 AM 7/8/2009 +0000, you wrote:
>
> Very true. I often hear people spousing "reciprocity" between
> receiving and transmitting with the same antenna. Designing an
> antenna for receiving is different to designing an antenna for
> transmission. One just has to
> look at the AM reception with the automobile radio. I would hate
> to estimate the capture area of the 3' whip ... let alone modern
> 10 inch antennas common these days. However they demonstrate
> excellent MW broadcast reception. If I locate in quiet area ...
> like a park .... I can receive weak daytime MW stations with the
> same efficiency as my portable with the assistance of a small
> tuned loop (sitting on the park bench).
>
> Of course when you move into town ... local RFI makes the small
> tuned loop superior by virtue of its ability to null the noise
> while the 10 inch whip on the car (parked in the drive) becomes
> useless.
>
[-- CUT --]
>
> Jim, VE3CI
>

Please allow me to point out that there is a more important
virtue of a loop MAGNETIC-sensing antenna over a whip ELECTRO-
STATIC-sensing antenna. For a distance of about 1/3 of a
wavelength (from my University Honours degree in Physics) the
STATIC fields (+ the INDUCTION fields) are WAY stronger than
the RADIATION (= RADIO WAVE) field. Thus at distances shorter
than 1/3 of a wavelength (about 500 feet at the upper end of MW)
MAGNETIC-sensing LOOP antennas do not HEAR electrostatic noises
(such as from TVs, Computers, Electric Motors, etc.) very well
if at all. This is quite INDEPENDANT of the fact that a
magnetic LOOP antenna can null out noise if oriented correctly.

Thus my "PLAY-MATE" AM Radio (1500 - 500 Meters, 0.5 - 1.5 mHz)
does not HEAR most domestic (and industrial) noises closer than
500 feet at the Upper end (1.5 mHz) and 1500 feet at the Lower
(0.5 mHz) end of the MW AM Radio Broadcast Band with its 1/2 inch
LOOP(-stick) diameter loop wound on a Ferrite (=Magnetic!) rod.

You have to drive your car with its ELECTRO-STATIC "whip"
antenna into the Park well away from man-made ELECTRO-STATIC

noises in order to acquire the same "EARS" as my tiny portable
"PLAY-MATE" AM-only 6 Transistor Radio with its Ferrite
LOOP(-stick) antenna can do right beside me in the ground floor
of my wood frame apartment building any time of the day or night.

73 de Yakov, VE7ALQ - Fists #11117

http://members.shaw.ca/yehudi2/vibros.jpg

6652. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-08 21:37:52 UTC
From: airchecklover
Topic: 6630 Message: 6652

Hey Michael; interesting thread. Why not use the large loop for rcv'g and the small loop for transmitting? Best of both worlds.

-Mark

==========

--- In loopantennas@yahoogroups.com, "mwsmith65857" <radion5tgl@...> wrote:
>
> Ok, you can take exception if you like. :) If I can't hear any signals in the noise, it's not a good RX antenna, plain and simple. What really matters on receive is . . . can you hear the stations?
>
> All I can tell you is that with the smaller loop, I only heard 1 - 2 stations. Once I switched to the large one, I heard more than I can count. Could band conditions changed in the 30 minutes it took to reconfigure the antenna? Sure. Could all of the bands changed equally remarkably, possible, but not probable.
>
> I was listening to one station around LAX that I was trying to contact. I heard him talking after he signed with one guy as if he was working a pileup. I could hear nothing of the other stations. Once I switched to the big loop, and heard him call again, I could hear about 6 stations calling him. That made it pretty clear-cut to me. Sure, there can be other reasons for it, but it would be a pretty big coincidence I think.
>
> I'm familiar with the MFJ loop. I'm also familiar with the impressively high price, and the tendency of the tuner box to self-destruct. No need to run an informercial about it for me, ahah! I've already evaluated it and discarded it as a solution. Maybe if I find a used one at a hamfest for ~$100 I might give it a try.
>
> I'm a bit confused on how you're relating capture area to TX effectiveness, maybe you're thinking more about RX? As I stated before, my small loop (3.2', or 0.97m) works perfectly fine for TX. Electrically, it still tunes like it's a 9.6 (2.92m) loop. Since it's just a coiled inductor, electrically it's the same length, even those physically it appears smaller. My 2,000+ mile contact to Puerto Rico proved that.
>
> I would be very interested to know a side-by-side comparison of the MFJ loop RX to a dipole. If the MFJ is able to pull in the same signals at the same signal level, then I'll rethink how I think about small loops. Yes, I realize loops are quieter, but if the signal level is so low you can't hear it, even with the low noise level, it's not much good now, is it? You can use a preamp to increase the gain, but then you're also adding more noise to the signal.
>
> In closing, please watch your tone. I realize you may be very passionate about what you are doing (particularly since you dropped $400+ on a new antenna) but there's no need to talk to me like I just fell off the turnip truck.
>

> 73,
> N5TGL
> Michael
>
> --- In loopantennas@yahoogroups.com, "Ya`akov N. Miles" <ve7alq@> wrote:
> >
> > --- In loopantennas@yahoogroups.com, "mwsmith65857" <radion5tgl@> wrote:
> > >
> > > An update from this weekend's operation.
> > >
> > > First off, small loop = poor RX. It goes back to capture area, just
> > > like Jim said. I just wasn't hearing what I heard before with the
> > > 9.6' loop. I switched back to the large loop and heard the stations
> > > I was missing. The bands just sounded absolutely dead with the small
> > > loop.
> > > Michael
> > > N5TGL
> > >
> >
> > I must take exception to small loop = poor RX. What matters on
> > receive is the SIGNAL/NOISE ratio, not the absolute SIGNAL value.
>

6653. Re: My 6m - 80m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-09 12:26:42 UTC
From: mwsmith65857
Topic: 6630 Message: 6653

Mark, Thanks for your kind words.

Good point. The problem is that I am space limited, and really only have room for one. Eventually, the antenna will go up in the attic, which will get rid of the ground loss problem, as it will be ~12' up, about 3 loop diameters off the ground. That would remove the main advantage of the small loop.

This weekend will bring the experimentation with the maltese cross arrangement. I'm going to take some s-meter readings from a known power level at a known distance to make my evaluation of performance less objective and more subjective. That will get the up and down of the bands out of the equation. I'm hoping that the RX of that loop will be a good compromise.

On another good note, I succeeded in fixing the HAM-M rotor. Had an open winding in the motor (a factory weld, no less!) and a dead motor start capacitor. Works good as new now.

Michael
N5TGL

--- In loopantennas@yahoogroups.com, "aircheckIover" <mdh@...> wrote:
>
> Hey Michael; interesting thread. Why not use the large loop for rcv'g and the small loop for transmitting? Best of both worlds.
>
> -Mark

6654. Re: [loopantennas] Loop on house roof?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-10 18:33:18 UTC
From: aimo ruoho
Topic: 6640 Message: 6654

Hi, folks!

I have been fixing a "Loop" on my higher flat roof lately.
It measures about 4x4 meters in a square decline form.
I used 1.5 mm plastic covered stranded copper wire.
Total length of the wire is 8x4x4 meters, 128 m.
Distance of every round of wire is a rather exact 1",
25 mm. I had to saw 10 inch times 2.5 " sheets of thick
plastic, to which I drilled 10 holes, 2 for nylon rope and
8 for antenna wire.

I haven't as yet put any Amidon ring in between the
antenna and coaxial cable down lead, but I think, that it
might make things a little better? What do you people
think? Any way I will test it one day soon...

Although I have read a lot of this type of "folded long wire",
I doubt, that this project did not give the wonderful results,
that people have been talking about.

This "Loop" gives almost as good signal on all channels
under 30 MHz as my other antennas, which are MANY,
but not any better.

Some examples: 252 kHz- 9+15 to 30 dB
567kHz- 9+30 to 45 dB,
855kHz- 9+22 to 38dB,
1539kHz- 9+30 to 35dB
1602kHz- 9+10 to 15dB
6075kHz- 9+10 to 20dB
11750kHz- 9dB
15380kHz- 9+10dB
17745kHz- 9+10dB
and 21840kHz-6 - 9+10dB

All these tests I made on the same day after 5pm GMT,
so the last few showed an astonishingly strong
signal. S/N/N was also quite good.
I used my YAESU FRTä7700 A.T.U., which naturally helped
on almost every channel, more or less, as usual.

It may be, that I will make some more tests in the future.

Best Regards to all!

Aimo

--- El dom, 5/7/09, Bill McGraw <mcgr3799@...> escribió:

De: Bill McGraw <mcgr3799@...>
Asunto: [loopantennas] Loop on house roof?
Para: loopantennas@yahoogroups.com
Fecha: domingo, 5 julio, 2009 8:53

I'm still new about loops and very weak on the electronics parts, still can follow some of it. I cannot climb a ladder or put up a tower but might get someone to put a loop on my roof or roof to shop to patio aasy steps.

Connect with others.

.

[Non-text portions of this message have been removed]

6655. Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-11 01:13:09 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6655

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@> wrote:
>
> At 07:55 AM 7/8/2009 +0000, you wrote:
>
> Very true. I often hear people spousing "reciprocity" between
> receiving and transmitting with the same antenna. Designing an
> antenna for receiving is different to designing an antenna for
> transmission. One just has to
> look at the AM reception with the automobile radio. I would hate
> to estimate the capture area of the 3' whip ... let alone modern
> 10 inch antennas common these days. However they demonstrate
> excellent MW broadcast reception. If I locate in quiet area ...
> like a park .... I can receive weak daytime MW stations with the
> same efficiency as my portable with the assistance of a small
> tuned loop (sitting on the park bench).
>
> Of course when you move into town ... local RFI makes the small
> tuned loop superior by virtue of its ability to null the noise
> while the 10 inch whip on the car (parked in the drive) becomes
> useless.
>
[-- CUT --]
>
> Jim, VE3CI
>

Please allow me to point out that there is a more important
virtue of a loop MAGNETIC-sensing antenna over a whip ELECTRO-
STATIC-sensing antenna. For a distance of about 1/3 of a
wavelength (from my University Honours degree in Physics) the
STATIC fields (+ the INDUCTION fields) are WAY stronger than
the RADIATION (= RADIO WAVE) field. Thus at distances shorter
than 1/3 of a wavelength (about 200 feet at the upper end of MW)
MAGNETIC-sensing LOOP antennas do not HEAR electrostatic noises
(such as from TVs, Computers, Electric Motors, etc.) very well
if at all. This is quite INDEPENDANT of the fact that a
magnetic LOOP antenna can null out noise if oriented correctly.

Thus my "PLAY-MATE" AM Radio (600 - 200 Meters, 0.5 - 1.5 mHz)
does not HEAR most domestic (and industrial) noises closer than
200 feet at the Upper end (1.5 mHz) and 600 feet at the Lower
(0.5 mHz) end of the MW AM Radio Broadcast Band with its 1/2 inch
LOOP(-stick) diameter loop wound on a Ferrite (=Magnetic!) rod.

You have to drive your car with its ELECTRO-STATIC "whip"
antenna into the Park well away from man-made ELECTRO-STATIC

noises in order to acquire the same "EARS" as my tiny portable
"PLAY-MATE" AM-only 6 Transistor Radio with its Ferrite
LOOP(-stick) antenna can do right beside me in the ground floor
of my wood frame apartment building any time of the day or night.

73 de Yakov, VE7ALQ - Fists #11117

http://members.shaw.ca/yehudi2/vibros.jpg

6656. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-11 02:24:34 UTC
From: jrtow3rd@bellsouth.net
Topic: 6630 Message: 6656

--- In loopantennas@yahoogroups.com, "Ya`akov N. Miles" <ve7alq@...> wrote:
>
> --- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@> wrote:
> >
> > At 07:55 AM 7/8/2009 +0000, you wrote:
> >
> > Very true. I often hear people spousing "reciprocity" between
> > receiving and transmitting with the same antenna. Designing an
> > antenna for receiving is different to designing an antenna for
> > transmission. One just has to
> > look at the AM reception with the automobile radio. I would hate
> > to estimate the capture area of the 3' whip ... let alone modern
> > 10 inch antennas common these days. However they demonstrate
> > excellent MW broadcast reception. If I locate in quiet area ...
> > like a park .... I can receive weak daytime MW stations with the
> > same efficiency as my portable with the assistance of a small
> > tuned loop (sitting on the park bench).
> >
> > Of course when you move into town ... local RFI makes the small
> > tuned loop superior by virtue of its ability to null the noise
> > while the 10 inch whip on the car (parked in the drive) becomes
> > useless.
> >
> [-- CUT --]
> >
> > Jim, VE3CI
> >
>
> Please allow me to point out that there is a more important
> virtue of a loop MAGNETIC-sensing antenna over a whip ELECTRO-
> STATIC-sensing antenna. For a distance of about 1/3 of a
> wavelength (from my University Honours degree in Physics) the
> STATIC fields (+ the INDUCTION fields) are WAY stronger than
> the RADIATION (= RADIO WAVE) field. Thus at distances shorter
> than 1/3 of a wavelength (about 200 feet at the upper end of MW)
> MAGNETIC-sensing LOOP antennas do not HEAR electrostatic noises
> (such as from TVs, Computers, Electric Motors, etc.) very well
> if at all. This is quite INDEPENDANT of the fact that a
> magnetic LOOP antenna can null out noise if oriented correctly.
>
> Thus my "PLAY-MATE" AM Radio (600 - 200 Meters, 0.5 - 1.5 mHz)
> does not HEAR most domestic (and industrial) noises closer than
> 200 feet at the Upper end (1.5 mHz) and 600 feet at the Lower
> (0.5 mHz) end of the MW AM Radio Broadcast Band with its 1/2 inch
> LOOP(-stick) diameter loop wound on a Ferrite (=Magnetic!) rod.

>
> You have to drive your car with its ELECTRO-STATIC "whip"
> antenna into the Park well away from man-made ELECTRO-STATIC
> noises in order to acquire the same "EARS" as my tiny portable
> "PLAY-MATE" AM-only 6 Transistor Radio with its Ferrite
> LOOP(-stick) antenna can do right beside me in the ground floor
> of my wood frame apartment building any time of the day or night.
>
> 73 de Yakov, VE7ALQ - Fists #11117
>
> http://members.shaw.ca/yehudi2/vibros.jpg
>
I have a problem with the use of 'electro-static' when I feel you may mean electric field. As the E/M wave propagates, of course, it's E & H fields are never constant (Re: Poynting vector - basic E/M propagation.). The short E-field aerial is more of a 'voltage probe' - as is the short wiring to/from fluorescent lights, motors, etc, although it is a 'source'. So, the whip picks up the E-field, while the ferrite cored loop, etc, respond to H-field (magnetic).

Back in the eighties, I and an SWL friend went on a mini-DXpedition to prepare for the real thing - and get away from my local EMI source - coronal discharge on power leads in front of my home. We went into a state park - and set up at the vacant primitive campgrounds in the back of my truck using a freshly charged 105 A-Hr marine battery and his FRG-7 and my SPR-4. We ran short Beverage antennas in three directions. We were greeted with the same horrendous noise level we thought we had left at my home. The fourth direction had a pole with a pole-pig mounted - only 20 ft from our listening spot - and no loads connected. As night fell, you could see the tensioned insulators with corona - on the pole - with no loads - in the middle of no where. On the way home, the battery broke it's bungee cord securement and turned over, getting under the truck bed's pad. It was a horrible experience.

Oh yeah, my greatest honor was that I actually graduated - in physics - Auburn U. '75. I've held a First Class Radiotelephone License since '68.

John

PS The AL-4 loop on the SPR-4 didn't help - what a noise level!

6657. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-11 02:38:57 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6657

```
--- In loopantennas@yahoogroups.com, "jrtow3rd@..." <JRTOW3RD@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "Ya`akov N. Miles" <ve7alq@> wrote:
> >
> > --- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@> wrote:
> > >
> > > At 07:55 AM 7/8/2009 +0000, you wrote:
> > >
> > > Very true. I often hear people spousing "reciprocity" between
> > > receiving and transmitting with the same antenna. Designing an
> > > antenna for receiving is different to designing an antenna for
> > > transmission. One just has to
> > > look at the AM reception with the automobile radio. I would hate
> > > to estimate the capture area of the 3' whip ... let alone modern
> > > 10 inch antennas common these days. However they demonstrate
> > > excellent MW broadcast reception. If I locate in quiet area ...
> > > like a park .... I can receive weak daytime MW stations with the
> > > same efficiency as my portable with the assistance of a small
> > > tuned loop (sitting on the park bench).
> > >
> > > Of course when you move into town ... local RFI makes the small
> > > tuned loop superior by virtue of its ability to null the noise
> > > while the 10 inch whip on the car (parked in the drive) becomes
> > > useless.
> > >
> > [-- CUT --]
> > >
> > > Jim, VE3CI
> > >
> >
> > Please allow me to point out that there is a more important
> > virtue of a loop MAGNETIC-sensing antenna over a whip ELECTRO-
> > STATIC-sensing antenna. For a distance of about 1/3 of a
> > wavelength (from my University Honours degree in Physics) the
> > STATIC fields (+ the INDUCTION fields) are WAY stronger than
> > the RADIATION (= RADIO WAVE) field. Thus at distances shorter
> > than 1/3 of a wavelength (about 200 feet at the upper end of MW)
> > MAGNETIC-sensing LOOP antennas do not HEAR electrostatic noises
> > (such as from TVs, Computers, Electric Motors, etc.) very well
> > if at all. This is quite INDEPENDANT of the fact that a
> > magnetic LOOP antenna can null out noise if oriented correctly.
> >
> > Thus my "PLAY-MATE" AM Radio (600 - 200 Meters, 0.5 - 1.5 mHz)
> > does not HEAR most domestic (and industrial) noises closer than
> > 200 feet at the Upper end (1.5 mHz) and 600 feet at the Lower
```

> > (0.5 mHz) end of the MW AM Radio Broadcast Band with its 1/2 inch
> > LOOP(-stick) diameter loop wound on a Ferrite (=Magnetic!) rod.
> >
> > You have to drive your car with its ELECTRO-STATIC "whip"
> > antenna into the Park well away from man-made ELECTRO-STATIC
> > noises in order to acquire the same "EARS" as my tiny portable
> > "PLAY-MATE" AM-only 6 Transistor Radio with its Ferrite
> > LOOP(-stick) antenna can do right beside me in the ground floor
> > of my wood frame apartment building any time of the day or night.
> >
> > 73 de Yakov, VE7ALQ - Fists #11117
> >
> > http://members.shaw.ca/yehudi2/vibros.jpg
> >
> I have a problem with the use of 'electro-static' when I feel you
> may mean electric field. As the E/M wave propagates, of course,
> it's E & H fields are never constant (Re: Poynting vector - basic
> E/M propagation.). The short E-field aerial is more of a 'voltage
> probe' - as is the short wiring to/from fluorescent lights, motors,
> etc, although it is a 'source'. So, the whip picks up the E-field,
> while the ferrite cored loop, etc, respond to H-field (magnetic).
>
> Back in the eighties, I and an SWL friend went on a mini-DXpedition
> to prepare for the real thing - and get away from my local EMI
> source - coronal discharge on power leads in front of my home. We
> went into a state park - and set up at the vacant primitive
> campgrounds in the back of my truck using a freshly charged 105
> A-Hr marine battery and his FRG-7 and my SPR-4. We ran short
> Beverage antennas in three directions. We were greeted with the
> same horrendous noise level we thought we had left at my home. The
> fourth direction had a pole with a pole-pig mounted - only 20 ft
> from our listening spot - and no loads connected. As night fell,
> you could see the tensioned insulators with corona - on the pole
> - with no loads - in the middle of no where. On the way home, the
> battery broke it's bungee cord securement and turned over, getting
> under the truck bed's pad. It was a horrible experience.
>
> Oh yeah, my greatest honor was that I actually graduated - in
> physics - Auburn U. '75. I've held a First Class Radiotelephone
> License since '68.
>
> John
>
> PS The AL-4 loop on the SPR-4 didn't help - what a noise level!
>

Despite your Physics degree (I have First Class Honors Physics 76)
and a Post Graduate Master's Degree in Physics 78, I must differ.

For a distance of 1/PI (approximately 1/3) of a Wavelength or less
the Static Fields (Electric and/or Magnetic) swamp the Radiation

(Electro-Magnetic) Fields. Thus an Electric Probe preferentially "Hears" Electric noise sources, and a Magnetic Probe preferentially "Hears" Magnetic noise sources up to 1/3 of a wavelength from the noise source. Further than that, only the Radiation Field persists. Orders of Magnitude (Static (1/(R*R*R)), Induction (1/R*R), and Radiation (1/R)) All three fields are of equivalent strength at a distance of One Radian (1/PI, i.e. about 1/3) Wavelength away from an Electrically Short Antenna. Further than that, as you can see, the Static and Induction fields quickly DIE AWAY.

For a probe to be truly Electric or Magnetic, its dimension must be less than about 1/10 (0.1) of a Wavelength. The loop(-stick) antenna that is 1/2 inch in diameter and wound on a Ferrite (Ferrite is Magnetic too!) Rod on my Six Transistor "PLAY-MATE" AM radio is much much less than 200 feet (1.5 mHz) or 600 feet (0.5 mHz) so it is a true Magnetic Probe, and will NOT PICK UP the Electric field, in PARTICULAR the electric STATIC field and the elecric INDUCTION field from an Electric Noise Source.

73 de Yakov, VE7ALQ, Fists #11117, Same Call Sign Held since 1969

6658. Re: [loopantennas] Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-11 17:50:40 UTC
From: Jim Dunstan
Topic: 6630 Message: 6658

At 01:13 AM 7/11/2009 +0000, you wrote:

> >
>
>Please allow me to point out that there is a more important
>virtue of a loop MAGNETIC-sensing antenna over a whip ELECTRO-
>STATIC-sensing antenna. For a distance of about 1/3 of a
>wavelength (from my University Honours degree in Physics) the
>STATIC fields (+ the INDUCTION fields) are WAY stronger than
>the RADIATION (= RADIO WAVE) field. Thus at distances shorter
>than 1/3 of a wavelength (about 200 feet at the upper end of MW)
>MAGNETIC-sensing LOOP antennas do not HEAR electrostatic noises
>(such as from TVs, Computers, Electric Motors, etc.) very well
>if at all. This is quite INDEPENDANT of the fact that a
>magnetic LOOP antenna can null out noise if oriented correctly.
>
>Thus my "PLAY-MATE" AM Radio (600 - 200 Meters, 0.5 - 1.5 mHz)
>does not HEAR most domestic (and industrial) noises closer than
>200 feet at the Upper end (1.5 mHz) and 600 feet at the Lower
>(0.5 mHz) end of the MW AM Radio Broadcast Band with its 1/2 inch
>LOOP(-stick) diameter loop wound on a Ferrite (=Magnetic!) rod.
>
>You have to drive your car with its ELECTRO-STATIC "whip"
>antenna into the Park well away from man-made ELECTRO-STATIC
>noises in order to acquire the same "EARS" as my tiny portable
>"PLAY-MATE" AM-only 6 Transistor Radio with its Ferrite
>LOOP(-stick) antenna can do right beside me in the ground floor
>of my wood frame apartment building any time of the day or night.
>
>73 de Yakov, VE7ALQ - Fists #11117

Hi Yakov,

I understand the gospel.

Jim, VE3CI

6659. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-11 17:42:37 UTC
From: hpmwphaser
Topic: 6630 Message: 6659

Here are a few jewels from W8JI on this topic.

So much for the myth that a receiving antenna can sort good signals from bad signals (noise) by virtue of being "magnetic"! We not only don't have the field response we might have imagined, we also almost certainly have no idea if close-by unwanted noise or signal sources are radiated from electric or magnetic field dominant sources. Successful noise reduction by virtue of by antenna "style" would mostly be a matter of hitting a lucky combination through experimentation.

Field impedance noise rejection is probably one of the deepest rooted falsehoods in amateur and SWL receiving.

6660. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-11 23:42:19 UTC
From: Hue
Topic: 6630 Message: 6660

An example: a decade ago I lived in central Oregon and
enjoyed the 22:00 hour of old time radio shows broadcast
over KNX Los Angeles 1070. Someone in the apartment
building apparently had some kind of light dimmer, judging
by the huge radio noise on the MW band. I was using only
one receiver, a Panasonic RF-2900. Unlike most portable
MW/ SW/ FM radios, this one kept the whip antenna connected
when switched to MW band - most radios disconnect the
whip and use only the ferrite core stick on this band.
I found that due to the noise level I could not actually
listen to the broadcast. What I finally did was to run a
Radio Shack alligator jumper from the whip antenna to an
exposed metal trim on the radio, a metal contact that also
contacted the radio chassis. This effectively shorted out
the whip antenna, and made the unusable signal actually
listenable.
Another noise minimizing idea I once read in a 1930s
Short Wave Craft magazine: the antenna was a dipole, fed
by some kind of twisted balanced line. There was a pot
at the receiving end, with the wiper grounded. This was
adjusted for best balance. The article claimed this could
worthwhile minimize noise. I think for use with coax you
would have to use twinax or use two coax cables with the
shields bonded every so often. -Hue Miller

6661. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 06:29:16 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6661

--- In loopantennas@yahoogroups.com, "hpmwphaser" <hpmwphaser@...> wrote:
>
> Here are a few jewels from W8JI on this topic.
>
> So much for the myth that a receiving antenna can sort good signals
> from bad signals (noise) by virtue of being "magnetic"! We not only
> don't have the field response we might have imagined, we also almost
> certainly have no idea if close-by unwanted noise or signal sources
> are radiated from electric or magnetic field dominant sources.
> Successful noise reduction by virtue of by antenna "style" would
> mostly be a matter of hitting a lucky combination through
> experimentation.
>
> Field impedance noise rejection is probably one of the deepest rooted
> falsehoods in amateur and SWL receiving.ï¿½
>

I must disagree with you there. Let us consider a permanent magnet.
It has a magnetic field (I think you will agree), and if it is not
moving, there is NO ASSOCIATED ELECTRIC FIELD. Low Frequencies
approximate a DC permanent magnet, so there is a STRONG magnetic
field close to the (Magnetic) antenna, and only a very WEAK
electric field close by. Q.E.D.

I have a Batchelors (Honours Physics 76) and Masters (Physics 78)
so I think I can speak with some authority on the following:

All antennas have three fields, the Static field, the Induction
field, and the Radiation field. The Static field falls off as
1/(R) with distance, the Dynamic field falls off as 1/(R*R) with
distance and the Radiation field falls off as 1/(R*R*R) with
distance R. At a distance of 1 Radian (1/PI) of a Wavelength, all
three fields have equal value. As you can see, closer than about
1/3 of a wavelength (i.e. for XX meter wavelength, about XX feet)
the Static and the Induction fields SWAMP the Radiation Field.
For a Magnetic Loop antenna, the Static field and Induction field
are Magnetic, so the Loop when closer than 1/3 of a wavelength to
most noise sources (which are ELECTRO-STATIC in origin) will not
"HEAR" any Electo-Static interference, if at all. Effectively,
the fields only become a Radio Wave at about 1/3 of a wavelength.
Rough Calculation, 80 Meters are Static to 80 feet, 40 meters are
Static to 40 feet, 20 meters are Static to 20 feet, get my drift?

Without disparaging him, how much University Physics has W8JI got?

73 de Yakov, VE7ALQ - Same callsign held since 1969, Fists #11117

http://members.shaw.ca/yehudi2/vibros.jpg

p.s. Why do you think AM radios and my 60 kHz WWVB Radio Controlled clock hanging on the wall have ferrite loop(-stick) antennas? I am sure that if Electric probes were as good, high gain solid state (i.e. FET) amplifiers could easily make up for their lack of gain...

6662. Re: Loop(-stick) Antennas have Better "Ears", CorrectionS!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 06:54:11 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6662

--- In loopantennas@yahoogroups.com, "hpmwphaser" <hpmwphaser@> wrote:
>
> Here are a few jewels from W8JI on this topic.
>
> So much for the myth that a receiving antenna can sort good signals
> from bad signals (noise) by virtue of being "magnetic"! We not only
> don't have the field response we might have imagined, we also almost
> certainly have no idea if close-by unwanted noise or signal sources
> are radiated from electric or magnetic field dominant sources.
> Successful noise reduction by virtue of by antenna "style" would
> mostly be a matter of hitting a lucky combination through
> experimentation.
>
> Field impedance noise rejection is probably one of the deepest
> rooted falsehoods in amateur and SWL receiving.ï¿½
>

I must disagree with you there. Let us consider a permanent magnet.
It has a magnetic field (I think you will agree), and if it is not
moving, there is NO ASSOCIATED ELECTRIC FIELD. Low Frequencies
approximate a DC permanent magnet, so there is a STRONG magnetic
field close to the (Magnetic) antenna, and only a very WEAK
electric field close by. Q.E.D.

I have a Batchelors (Honours Physics 76) and Masters (Physics 78)
so I think I can speak with some authority on the following:

All antennas have three fields, the Static field, the Induction
field, and the Radiation field. The Static field falls off as
1/(R*R*R) with distance, the Dynamic field falls off as 1/(R*R)
with distance and the Radiation field falls off as 1/(R) with
distance R. At a distance of 1 Radian (1/PI) of a Wavelength, all
three fields have equal value. As you can see, closer than about
1/3 of a wavelength (i.e. for XX meter wavelength, about XX feet)
the Static and the Induction fields SWAMP the Radiation Field.
For a Magnetic Loop antenna, the Static field and Induction field
are Magnetic, so the Loop when closer than 1/3 of a wavelength to
most noise sources (which are ELECTRO-STATIC in origin) will not
"HEAR" any Electo-Static interference, if at all. Effectively,
the fields only become a Radio Wave at about 1/3 of a wavelength.
Rough Calculation, 80 Meters are Static to 80 feet, 40 meters are
Static to 40 feet, 20 meters are Static to 20 feet, get my drift?

Without disparaging him, how much University Physics has W8JI got?

73 de Yakov, VE7ALQ - Same callsign held since 1969, Fists #11117

http://members.shaw.ca/yehudi2/vibros.jpg

p.s. Why do you think AM radios and my 60 kHz WWVB Radio Controlled clock hanging on the wall have ferrite loop(-stick) antennas? I am sure that if Electric probes were as good, high gain solid state (i.e. FET) preamplifiers could easily make up for their lack of gain.

6663. Re: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 16:46:41 UTC
From: Jim Dunstan
Topic: 6630 Message: 6663

At 06:29 AM 7/12/2009 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com,
>"hpmwphaser" <hpmwphaser@...> wrote:
> >
> > Here are a few jewels from W8JI on this topic.
> >
> > So much for the myth that a receiving antenna can sort good signals
> > from bad signals (noise) by virtue of being "magnetic"! We not only
> > don't have the field response we might have imagined, we also almost
> > certainly have no idea if close-by unwanted noise or signal sources
> > are radiated from electric or magnetic field dominant sources.
> > Successful noise reduction by virtue of by antenna "style" would
> > mostly be a matter of hitting a lucky combination through
> > experimentation.
> >
> > Field impedance noise rejection is probably one of the deepest rooted
> > falsehoods in amateur and SWL receiving.ï¿½
> >
>
>I must disagree with you there. Let us consider a permanent magnet.
>It has a magnetic field (I think you will agree), and if it is not
>moving, there is NO ASSOCIATED ELECTRIC FIELD. Low Frequencies
>approximate a DC permanent magnet, so there is a STRONG magnetic
>field close to the (Magnetic) antenna, and only a very WEAK
>electric field close by. Q.E.D.

I think you are in disagreement with W8JI .... hi hi

>I have a Batchelors (Honours Physics 76) and Masters (Physics 78)
>so I think I can speak with some authority on the following:

Hmmm maybe you should post copies of your degrees .... so I can be assured
of your authority hi hi.

>Without disparaging him, how much University Physics has W8JI got?
>
>73 de Yakov, VE7ALQ - Same callsign held since 1969, Fists #11117
>
><http://members.shaw.ca/yehudi2/vibros.jpg>http://members.shaw.ca/yehudi2/vibros.jpg
>
>p.s. Why do you think AM radios and my 60 kHz WWVB Radio Controlled
>clock hanging on the wall have ferrite loop(-stick) antennas? I am
>sure that if Electric probes were as good, high gain solid state

>(i.e. FET) amplifiers could easily make up for their lack of gain...

I don't think anyone is arguing the point that the loop antenna works better than a whip in an RFI environment. All I am saying is that any antenna in an RFI environment does not work as well as in an RFI free environment. Just because you use a loop does not make the radio immune to RFI. I found the argument quite irritating .... and as a result I did an experiment in the early afternoon. I have several ferrite antenna equipped radios ... and I chose the most sensitive one and using earphones .... started noting the number of MW stations I could receive in different locations and under different conditions. I used 3 locations: in my house, on the deck of my house, and in the park at least 300 mtrs from the nearest electrical device. I also used the radio unassisted and with the assistance of a passive Hi-Q tuned loop approx. 1 ft square.

In the house (the location with the highest RFI environment) the unassisted radio could just barely detect 3 stations ... non listenable. With the assistance of the tuned loop I could hear 5 stations and 2 were barely listenable.

On the deck (which has less RFI than in the house) I could listen to 2 stations unassisted. With the Loop I could hear 7 or 8 stations and 3 were very listenable.

I then drove out to a park and located on park table at least 300 mtrs from the nearest electrical device. The difference was amazing between 540 khz and 800 khz I could hear stations on every 10 khz step on the dial !! I identified many stations (by call sign) up to 600 miles away. There were at least a dozen stations that were strong enough to comfortably listen to using the speaker and many more using the earphones.

I also went over to my truck which uses the infamous whip and I could only hear about 1/2 the number of stations (I also used earphones on the truck radio).

The only interference was atmospheric. The wx was quite good and any faint electrical noise due to lightning was way off to the west which was easily nulled.

It is clear to me that the only way you can get consistent MW broadcast reception in the RFI environment of a typical household is if the broadcast station is strong enough. Weak signal reception must have the antenna outside of this environment .... whether it is a loop or not. The loop picks up RFI at a signal strength that out matches the desired signals, and overpowers the mixer circuit and drives the AGC.

The loop may be "better ears" ..... but who can tell if you can't hear anything? True whether you have a degree or not hi h.

Jim, VE3CI

>

[Non-text portions of this message have been removed]

6664. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 17:18:11 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6664

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
[--CUT--]
>
> I don't think anyone is arguing the point that the loop antenna
> works better than a whip in an RFI environment. All I am saying
> is that any antenna in an RFI environment does not work as well
> as in an RFI free environment. Just because you use a loop does
> not make the radio immune to RFI. I found the argument quite
> irritating .... and as a result I did an experiment in the early
> afternoon. I have several ferrite antenna equipped
> radios ... and I chose the most sensitive one and using
> earphones ....
> started noting the number of MW stations I could receive in
> different
> locations and under different conditions. I used 3 locations:
> in my house, on the deck of my house, and in the park at least
> 300 mtrs from the nearest electrical device. I also used the
> radio unassisted and with the
> assistance of a passive Hi-Q tuned loop approx. 1 ft square.
>
> In the house (the location with the highest RFI environment) the
> unassisted radio could just barely detect 3 stations ... non
> listenable. With the assistance of the tuned loop I could
> hear 5 stations and 2 were barely listenable.
>
> On the deck (which has less RFI than in the house) I could listen
> to 2 stations unassisted. With the Loop I could hear 7 or 8
> stations and 3 were very listenable.
>
> I then drove out to a park and located on park table at least
> 300 mtrs from the nearest electrical device. The difference was
> amazing between 540 khz and 800 khz I could hear stations on
> every 10 khz step on the dial !! I identified many stations
> (by call sign) up to 600 miles away. There were at least a dozen
> stations that were strong enough to comfortably listen to
> using the speaker and many more using the earphones.
>
> I also went over to my truck which uses the infamous whip and I
> could only hear about 1/2 the number of stations (I also used
> earphones on the truck radio).
>
> The only interference was atmospheric. The wx was quite good and
> any faint electrical noise due to lightning was way off to the
> west which was easily nulled.

>
> It is clear to me that the only way you can get consistent MW
> broadcast reception in the RFI environment of a typical household
> is if the broadcast station is strong enough. Weak signal
> reception must have the antenna outside of this environment ....
> whether it is a loop or not. The loop picks up RFI at a signal
> strength that out matches the desired signals, and overpowers
> the mixer circuit and drives the AGC.
>
> The loop may be "better ears" ..... but who can tell if you can't
> hear anything? True whether you have a degree or not hi h.
>
> Jim, VE3CI

Again, I must disagree. With my Electro-Magnetic Studies in
Undergraduate Second Year Physics at the University of Victoria
in 1974, I learned that an electrically short antenna radiates
(and detects) THREE fields, the STATIC, INDUCTION and RADIATION.

The Static field decays as 1/(Distance*Distance*Distance)

The Induction field decays as 1/(Distance*Distance)

The Radiation field decays as 1/(Distance)

At a Distance of 1 Radian (1/PI or about 1/3) Wavelength, all
three fields are of equivalent strength. For 0.5 mHz this
Wavelength is 600 Meters, so the Radian distance is 600 Feet,
at 1.5 mHz this Wavelength is 200 Meters so a Radian is 200 Feet.

At distances shorter than a Radian, a Magnetic "Loop" becomes
increasingly "deaf" to Electrostatic induced noise sources.
The fact you can't "hear" weak signals, and the fact that a
bigger loop seems to "hear" better suggests to me that you
need a high gain solid-state (FET?) Pre-Amplifier before your
Receiver, to make up for the small capture area of your smaller
Magnetic Loop. This argument is ORTHOGONAL (i.e. irrelevant)
to whether the bigger Magnetic Loop is "better" at improving the
signal-to-noise RATIO (I emphasize RATIO, not absolute strength)
Tuning the loop helps prevent front end overload from strong
signals, this is one reason a tuned Hi-Q ferrite "loopstick"
antenna is used for portable AM radio receivers, rather than a
huge wire Lo-Q loop wound around the inside of the case of the
radio. A small ferrite core loop will actually be better than
a larger loop without the ferrite core, for the simple reason
that it is physically smaller and less susceptable to electric
fields. If you want a larger loop, such as used by Naval vessels
for direction finding (Goniometer) you will have to shield it by
wrapping it inside a metal tube that is cut so the tube itself
cannot form a complete loop and have its own circulating current!!!

73 de Yakov, VE7ALQ - Same Callsign since 1969, Fists #11117

6665. Re: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 17:20:43 UTC
From: Paul V Birke PEng
Topic: 6630 Message: 6665

Hmmm maybe you should post copies of your degrees .... so I can be assured of your authority hi hi.

****
as we say in Canada "beauty"

p

[Non-text portions of this message have been removed]

6666. Re: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 17:24:29 UTC
From: Paul V Birke PEng
Topic: 6630 Message: 6666

It is clear to me that the only way you can get consistent MW broadcast reception in the RFI environment of a typical household is if the broadcast station is strong enough. Weak signal reception must have the antenna outside of this environment .... whether it is a loop or not.

****

excellent Jim

Paul in Guelph VE3PVB

thanks for performing this illuminating experiment

why our radio telescopes were put in Algonquin Park in the early days
very low background noise signature (likely still true)

[Non-text portions of this message have been removed]

6667. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 17:32:28 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6667

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
>
>
> It is clear to me that the only way you can get consistent MW
> broadcast reception in the RFI environment of a typical household
> is if the broadcast station is strong enough. Weak signal
> reception must have the antenna outside of this environment ...
> whether it is a loop or not.
>
> **********
>
> excellent Jim
>
>
> Paul in Guelph VE3PVB

I agree that the signal must not be swamped by interference.
Guidelines for AM radio suggest that in Rural areas the signal
strength must exceed 100 microvolts/meter, and in Urban areas
the signal strength must exceed 1000 microvolts/meter.

As for magnetic antennas not being sensitive to electric fields,
consider the reverse. Since when have you got an electric
shock from a strong Permanent Magnet? Permanent Magnet is as
close to DC and Low Frequency as I can think of, offhand...

73 de Yakov, VE7ALQ - Same Callsign since 1969, Fists #11117

http://members.shaw.ca/yehudi2/israel.jpg

6668. Re: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 18:05:35 UTC
From: Paul V Birke PEng
Topic: 6630 Message: 6668

Since when have you got an electric
shock from a strong Permanent Magnet?

???

regards Paul

[Non-text portions of this message have been removed]

6669. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 21:43:31 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6669

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> Since when have you got an electric
> shock from a strong Permanent Magnet?
>
>
> ???
>
> regards Paul
>

Since my magnet keeper flew off my magnet and headed to
the nearest wall outlet. Shock is Magnetic in nature like
a Magnet keeper is attracted to Electricity (in a wall outlet)

73 de Yakov, VE7ALQ - Same Callsign since 1969, Fists #11117

http://members.shaw.ca/yehudi2/hebrew.gif

6670. Re: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 21:57:36 UTC
From: Paul V Birke PEng
Topic: 6630 Message: 6670

I think you need another degree

73 Paul

From: Ya`akov N. Miles <ve7alq@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, July 12, 2009 5:43:31 PM
Subject: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

--- In loopantennas@ yahoogroups. com, Paul V Birke PEng <nonlinear@. ..> wrote:
>
> Since when have you got an electric
> shock from a strong Permanent Magnet?
>
>
> ???
>
> regards Paul
>

Since my magnet keeper flew off my magnet and headed to
the nearest wall outlet. Shock is Magnetic in nature like
a Magnet keeper is attracted to Electricity (in a wall outlet)

73 de Yakov, VE7ALQ - Same Callsign since 1969, Fists #11117

http://members. shaw.ca/yehudi2/ hebrew.gif

[Non-text portions of this message have been removed]

6671. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 22:08:27 UTC
From: Ya`akov N. Miles
Topic: 6630 Message: 6671

--- In loopantennas@ yahoogroups. com, Paul V Birke PEng <nonlinear@ ..> wrote:
>
> Since when have you got an electric
> shock from a strong Permanent Magnet?
>
>
> ???
>
> regards Paul
>

Since my magnet keeper flew off my magnet and headed to the
nearest wall outlet. Shock is Magnetic in nature just like
a Magnet keeper is attracted to Electricity (in a wall outlet)

73 de Yakov, VE7ALQ - Same Callsign since 1969, Fists #11117

http://members.shaw.ca/yehudi2/hebrew.gif

6672. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 22:36:53 UTC
From: Hue
Topic: 6630 Message: 6672

Jim - the test for reception comparison inside your
home is not valid for your hypothesis. The inside
reception is affected by attenuation from the building
materials of the roof and walls and also the inside
power wiring that crosses the walls and roof, which
in effect forms a shorted turn loop. This can vary
quite a bit between buildings due to differences
in construction so the effect is difficult to
predict, but it is real. Also the deck location
may still be too near the house, may suffer shading
also from house wiring. I suggest you set up in
the yard but still close enuff to the house that
you reckon you are still within the RFI field.
I have noticed here where I live, carrying a SW
portable radio while walking, I can listen to to
several international broadcasters, walking inside
with the same radio, the less strong signals become
totally unusable.
-Hue Miller

6673. Re: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 23:10:40 UTC
From: Jim Dunstan
Topic: 6630 Message: 6673

At 06:29 AM 7/12/2009 +0000, you wrote:

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com,
>"hpmwphaser" <hpmwphaser@...> wrote:
> >
> > Here are a few jewels from W8JI on this topic.
> >
> > So much for the myth that a receiving antenna can sort good signals
> > from bad signals (noise) by virtue of being "magnetic"! We not only
> > don't have the field response we might have imagined, we also almost
> > certainly have no idea if close-by unwanted noise or signal sources
> > are radiated from electric or magnetic field dominant sources.
> > Successful noise reduction by virtue of by antenna "style" would
> > mostly be a matter of hitting a lucky combination through
> > experimentation.
> >
> > Field impedance noise rejection is probably one of the deepest rooted
> > falsehoods in amateur and SWL receiving.ï¿½
> >
>
>I must disagree with you there. Let us consider a permanent magnet.
>It has a magnetic field (I think you will agree), and if it is not
>moving, there is NO ASSOCIATED ELECTRIC FIELD. Low Frequencies
>approximate a DC permanent magnet, so there is a STRONG magnetic
>field close to the (Magnetic) antenna, and only a very WEAK
>electric field close by. Q.E.D.

I think you are in disagreement with W8JI .... hi hi

>I have a Batchelors (Honours Physics 76) and Masters (Physics 78)
>so I think I can speak with some authority on the following:

Hmmm maybe you should post copies of your degrees .... so I can be assured
of your authority hi hi.

>Without disparaging him, how much University Physics has W8JI got?
>
>73 de Yakov, VE7ALQ - Same callsign held since 1969, Fists #11117
>
><http://members.shaw.ca/yehudi2/vibros.jpg>http://members.shaw.ca/yehudi2/vibros.jpg
>
>p.s. Why do you think AM radios and my 60 kHz WWVB Radio Controlled
>clock hanging on the wall have ferrite loop(-stick) antennas? I am
>sure that if Electric probes were as good, high gain solid state

>(i.e. FET) amplifiers could easily make up for their lack of gain...

I don't think anyone is arguing the point that the loop antenna works better than a whip in an RFI environment. All I am saying is that any antenna in an RFI environment does not work as well as in an RFI free environment. Just because you use a loop does not make the radio immune to RFI. I found the argument quite irritating .... and as a result I did an experiment in the early afternoon. I have several ferrite antenna equipped radios ... and I chose the most sensitive one and using earphones .... started noting the number of MW stations I could receive in different locations and under different conditions. I used 3 locations: in my house, on the deck of my house, and in the park at least 300 mtrs from the nearest electrical device. I also used the radio unassisted and with the assistance of a passive Hi-Q tuned loop approx. 1 ft square.

In the house (the location with the highest RFI environment) the unassisted radio could just barely detect 3 stations ... non listenable. With the assistance of the tuned loop I could hear 5 stations and 2 were barely listenable.

On the deck (which has less RFI than in the house) I could listen to 2 stations unassisted. With the Loop I could hear 7 or 8 stations and 3 were very listenable.

I then drove out to a park and located on park table at least 300 mtrs from the nearest electrical device. The difference was amazing between 540 khz and 800 khz I could hear stations on every 10 khz step on the dial !! I identified many stations (by call sign) up to 600 miles away. There were at least a dozen stations that were strong enough to comfortably listen to using the speaker and many more using the earphones.

I also went over to my truck which uses the infamous whip and I could only hear about 1/2 the number of stations (I also used earphones on the truck radio).

The only interference was atmospheric. The wx was quite good and any faint electrical noise due to lightning was way off to the west which was easily nulled.

It is clear to me that the only way you can get consistent MW broadcast reception in the RFI environment of a typical household is if the broadcast station is strong enough. Weak signal reception must have the antenna outside of this environment .... whether it is a loop or not. The loop picks up RFI at a signal strength that out matches the desired signals, and overpowers the mixer circuit and drives the AGC.

The loop may be "better ears" ..... but who can tell if you can't hear anything? True whether you have a degree or not hi h.

Jim, VE3CI

>

[Non-text portions of this message have been removed]

6674. Re: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-12 23:52:12 UTC
From: Jim Dunstan
Topic: 6630 Message: 6674

At 10:36 PM 7/12/2009 +0000, you wrote:

>Jim - the test for reception comparison inside your
>home is not valid for your hypothesis. The inside
>reception is affected by attenuation from the building
>materials of the roof and walls and also the inside
>power wiring that crosses the walls and roof, which
>in effect forms a shorted turn loop. This can vary
>quite a bit between buildings due to differences
>in construction so the effect is difficult to
>predict, but it is real. Also the deck location
>may still be too near the house, may suffer shading
>also from house wiring. I suggest you set up in
>the yard but still close enuff to the house that
>you reckon you are still within the RFI field.
>I have noticed here where I live, carrying a SW
>portable radio while walking, I can listen to to
>several international broadcasters, walking inside
>with the same radio, the less strong signals become
>totally unusable.
>-Hue Miller

Hi Hue,

You may be right in that reception results are partially due to the actual attenuation of the signals. But I am convinced that the major impediment is the surrounding RFI.. I could for example extend my experiment to my farm. At the farm I am miles from the nearest electrical device .... unless I run the generator. Otherwise I use a small solar panel and battery. I use the same kind ... or even the same receivers ... and for the most part the results are about the same as operating in the park. My cabin has some electrical wiring, and of course a roof and walls ... and aluminum windows etc..

I would have included the farm as well in the experiment except it is a 30 mile drive. I also use a MW receiver with a small tuned loop for assistance. the house structure here is wood for the most part. the big difference is all the RFI from devices here at home and in the neighborhood. I don't think there is much in the way of shading from MW signals hi hi. there are buildings out at the park that are used for group picnics ... perhaps the next time we rent one I will do the experiment over again ... just to compare the building to the park bench. It might have an effect on the really weak stations. Before answering you I took a look at my log notes from the experiment and even surprised myself. I am located on the n.shore of lake superior. I logged CBC (Canadian Broadcast

Corporation) on 540 khz which i know is located in the small town of Watrous in central Saskatchewan no less than a 1000 miles away ... and CBC on 990 khz located in Carman in central Manitoba about 500 miles away. I also logged many stations in Minn., WI, and Illinois. I didn't log any Canadian stations to the east ... although I know there are no 50,000 watt stations until you hit Toronto. There is a 50,000 watt station there on 740 khz ... which used to be CBC but is now privately owned ... but very popular. I expect the western stations will go soon as well as just about every city and town now is covered with FM broadcast. that is the reason I can do MW DX from my location since the last MW station here (on 580 khz) closed down almost a year ago. Having a strong local station ... or any local stations de-sensitize most run in the mill MW receivers .... usually through overpowering the mixer stage. After this ... weak signals are out of the picture. In this sense even a crystal set works better than most inexpensive superhet radios.

No, there is little doubt .... the difference between hearing weak MW stations and not hearing them is the presence of RFI. In fact, I would not have had the logging success I did last afternoon if it wasn't for the broad high pressure zone overhead ... no lightning crashes and static. Even that is enough to overpower low level MW signals. In any event I am always amazed at MW and LW signal propagation. I would have been able to hear 20m stations at those distance very well during the afternoon ... but I doubt I would have heard stations on 75m. But I could hear 540 and 990 khz. Mind you they run 50,000 kw hi hi It would be nice to know how it gets here.

By the way I also run my QRP station out at the farm using my venerable Ten Tec Argonaut 509 to a 100 ft doublet about 50 ft in the trees.

73

Jim, VE3CI

>

[Non-text portions of this message have been removed]

6675. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 01:34:32 UTC
From: jrtow3rd@bellsouth.net
Topic: 6630 Message: 6675

I am tired of this... maybe it's my age (I'll hit 61 soon.)

The E-field production of EMI within a house, which is 'radiated' by unshielded power cords and vertical & horizontal power wiring - and, to a lessor extent, conduit carried conductors, can be picked up by a loop - inside or out. It's not 'ELECTRO-STATIC', that implies a steady state charge distribution. Anyone with a modicum of understanding of sophomore physics would understand this - and recall it from Maxwell's Equations - or definition of the Poynting Vector. E-M wave propagation is via alternating Electric (E) and Magnetic (H) fields - there is nothing 'static' about it. It is capacitively coupled - and more efficiently with single-ended loops, as their CMRR is poor.

You can lessen the unbalanced capacitive coupling to a loop inside or outside a building, as our esteemed friend said, with a nearly completed conductive shield around the loop - that is then grounded (My old Drake SPR-4 had the accessory AL-4 such loop - actually, decent from LW-MW.). This is the familiar 'Faraday Shield' and can increase the capacitance across said loop, lowering it's resonant frequency. It also greatly lessens E-field capacitive coupling to the H-field designed loop. Of course, a treatise on loop antennas is included in the excellent 1950 production 'Antennas' by John D. Krause, the late (Died 7/18/2004 at 94!) great physicist/lecturer - and one of the 'Fathers' of American Radio Astronomy. Any sophomore physics text, such as Halliday & Resnick, will introduce you to Maxwell's equations, while 'Foundations of E-M Theory', by Reitz & Milford offers more detail. Neither text is a how-to manual; go to the ARRL & RSGB for good application references.

As said, it was my 'honor' to graduate in physics from Auburn U. - which I did in '75 after having started in '66. Yeah, I goofed off - got a job offer I couldn't refuse part way through (It happened back then...) - returned to AU after my release from active duty. What do you do with a BS - and even grad work - in physics? Not a big bread earner. I taught in Alabama's post secondary system - physics the first quarter. Then - pre-engineering, technologies, photography, and math, among other areas. I chiefed a few broadcast stations (4 FM & 1 AM) from 9/68-12/99, when I finally tired of midnite calls (Commercial FCC 1st Class Radiotelephone License '68.). I've been a shooting range RO and woodworker since retiring.

JRT

PS This is the internet... I could be just a 13 yr old savant with a vivid imagination, too! Remember that...

>
> I think you are in disagreement with W8JI .... hi hi
>
>
> >I have a Batchelors (Honours Physics 76) and Masters (Physics 78)
> >so I think I can speak with some authority on the following:
>

> Hmmm maybe you should post copies of your degrees .... so I can be assured
> of your authority hi hi.
>
>
>
>
> >Without disparaging him, how much University Physics has W8JI got?
> >
> >73 de Yakov, VE7ALQ - Same callsign held since 1969, Fists #11117
>
> The loop may be "better ears" ..... but who can tell if you can't hear
> anything? True whether you have a degree or not hi h.
>
> Jim, VE3CI
>
> [Non-text portions of this message have been removed]
>

6676. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 02:12:20 UTC
From: Steve
Topic: 6630 Message: 6676

```
--- In loopantennas@yahoogroups.com, "Ya`akov N. Miles" <ve7alq@...> wrote:
>
> --- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@> wrote:
> >
> > Since when have you got an electric
> > shock from a strong Permanent Magnet?
> >
> >
> > ???
> >
> > regards Paul
> >
>
> Since my magnet keeper flew off my magnet and headed to
> the nearest wall outlet. Shock is Magnetic in nature like
> a Magnet keeper is attracted to Electricity (in a wall outlet)
>

What? Are you claiming that a chunk of slightly magnetized metal is attracted to copper
wire because it happens to have a slight electric field on it?

Steve Greenfield
no degrees but a decent BS detector
```

6677. Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 02:36:12 UTC
From: RICH
Topic: 6630 Message: 6677

No, No, NOOOOOOOO. Then he'll not only insist that he is smarter than the rest of use but he will then beable to give us the Third Degree....
RICH WA6KNW

--- Paul V Birke PEng <nonlinear@...> wrote:

I think you need another degree

73 Paul

6678. LoopStick Gold Edition

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 00:03:05 UTC
From: EDUARDO
Topic: 6678 Message: 6678

Hello friends, good night!
After 15 months of tests and trials, got the best of an antenna for loopstick MW. This antenna has the name of LoopStick Gold Edition, it has a spectacular yield, the lower antenna on the market with excellent or even say, the biggest gain. It is worth giving, this model is already in several countries other than Brazil, such as Spain, Portugal, USA, Argentina, etc..
Check out the link below:

http://www.youtube.com/user/ADCASZIZA#play/all/favorites-all/1/4lpSNiirUVk

After several experiments with other types of antennas, qeu believe this is one of the best options, because we have the smallest antenna in the market with support, portable, small, excellent, low noise, 21 cm long by 2.54 cm diameter.

Respectfully,

Eduardo L. Castaldelli
Grid Locator : GG66qq
Mairipor?- SP- Brasil
www.radiodx.qsl.br or
www.radiodx.com.br

6679. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 03:07:42 UTC
From: Steve
Topic: 5773 Message: 6679

What would be better than correcting the Links.txt would be adding the links to the Links section. Can I say "links" a few more times? ;')

I created a folder for active loops and preamps in the Links section and put your new address there.

Steve Greenfield

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> >* The KRS AA-1 Active Antenna was sold through Radio West
> >in the early '70's, and was a good performer.
> >http://members.cts.com/king/j/jlkolb/site/aa-1.pdf
> >
>
> Should be:
>
> http://jlkolb.cts.com/site/ant.htm
>
> >
> >* In the '70's, this Circuit was developed suitable for
> >use as an Antenna Pre-Amplifier or as the Amplifier for
> >a Box Loop Antenna or Ferrite Rod Antenna.
> >http://members.cts.com/king/j/jlkolb/site/fet_pre.pdf
> >
>
> Should be:
>
> http://jlkolb.cts.com/site/fet_pre.pdf
>
> >
> >* A fancier version, with a Dual-Gate FET, featuring an
> >RF Gain Control. Dual-Gate FET's can still be found,
> >but not easily. This Schematic is closely related to
> >a Pre-Selector sold as the KS Pre-Selector.
> >http://members.cts.com/king/j/jlkolb/site/dual_fet.pdf
> >
>
> Should be:
>
> http://jlkolb.cts.com/site/dual_fet.pdf
>
> >
> >* Better Nulling is obtained with a Loop Antenna when it
> >is Center Tapped and Amplified with a Balanced Amplifier.

> >http://members.cts.com/king/j/jlkolb/site/dif_fet.pdf
> >
>
> Should be:
>
> http://jlkolb.cts.com/site/dif_fet.pdf
>
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

6680. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 03:49:09 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6680

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /ModeratorFiles/Links.txt
Uploaded by : alienrelics <alienrelics@...>
Description : Links saved from the old list. Corrected and updated with help from Cor
Beijersbergen van Henegouwen and Chris Trask. Thank you! 12JUL2009

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/ModeratorFiles/Links.txt

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles

Regards,

alienrelics <alienrelics@...>

6681. Re: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 04:07:56 UTC
From: Paul V Birke PEng
Topic: 6630 Message: 6681

KOOL
have not laughed so hard for a while

p

From: RICH <sgm460122@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, July 12, 2009 10:36:12 PM
Subject: [loopantennas] Re: Loop(-stick) Antennas have Better "Ears", Correction

No, No, NOOOOOOOO. Then he'll not only insist that he is smarter than the rest of use but he will then beable to give us the Third Degree....
RICH WA6KNW

--- Paul V Birke PEng <nonlinear@. ..> wrote:

I think you need another degree

73 Paul

[Non-text portions of this message have been removed]

6682. FM Loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 18:11:09 UTC
From: brian russell
Topic: 6682 Message: 6682

Hi,
Although the subject of various designs of loop antenna for reception in the 0.5 - 1.8 MHz range comes up fairly regularly I have yet to see any links to a loop antenna for FM reception, 88 - 104 MHz.
This begs the question would a loop be any advantage over the common telescopic whip ????
Your thoughts please.
72, Brian, G0NSL-QRP.

6683. Re: [loopantennas] FM Loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 11:19:44 UTC
From: Chris Trask
Topic: 6682 Message: 6683

> Hi,
> Although the subject of various designs of loop antenna for reception
> in the 0.5 - 1.8 MHz range comes up fairly regularly I have yet to see any
> links to a loop antenna for FM reception, 88 - 104 MHz.
> This begs the question would a loop be any advantage over the common
> telescopic whip ????
>
> Your thoughts please.
>

A folded dipole made from 300-ohm twinlead makes a great FM antenna.
You cut a piece of twinlead that is a half wavelength long at the middle of
the band. Short the ends, then make a cut in one conductor at the middle.
Attach the 300-ohm twinlead feedline at that point or you can connect it to
a 75-ohm balun. These work really well for the FM broadcast band as well as
part of the VHF-TV band. I made these by the dozen while in undergrad
school and sold them to dormies to raise beer money. I still have a
commercial one connected to my desk FM stereo receiver and it works just as
good as my homebrewed ones did.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6684. Re: FM Loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 18:31:42 UTC
From: Ya`akov N. Miles
Topic: 6682 Message: 6684

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...> wrote:
>
> Hi,
> Although the subject of various designs of loop antenna for
reception in the 0.5 - 1.8 MHz range comes up fairly regularly I
> have yet to see any links to a loop antenna for FM reception,
> 88 - 104 MHz. This begs the question would a loop be any
> advantage over the common telescopic whip ????
>
> Your thoughts please.
> 72, Brian, G0NSL-QRP.
>

The frequencies 88-108 mHz are approximately 100 mHz which
has a wavelength of 3 meters. This means that the Radiation
field does not predominate over the Static and Induction
field until a distance of one Radian, 1/PI wavelength, which
is about one meter. Thus a loop only would be of advantage
over a whip for distances shorter than approximately one meter,
i.e. about three feet.

I think you will agree with me that most noise sources are
further than three feet away, therefore I see no particular
advantage of using a loop for FM reception, 88 - 104 mHz.

My thoughts.

73 de Yakov, VE7ALQ - Held same Callsign since 1969, Fists #11117

http://members.shaw.ca/yehudi2/vibros.jpg

http://members.shaw.ca/yehudi2/index.html

6685. Re: [loopantennas] FM Loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 20:13:40 UTC
From: David Towers
Topic: 6682 Message: 6685

Hi Brian
John Faulkner built and used one with good results
details in Skywaves site
http://www.skywaves.info/?cID=home
and also the Yahoo Group
cheers
dave G8SZX

brian russell wrote:
> Hi,
> Although the subject of various designs of loop antenna for reception
> in the 0.5 - 1.8 MHz range comes up fairly regularly I have yet to see any
> links to a loop antenna for FM reception, 88 - 104 MHz.
> This begs the question would a loop be any advantage over the common
> telescopic whip ????
> Your thoughts please.
> 72, Brian, G0NSL-QRP.
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>

6686. Re: [loopantennas] FM Loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 21:18:14 UTC
From: Jim Dunstan
Topic: 6682 Message: 6686

At 09:13 PM 7/13/2009 +0100, you wrote:

>Hi Brian
>John Faulkner built and used one with good results
>details in Skywaves site
><http://www.skywaves.info/?cID=home>http://www.skywaves.info/?cID=home
>and also the Yahoo Group
>cheers
>dave G8SZX

Hi,

As already mentioned the most common antenna used for local FM reception is a folded dipole made of TV type twin lead. I have several in the junk box and checked them out for dimensions and find they are indeed cut to a the standard 1/2 wavelength dimension (about 5 ft). It would be quite easy to design the antenna as a full size self resonant loop which would be approx. 3 ft in diameter. I can understand why the dipole is more common in that it is easier to deploy than a loop .... the loop requires more support points. A full size loop has a small gain advantage over the dipole (but certainly not the 5.5 db claimed on the skywaves site ... e.g. they claim it to be comparable to a 5 el. yagi !!). I would take information from this site with a grain of salt.

If you want this amount of gain (5.5 db) you will certainly have to form the antenna into a 3 dimensional configuration with parasitic elements. The elements can be either loops, dipoles, or a combination.

Jim, VE3CI

[Non-text portions of this message have been removed]

6687. Re: [loopantennas] FM Loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-14 02:47:53 UTC
From: Andy
Topic: 6682 Message: 6687

A folded dipole at first glance seems like a loop, but it is not a loop antenna. It is a dipole, which has (in its usual configuration) two wires in parallel and connected in a way that appears like a loop. But the two wires are so close together that it doesn't behave at all similar to how a loop antenna behaves. The reason for doing a folded dipole, is to get the feedpoint impedance transformation, useful since most FM radios have 300 ohm input terminals. Otherwise, it transmits and receives like a dipole of comparable size, not like a loop.

In days gone past, there were FM broadcast transmitting loop antennas, probably made that way to give them somewhat non-directional characteristics (in the horizontal plane), as opposed to a straight dipole with its figure-8 pattern. The transmitting loops I saw and used had a gap opposite from the feed end, with two small adjustable capacitor plates in the gap to tune the loop to resonance.

A VHF/UHF "shielded" (i.e., balanced) loop you might want to think about, is at http://www.arrowantennas.com/fhl.html and http://www.arrowantennas.com/loopdemo.html . I have no experience with this thing, but its advertised advantage is the sharp null which would make it good for radio direction finding, or for rejecting a point noise source at any distance.

Andy

6688. Re: [loopantennas] FM Loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-14 03:54:00 UTC
From: Jim Dunstan
Topic: 6682 Message: 6688

At 10:47 PM 7/13/2009 -0400, you wrote:
>A folded dipole at first glance seems like a loop, but it is not a loop
>antenna. It is a dipole, which has (in its usual configuration) two wires
>in parallel and connected in a way that appears like a loop. But the two
>wires are so close together that it doesn't behave at all similar to how a
>loop antenna behaves. The reason for doing a folded dipole, is to get the
>feedpoint impedance transformation, useful since most FM radios have 300 ohm
>input terminals. Otherwise, it transmits and receives like a dipole of
>comparable size, not like a loop.

I think that is why it is called a folded "dipole" .... hi I may be mistaken, but I don't think anyone was thinking the folded dipole was a loop.

I think someone was asking how a loop might work vs a common and somewhat traditional "folded dipole" that often comes along with your Hi-Fi FM receiver.

The full size self resonant loop would of course be 1 wavelength in circumference and in my view it would be a little big and awkward sitting on top of the Hi-Fi FM receiver. It got me thinking about a small tuned magnetic loop (usually about 1/10 the size of full size loop or about 1 ft or so in circumference or a little over 3 inches in dia. It could of course be made a little bit bigger out of heavy copper, with a nice wood or Bakelite base containing the tuning capacitor . The loop could be tweaked at each FM station frequency and rotated for best reception. I have never heard of anyone making a small tuned loop for FM reception. It might be an interesting experiment.

Jim, VE3Ci

6689. Re: [loopantennas] LoopStick Gold Edition

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-13 23:10:01 UTC
From: aimo ruoho
Topic: 6678 Message: 6689

Hello!

It was very interesting to see and hear the effect of your
strong ferrite antenna on tropical waves!
I like to ask the price for that kind of an antenna if sent
to Spain.

Best Regards from a Finnish veteran DXer living in Spain
permanently.

--- El lun, 13/7/09, EDUARDO <adcas@sti.com.br> escribió:

De: EDUARDO <adcas@...>
Asunto: [loopantennas] LoopStick Gold Edition
Para: loopantennas@yahoogroups.com
Fecha: lunes, 13 julio, 2009 2:03

Hello friends, good night!
After 15 months of tests and trials, got the best of an antenna for
loopstick MW. This antenna has the name of LoopStick Gold Edition, it has a
spectacular yield, the lower antenna on the market with excellent or even
say, the biggest gain. It is worth giving, this model is already in several
countries other than Brazil, such as Spain, Portugal, USA, Argentina, etc..
Check out the link below:

http://www.youtube. com/user/ ADCASZIZA# play/all/ favorites- all/1/4lpSNiirUV k

After several experiments with other types of antennas, qeu believe this is
one of the best options, because we have the smallest antenna in the market
with support, portable, small, excellent, low noise, 21 cm long by 2.54 cm
diameter.

Respectfully,

Eduardo L. Castaldelli
Grid Locator : GG66qq
Mairiporã- SP- Brasil
www.radiodx. qsl.br or
www.radiodx. com.br

[Non-text portions of this message have been removed]

6690. Re: [loopantennas] FM Loops !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-14 14:35:15 UTC
From: Chris Trask
Topic: 6682 Message: 6690

```
>
> > A folded dipole at first glance seems like a loop, but it is
> > not a loop antenna. It is a dipole, which has (in its usual
> > configuration) two wires in parallel and connected in a way that
> > appears like a loop. But the two wires are so close together
> > that it doesn't behave at all similar to how a loop antenna
> > behaves. The reason for doing a folded dipole, is to get the
> > feedpoint impedance transformation, useful since most FM radios
> > have 300 ohm input terminals. Otherwise, it transmits and
> > receives like a dipole of comparable size, not like a loop.
>
> I think that is why it is called a folded "dipole" .... hi I may
> be mistaken, but I don't think anyone was thinking the folded
> dipole was a loop.
>
```

<<SNIP>>

The whole "folded dipole vs. loop" discussion has gone back and forth for decades, and it's more a matter of opinion rather than strict definition as to what term is used. The directional properties of the folded dipole make it a better performer than a simple whip as you get more signal (ie - pattern gain) plus you have the opportunity to null out some interference, plus it will connect directly to the 300-ohm inputs that are common with commercial FM broadcast and VHF TV receivers.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

6691. FM antennas !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-15 18:04:29 UTC
From: brian russell
Topic: 6691 Message: 6691

Hi,
Thanks to all who responded to my query on FM loop antennas
much appreciated.
It would seem that there is no great case for a loop, in fact spacewise there
is a downside to one compared to a folded dipole or whip.
From chimney top observations there would appear to be several types
of folded dipole antennas i.e. straight, circular and one shaped like a
letter ' S' squashed from the sides ?????
Though it may not be an FM antenna there is a common type in the UK
seen on caravans / motor cruisers, this is of a ' geodetic ' shape
about the size of a football, I have never seen one close-up so
I have no idea of the configuration of the element (s).
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

6692. LoopStick Gold Edition- Mr. Aimo

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-15 18:13:15 UTC
From: EDUARDO
Topic: 6692 Message: 6692

Hello Friend!
I hope you received my message in pvt.

att,

Eduardo
----- Original Message -----
From: "aimo ruoho" <aimounto@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, July 13, 2009 8:10 PM
Subject: ***SPAM*** Re: [loopantennas] LoopStick Gold Edition

Hello!

It was very interesting to see and hear the effect of your
strong ferrite antenna on tropical waves!
I like to ask the price for that kind of an antenna if sent
to Spain.

Best Regards from a Finnish veteran DXer living in Spain
permanently.

--- El lun, 13/7/09, EDUARDO <adcas@...> escribi?:

De: EDUARDO <adcas@...>
Asunto: [loopantennas] LoopStick Gold Edition
Para: loopantennas@yahoogroups.com
Fecha: lunes, 13 julio, 2009 2:03

Hello friends, good night!
After 15 months of tests and trials, got the best of an antenna for
loopstick MW. This antenna has the name of LoopStick Gold Edition, it has a
spectacular yield, the lower antenna on the market with excellent or even
say, the biggest gain. It is worth giving, this model is already in several
countries other than Brazil, such as Spain, Portugal, USA, Argentina, etc..
Check out the link below:

http://www.youtube. com/user/ ADCASZIZA# play/all/ favorites-
all/1/4lpSNiirUV k

After several experiments with other types of antennas, qeu believe this is
one of the best options, because we have the smallest antenna in the market
with support, portable, small, excellent, low noise, 21 cm long by 2.54 cm
diameter.

Respectfully,

Eduardo L. Castaldelli
Grid Locator : GG66qq
Mairipor?- SP- Brasil
www.radiodx. qsl.br or
www.radiodx. com.br

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

6693. Re: [loopantennas] LoopStick Gold Edition- Mr. Aimo

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-15 21:20:07 UTC
From: aimo ruoho
Topic: 6692 Message: 6693

Kiitos/gracias/thank you EDUARDO!

I received your message, yes, but right now I am not able to buy
that antenna, because I think, that the price is too high for my
relatively low pension...

Thanks anyway to give the details.

Best Regards from Aimo.

--- El mié, 15/7/09, EDUARDO <adcas@...> escribió:

De: EDUARDO <adcas@...>
Asunto: [loopantennas] LoopStick Gold Edition- Mr. Aimo
Para: loopantennas@yahoogroups.com
Fecha: miércoles, 15 julio, 2009 8:13

Hello Friend!
I hope you received my message in pvt.

att,

Eduardo
----- Original Message -----
From: "aimo ruoho" <aimounto@yahoo. com>
To: <loopantennas@ yahoogroups. com>
Sent: Monday, July 13, 2009 8:10 PM
Subject: ***SPAM*** Re: [loopantennas] LoopStick Gold Edition

Hello!

It was very interesting to see and hear the effect of your
strong ferrite antenna on tropical waves!
I like to ask the price for that kind of an antenna if sent
to Spain.

Best Regards from a Finnish veteran DXer living in Spain
permanently.

--- El lun, 13/7/09, EDUARDO <adcas@.... br> escribió:

De: EDUARDO <adcas@.... br>
Asunto: [loopantennas] LoopStick Gold Edition
Para: loopantennas@ yahoogroups. com
Fecha: lunes, 13 julio, 2009 2:03

Hello friends, good night!
After 15 months of tests and trials, got the best of an antenna for

loopstick MW. This antenna has the name of LoopStick Gold Edition, it has a spectacular yield, the lower antenna on the market with excellent or even say, the biggest gain. It is worth giving, this model is already in several countries other than Brazil, such as Spain, Portugal, USA, Argentina, etc.. Check out the link below:

http://www.youtube. com/user/ ADCASZIZA♯ play/all/ favorites-all/1/4lpSNiirUV k

After several experiments with other types of antennas, qeu believe this is one of the best options, because we have the smallest antenna in the market with support, portable, small, excellent, low noise, 21 cm long by 2.54 cm diameter.

Respectfully,

Eduardo L. Castaldelli
Grid Locator : GG66qq
Mairiporã- SP- Brasil
www.radiodx. qsl.br or
www.radiodx. com.br

[Non-text portions of this message have been removed]

------------ --------- --------- ------

If you've got links, post them in the Links section!
http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6694. Re: LoopStick Gold Edition- Mr. Aimo

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-16 07:54:20 UTC
From: oh6bi
Topic: 6692 Message: 6694

Greetings from Finland !

Hi Aimo and Eduardo and all in the Group !

I took a look for that Loopstick, Golden Edition.
It intrests me much because I am planning to make ferrite RX loop
for lover HF, means abt 3 to 9 MHz .
I have done some ferrite tests just to find source of local QRM
at 3,5 MHz but not yet found it. I made pararell resonance with
coil and 300 pF variable cap.
Do you have any idea how this GoldenStick is made ?
Is there Capasitance making resonance together with ferrite coil ?

best regards es 73s de rami, oh6bi

6695. Re: [loopantennas] Re: LoopStick Gold Edition- Mr. Aimo

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-16 08:03:40 UTC
From: Marc Coevoet
Topic: 6692 Message: 6695

oh6bi schreef:
>
>
> Greetings from Finland !
>
> Hi Aimo and Eduardo and all in the Group !
>
> I took a look for that Loopstick, Golden Edition.
> It intrests me much because I am planning to make ferrite RX loop
> for lover HF, means abt 3 to 9 MHz .
> I have done some ferrite tests just to find source of local QRM
> at 3,5 MHz but not yet found it. I made pararell resonance with
> coil and 300 pF variable cap.
> Do you have any idea how this GoldenStick is made ?
> Is there Capasitance making resonance together with ferrite coil ?
>

Same principle as loop antenna: a long wire (around AIR, the loopstick
has a metal, which gives shorter wire), and a variabla cap to tune. It
would be nice to compare a loopstick with a loop antenna ...

Marc

> best regards es 73s de rami, oh6bi
>
>

--
Shortwave transmissions in English, Francais, Nederlands, Deutsch, Suid-Afrikaans,
Chinese, Dansk, Urdu, Cantonese, Greek, Spanish, Portuguese, ...
http://users.fulladsl.be/spb13810/swlist/ http://radiolanguages.tk
Stations list: http://users.fulladsl.be/spb13810/txlist/

6696. LoopStick Gold Edition

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-16 13:46:15 UTC
From: EDUARDO
Topic: 6678 Message: 6696

Hello Friends,
This antenna is manufactured by GE LoopStick me. Its construction consists of a coil on the ferrite stick, connected to a variable capacitor of 365pf. The signal is amplified by an amplifier of 40 dB, produced by me too. The result is amazing, wonderful, equivalent to a Long wire antenna from 70 to 100 meters. Its coil resonate in the range 2000 kHz to 9000 kHz.
Respectfully,

Eduardo
Grid Locator: GG66qq
Mairipor?- S?o Paulo- Brasil

----- Original Message -----
From: "Marc Coevoet" <sintsixtus@...>
To: <loopantennas@yahoogroups.com>
Sent: Thursday, July 16, 2009 5:03 AM
Subject: ***SPAM*** Re: [loopantennas] Re: LoopStick Gold Edition- Mr. Aimo

> oh6bi schreef:
>>
>>
>> Greetings from Finland !
>>
>> Hi Aimo and Eduardo and all in the Group !
>>
>> I took a look for that Loopstick, Golden Edition.
>> It intrests me much because I am planning to make ferrite RX loop
>> for lover HF, means abt 3 to 9 MHz .
>> I have done some ferrite tests just to find source of local QRM
>> at 3,5 MHz but not yet found it. I made pararell resonance with
>> coil and 300 pF variable cap.
>> Do you have any idea how this GoldenStick is made ?
>> Is there Capasitance making resonance together with ferrite coil ?
>>
>
>
>
>
>
>
>
>
>
>
>
>
>

>
>
>
>
> Same principle as loop antenna: a long wire (around AIR, the loopstick
> has a metal, which gives shorter wire), and a variabla cap to tune. It
> would be nice to compare a loopstick with a loop antenna ...
>
> Marc
>
>
>> best regards es 73s de rami, oh6bi
>>
>>
>
>
> --
> Shortwave transmissions in English, Francais, Nederlands, Deutsch,
> Suid-Afrikaans, Chinese, Dansk, Urdu, Cantonese, Greek, Spanish,
> Portuguese, ...
> http://users.fulladsl.be/spb13810/swlist/ http://radiolanguages.tk
> Stations list: http://users.fulladsl.be/spb13810/txlist/
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

6697. LoopStick Gold Edition- Mr.rami, oh6bi

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-16 14:08:58 UTC
From: EDUARDO
Topic: 6697 Message: 6697

Hello friend,

Recently perform some tests with a shielded loop antenna with 1 meter
diameter, and it was higher.
Respectfully,

Eduardo
Grid Locator: GG66qq
Mairipor?- S?o Paulo- Brasil

----- Original Message -----
From: "Marc Coevoet" <sintsixtus@...>
To: <loopantennas@yahoogroups.com>
Sent: Thursday, July 16, 2009 5:03 AM
Subject: ***SPAM*** Re: [loopantennas] Re: LoopStick Gold Edition- Mr. Aimo

> oh6bi schreef:
>>
>>
>> Greetings from Finland !
>>
>> Hi Aimo and Eduardo and all in the Group !
>>
>> I took a look for that Loopstick, Golden Edition.
>> It intrests me much because I am planning to make ferrite RX loop
>> for lover HF, means abt 3 to 9 MHz .
>> I have done some ferrite tests just to find source of local QRM
>> at 3,5 MHz but not yet found it. I made pararell resonance with
>> coil and 300 pF variable cap.
>> Do you have any idea how this GoldenStick is made ?
>> Is there Capasitance making resonance together with ferrite coil ?
>>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

>
>
> Same principle as loop antenna: a long wire (around AIR, the loopstick
> has a metal, which gives shorter wire), and a variabla cap to tune. It
> would be nice to compare a loopstick with a loop antenna ...
>
> Marc
>
>
>> best regards es 73s de rami, oh6bi
>>
>>
>
>
> --
> Shortwave transmissions in English, Francais, Nederlands, Deutsch,
> Suid-Afrikaans, Chinese, Dansk, Urdu, Cantonese, Greek, Spanish,
> Portuguese, ...
> http://users.fulladsl.be/spb13810/swlist/ http://radiolanguages.tk
> Stations list: http://users.fulladsl.be/spb13810/txlist/
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

6698. KA-35 reception improvement

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-21 05:57:54 UTC
From: Adam E.
Topic: 6698 Message: 6698

I have a plan in finding ways to improve the LW reception when I get the KA-35 controller cable fixed. I was thinking about making the
ferrite rod antenna bigger so it can pull in better than the 4.5 inch
ferrite rod that it comes with it.

Is it possible to improve the LW/MW reception with switching out the old ferrite loop stick with a 7.5 inch loopstick?

Adam E.

6699. Re: KA-35 reception improvement

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-21 18:15:52 UTC
From: aircheckIover
Topic: 6698 Message: 6699

"Ya but ..." with the 'but' being what is inside the plastic ferrite mounting box? If it is a coil &/or capacitor, there is a matching network you will have to deal with when adding a longer stick.

-Mark

========== --- In loopantennas@...m, "Adam E." <gccradioscience@...> wrote:
>
>
> I have a plan in finding ways to improve the LW reception when I get the KA-35 controller cable fixed. I was thinking about making the
> ferrite rod antenna bigger so it can pull in better than the 4.5 inch
> ferrite rod that it comes with it.
>
> Is it possible to improve the LW/MW reception with switching out the old ferrite loop stick with a 7.5 inch loopstick?
>
> Adam E.
>

6700. Re: [loopantennas] Re: KA-35 reception improvement

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-21 19:20:08 UTC
From: Don
Topic: 6698 Message: 6700

I don't think you can do much better with an indoor antenna, IMHO.
Anyway, the adverb says the stock rod is 5 1/2 in. Is yours shorter???
If it is really 5 1/2 in, adding another inch on each side (for a total
of 7.5 in by replacing the original rod) won't do much for reception.
You might try temporarily adding longer pieces to each end, like 3 1/2
in rods. Use painters tape (blue) or small cardboard/plastic tubes so as
not to mark up the KA35. Appearantly there is no tuning - there is an
active amp in the box.

Again, IMHO, indoor antennas have practical/aesthetic/better half (wife)
limits. An outdoor antenna is really the way to go for better reception
if you can. Of course the ultimate hack for this would be to disassemble
the KA35 unit and mount it in a weatherproof plastic box or a large
diameter PVC pipe, like a 3 inch T-shape outside. I believe the rod
antenna is only for LW/MW though. Looks like it only needs the one
RF/power cable as well. Let us know how you get on!

Don
Upland, CA

aircheckclover wrote:
> "Ya but ..." with the 'but' being what is inside the plastic ferrite mounting box? If it
is a coil &/or capacitor, there is a matching network you will have to deal with when
adding a longer stick.
>
> -Mark
>
> ========== --- In loopantennas@yahoogroups.com, "Adam E." <gccradioscience@...>
wrote:
>
>> I have a plan in finding ways to improve the LW reception when I get the KA-35
controller cable fixed. I was thinking about making the
>> ferrite rod antenna bigger so it can pull in better than the 4.5 inch
>> ferrite rod that it comes with it.
>>
>> Is it possible to improve the LW/MW reception with switching out the old ferrite loop
stick with a 7.5 inch loopstick?
>>
>> Adam E.
>>
>>
>
>
>
>
> ----------

>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
> --
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 8.5.385 / Virus Database: 270.13.19/2245 - Release Date: 07/18/09 05:57:00
>
>

No virus found in this outgoing message.
Checked by AVG - www.avg.com
Version: 8.5.385 / Virus Database: 270.13.19/2245 - Release Date: 07/18/09 05:57:00

[Non-text portions of this message have been removed]

6701. Re: KA-35 reception improvement

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-21 21:16:03 UTC
From: John Stumm
Topic: 6698 Message: 6701

> I have a plan in finding ways to improve the LW reception when I get the KA-35 controller cable fixed. I was thinking about making the
> ferrite rod antenna bigger so it can pull in better than the 4.5 inch
> ferrite rod that it comes with it.
>
> Is it possible to improve the LW/MW reception with switching out the old ferrite loop stick with a 7.5 inch loopstick?
>
> Adam E.

Adam,
I've had good results with adapting larger ferrite rod/coil assemblies with several different base amps. My portaloop couples a ferrite loop with a Degen 31 with acceptible results, (considering its simplicity).
Also made various plug-ins for my Palomar base amp and Ramsey signal magnet. See them in ferriteantennaexperimenter group my ferroids photos section. (Portaloop and LW loop plug-in) Bottom line, whether the the base amp employs veractor tuning (Kaito/Degen, Ramsey), or variable tuning cap, (Palomar) The loop will tune. It's just a matter of dialing it in to the desired range by varing the winding numbers and diameter.
The only amplified loop I haven't modified is my Quantum QX. It's my reference to which I make comparisons. Nothing I've made quite matches up so far - at least on MW.

John

6702. Wellbrook antenna for sale on eBay

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-22 23:51:27 UTC
From: rrezazadegan
Topic: 6702 Message: 6702

I have a wellbrook ALA 1530+ antenna for sale on ebay:

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=250470319505

It's item number on eBay is 250470319505. The auction ends on July 29th.

6704. Re: KA-35 reception improvement

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-24 23:52:23 UTC
From: Adam E.
Topic: 6698 Message: 6704

Thanks for the information there. I see that there will be major improvements using this special base loop antenna amplifier. I have some great news. I did some homebrew experiments using my knowledge
in electronics. I had trouble fixing the loop antenna element so I started to tinker around with it more. Instead of using the everyday loop antenna to capacitor in parallel connection like the framed antennas we have been building for years. I had to use the other method, I reconnected the loop antenna and variable tuning capacitor in series. Connected 1 lead from the loop antenna to the variable tuning capacitor, then connected to variable tuning capacitor to the KA-35 using the white wire NOT the red one (red one powers the optional loop antenna element. Then connected the 2nd lead loop antenna wire to the ground shielded lead. And tada the KA-35 now is using a tunable loop antenna that I built not the stock one. Which means if you're going to connect to actually any RF amp you have to use the series method.

VARIABLE CAP
\
A Loop Lead -------|(------- Amp RF Input
\

B Loop Lead ---------------- Amp RF Ground Input

Adam E.

gccengineering

--- In loopantennas@yahoogroups.com, "John Stumm" <jcstumm@...> wrote:
>
>
> > I have a plan in finding ways to improve the LW reception when I get the KA-35 controller cable fixed. I was thinking about making the
> > ferrite rod antenna bigger so it can pull in better than the 4.5 inch
> > ferrite rod that it comes with it.
> >
> > Is it possible to improve the LW/MW reception with switching out the old ferrite loop stick with a 7.5 inch loopstick?
> >
> > Adam E.
>
> Adam,
> I've had good results with adapting larger ferrite rod/coil assemblies with several different base amps. My portaloop couples a ferrite loop with a Degen 31 with acceptible results, (considering its simplicity).
> Also made various plug-ins for my Palomar base amp and Ramsey signal magnet. See them in ferriteantennaexperimenter group my ferroids photos section. (Portaloop and LW loop plug-in) Bottom line, whether the the base amp employs veractor tuning (Kaito/Degen, Ramsey), or variable tuning cap, (Palomar) The loop will tune. It's just a matter of

dialing it in to the desired range by varing the winding numbers and diameter.
> The only amplified loop I haven't modified is my Quantum QX. It's my reference to which I make comparisons. Nothing I've made quite matches up so far - at least on MW.
>
> John
>

6706. Re: Loop on house roof?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-28 09:51:13 UTC
From: mhatlau
Topic: 6640 Message: 6706

Don't have time for much of a reply (Gotta Work), but Jim says most of what I wanted to say. I will point out that you will gain nothing from using Coax TV line for the large loop. Insulated wire from Home Depot, such as Bell wire, is much cheaper, and works just as well.

I would also point out that Houses and Power Lines are where noise is generated. Rather than circling the house, try keeping the antenna as far away from these structures as possible. Every foot helps. Use an isolation transformer at the juncture of the loop wires, and coax as the feed to your receiver. Don't forget the lightning arrestors. Also consider the PAR EF-SWL antenna. It is not a loop, but it is an excellent antenna for a reasonable price. And requires only one tall support and a ground rod. Trees are excellent supports if you include a pully/sash-weight support line to keep the wire from being pulled apart when the tree moves. No climbing needed.

--- In loopantennas@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 11:53 PM 7/4/2009 -0700, you wrote:
>
>
>
> >I'm still new about loops and very weak on the electronics parts, still
> >can follow some of it. I cannot climb a ladder or put up a tower but might
> >get someone to put a loop on my roof or roof to shop to patio and back to
> >my window. I cannot get into my attic anymore, too weak to climb the damn
> >ladder.
> >
> >How would TV cable work as a 21 foot diameter (66 ft circumference) loop
> >on a slanted roof for 80, 40 and 20 Meters? If it would work, how should
> >it be fed into a receiver? I only have several V-caps and a RS DX-398 and
> >a shallow ground, no other equipment, no antenna tuners other than the
> >several V-caps.
> >
> >I really don't want or have room in my "office" for any other equipment.
> >It is full of computor equipment, 3 desks full of stuff, guns and my
> >"gunsmithing" working desk where I fix anything needs fixing.
> >
> >Or I might be able to run the TV coax from my roof to my shop about 30
> >feet away and from there to my patio roof, another 25 feet and back to my
> >roof, another 10 feet for a rough triangle of about 65 feet, really
> >needing about 66 ft if the formula is correct for 15 MHz, the highest
> >frequency. Does that sound right?
> >
> >If anyone could offer an explanation, be graphic in details about running
> >any connections from the antenna and to my receiver.
> >

> >Bill McGraw
> >
> >"Somewhere South of Chicago"
> >
> >Greenville, MS
>
> Hi Bill,
>
> I take it you want to use the loop for receiving SW broadcast and other
> signals on your DX-398 receiver. The kind of loop you describe is more or
> less full-size ... and not a tuned small loop. You will not need a tuner
> or your v-caps. You will have more than enough signal for your radio
> without precise tuning or matching. You mention laying out TV cable as the
> antenna .... a good choice as it is insulated and should do good service
> over a long period of time. You will treat the whole cable (shield and
> center conductor) as a single conductor. I would not worry about exact
> length ... you mention 66' which indeed is approximately resonant at 15mhz
> and present a reasonably low impedance value at the feed point which can be
> fed with another length of TV cable as the feed line. It would be best
> from a physical point of view if your cable is terminated at each end with
> a TV connector. I would simply use another piece of standard TV cable as a
> feed line. The project would then be to layout the first length in a more
> or less circular pattern so the two ends are almost together. At that
> point (feed point) place one end of the second piece of TV coax (feed-line)
> with the other end at your listening position .. next to the DX398.
>
> The trick will be to fabricate an appropriate junction at the feed point of
> the loop and at the receiver. At the loop feed point you want your
> junction to make a connection between the shield of the feed line with one
> end of the loop .... and ..... the center conductor of the feed line to the
> other side of the loop feed point. Then, at the receiver you will have to
> fabricate a junction that will connect the end of the TV feed line to the
> connector on your RS DX-398. There are various TV cable hardware adapters
> available and you will have to use your imagination and mechanical skills
> to manufacture the two junctions (at the loop feed point and at the
> receiver). Be sure the junction at the feed point (on the roof) is weather
> proof. The antenna will provide all the SW signals your receiver can
> handle without any tuning required.
>
> If you were planning to transmit with the loop then other strategies would
> have to be employed which would more precisely match the impedance at the
> feed point to the feed line and more precisely match the feed line to the
> radio for maximum efficiency. However for SW listening these mismatches
> are of minor concern and your radio has more than enough gain to compensate.
>
> Jim, VE3CI
>

6707. NEW LOOP

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-07-28 15:18:04 UTC
From: EDUARDO
Topic: 6707 Message: 6707

Hello for all!

This is my new construction " Antenna Loop 1,00 m. x 1,00 ms

Well built this antenna only to listen on MW. Your income is extraordinary, in rapid test could hear the station on 1610 kHz Radio Caribean Beacon in Anguilla, as well as several other broadcasters in other countries such as Argentina in the range x-band, Uruguay in 1050 kHz, recommend its construction for those who like mw.
Offer some photos on the site www.radiodx.qsl.br on page "Radioescuta"

Respectfully,

Eduardo L. Castaldelli
Grid Locator: GG66qq
Brasil
www.radiodx.qsl.br

[Non-text portions of this message have been removed]

6708. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-01 12:58:17 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6708

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6709. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-01 12:58:17 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6709

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6710. Hidden stealth wire loop around UPVC gutter - Thoughts Please -

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-02 09:36:03 UTC
From: Colin Lowe
Topic: 6710 Message: 6710

Hi all,

I need to install an aerial that will work on 80/40m at my home QTH. I'm not looking for DX but enjoy good inter-UK contacts. One of my interests is QRP on 80m so the aerial needs to be as efficient as possible on 80m. Also if the tuner will allow the loop to be tuned on 40m & 20m, I'd be more than happy :)
The aerial needs to be hidden as much as possible.
I'm thinking of running a simple insulated wire around the clips that support the UPVC gutter of my home. The rain water gutter is 5.2m above ground level and if I install a full loop around the gutter it will total 31.4m (2 sides 8.7m and 2 sides 7m). I intend to feed the loop and tune it with an SG-237 auto-tuner from SGC mounted at the loop.
Now for the questions....
Q1. What gauge wire should I use:
Q2. Would it be worth making some loading coils so that the electrical length of the loop is about 40m and if so where should they be placed in the loop.

Any other thought or advice gratefully received.

73 de Colin

6711. Re: [loopantennas] Hidden stealth wire loop around UPVC gutter - Thoughts Please -

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-02 18:23:54 UTC
From: Jim Dunstan
Topic: 6710 Message: 6711

At 09:36 AM 8/2/2009 +0000, you wrote:
>
>
>Hi all,
>
>I need to install an aerial that will work on 80/40m at my home QTH. I'm
>not looking for DX but enjoy good inter-UK contacts. One of my interests
>is QRP on 80m so the aerial needs to be as efficient as possible on 80m.
>Also if the tuner will allow the loop to be tuned on 40m & 20m, I'd be
>more than happy :)
>The aerial needs to be hidden as much as possible.
>I'm thinking of running a simple insulated wire around the clips that
>support the UPVC gutter of my home. The rain water gutter is 5.2m above
>ground level and if I install a full loop around the gutter it will total
>31.4m (2 sides 8.7m and 2 sides 7m). I intend to feed the loop and tune it
>with an SG-237 auto-tuner from SGC mounted at the loop.
>Now for the questions....
>Q1. What gauge wire should I use:
>Q2. Would it be worth making some loading coils so that the electrical
>length of the loop is about 40m and if so where should they be placed in
>the loop.
>
>Any other thought or advice gratefully received.
>
>73 de Colin

Hi Colin

The SGC-237 should have no difficulty matching the 31m (102 ft approx) loop. The gauge will not be of consequence except as to its visibility. If the gutter is white ... then use white insulated wire and if black use black hi hi. #14 gauge and flexible would be ideal. I have some black flexible fwire that would be ideal ... It is called 'flexi-something or other'. Loading coils will be counter productive. SGC used to market a similar 'stealth' antenna that consisted of 80ft (25m approx) of insulated flexible wire which would load well 160-10m using their antenna coupler.

The antenna will load well ... however the radiation pattern will be mostly vertical on the lower frequencies ... and a bit better on the higher frequencies. However you should have no difficulty making contacts on all bands and your transceiver will be perfectly happy.

Jim, VE3CI

6712. Re: [loopantennas] Hidden stealth wire loop around UPVC gutter - Thoughts Please -

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-02 21:04:31 UTC
From: M HOLDEN
Topic: 6710 Message: 6712

Resonance on 80 and working other bands harmonically related is do-able. Can you put up a loop of (ANY GUAGE) wire around the plastic gutter and extend it to 283 Feet in the garden? If that is just at fence-top height you will work 80 - 10 metres no sweat ! The results will amaze you. Use twin feeder of 300 ohm slotted ribbon to keep the noise minimal. Any feeder length will work as it it is theoretically non-radiating when you feed a balanced antenna, and the impedance will be "medium" throughout the hf spectrum.
If not, just use the largest loop that will fit into your plot and trust your SG-237 to do it's work.

If you introduce loading coils, it complicates life and gives inductive reactance which will only be ideal on one band and certainly not all. Forty metre resonance will beachieved if you cut your loop at 141Ft 6ins. This would work on 40 - 10 very well but 80 would be poor. If you have a good earth, then strap the feeders for the 80M band but expect the noise to be higher. Mike G4HOL.

From: Colin Lowe <g1ivg@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, 2 August, 2009 10:36:03 AM
Subject: [loopantennas] Hidden stealth wire loop around UPVC gutter - Thoughts Please -

Hi all,

I need to install an aerial that will work on 80/40m at my home QTH. I'm not looking for DX but enjoy good inter-UK contacts. One of my interests is QRP on 80m so the aerial needs to be as efficient as possible on 80m. Also if the tuner will allow the loop to be tuned on 40m & 20m, I'd be more than happy :)
The aerial needs to be hidden as much as possible.
I'm thinking of running a simple insulated wire around the clips that support the UPVC gutter of my home. The rain water gutter is 5.2m above ground level and if I install a full loop around the gutter it will total 31.4m (2 sides 8.7m and 2 sides 7m). I intend to feed the loop and tune it with an SG-237 auto-tuner from SGC mounted at the loop.
Now for the questions... .
Q1. What gauge wire should I use:
Q2. Would it be worth making some loading coils so that the electrical length of the loop is about 40m and if so where should they be placed in the loop.

Any other thought or advice gratefully received.

73 de Colin

[Non-text portions of this message have been removed]

6713. Re: [loopantennas] Hidden stealth wire loop around UPVC gutter - Thoughts Please -

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-02 22:01:27 UTC
From: Jim Dunstan
Topic: 6710 Message: 6713

At 09:36 AM 8/2/2009 +0000, you wrote:
>
>
>Hi all,
>
>I need to install an aerial that will work on 80/40m at my home QTH. I'm
>not looking for DX but enjoy good inter-UK contacts. One of my interests
>is QRP on 80m so the aerial needs to be as efficient as possible on 80m.
>Also if the tuner will allow the loop to be tuned on 40m & 20m, I'd be
>more than happy :)
>The aerial needs to be hidden as much as possible.
>I'm thinking of running a simple insulated wire around the clips that
>support the UPVC gutter of my home. The rain water gutter is 5.2m above
>ground level and if I install a full loop around the gutter it will total
>31.4m (2 sides 8.7m and 2 sides 7m). I intend to feed the loop and tune it
>with an SG-237 auto-tuner from SGC mounted at the loop.
>Now for the questions....
>Q1. What gauge wire should I use:
>Q2. Would it be worth making some loading coils so that the electrical
>length of the loop is about 40m and if so where should they be placed in
>the loop.
>
>Any other thought or advice gratefully received.
>
>73 de Colin

Hi Colin

A further comment. You mentioned putting the tuner out at the feed point of the loop. With no doubt that will be the most effective way to feed the loop on all bands with no problems and use a coax feed line. If you place the tuner at the feed point then you can use just about anything as the antenna ... introducing a balanced feed line between the antenna and the xcvr will complicate the situation. Since you are going to use the loop on all bands resonance is not an issue. There are certain unique situations where you may use a lumped inductance with a loop. However the purpose is not to obtain resonance but to introduce a phase shift which in turn introduces some directivity in the radiation pattern. It is used in a mono-band situation where the loop is made a half-wavelength and oriented in a vertical position. The inductors are placed in vertical portions of the loop. Some of the early antenna handbooks discuss this antenna arrangement. In your case adding lumped inductance will serve no purpose.

Jim, VE3CI

6714. Re: Hidden stealth wire loop around UPVC gutter - Thoughts Please -

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-04 19:12:48 UTC
From: Colin Lowe
Topic: 6710 Message: 6714

Many thanks Jim and Mike for you reply's.

Weather permitting I will install the loop this weekend and report back on it's performance. I plan to run a length of RG213 from the shack into the attic and then out to the SGC tuner mounted under the eaves. Then I will run a 1mm insulated wire around the outside of the plastic gutter and back to the tuner in a loop. For the time being I will keep it just around the house and not extend it to run down the garden as I want to keep it hidden as much as possible.

Thanks again and I will report back next week once I have tested it's performance.

73 de Colin (G1IVG)

6715. New Yahoo group formed to discuss simple antenna building - all welcome

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-10 13:36:42 UTC
From: Stan
Topic: 6715 Message: 6715

This is to let the amateur radio and SWL community know about a new Yahoo group for the discussion on simple antenna construction.
http://groups.yahoo.com/group/Radio_Antenna/

A discussion group restricted to the technical aspects, methods and techniques for developing and building amateur and short wave listener radio antenna

Members of the list are encouraged to ask questions and post answers, links, photos and files with the discussion directed to their experience, needs and solutions.

Portable and QRP applications are of special interest to the group.

Please feel free to post your EZNEC files and results. I am in the process of learning how to use this powerful tool and expect others interested in building antenna would be also.

Stan AK0B

6716. New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-11 23:29:41 UTC
From: dean_0_way
Topic: 162 Message: 6716

After messing around with a mini Bog wire antenna for a few day's i started to think of my next project;

I have a crawl space in the upper part of the house that would be a nice place for a Bigger Loop,so in preperation for that ,today i built a 3 foot loop with 4 inch wood ,added 8 turns of 18 ga. insulated wire ,and an old 2 stage tuning cap.

I went outside with it for the first test,in the middle of the afternoon it will clearly bring in stations of the 5000w range from 300-400 miles away,also had one from 200 miles away that is a 500w.

But as you might suspect my old nemesis is back ,besides the home freg. I now have several harmonics above and below 1350 ,so what i'm wondering is if there is a way to block that 1350khz signal,and if that's possible will it also kill the harmonics?

Iv'e been looking around for a fix but have'nt come up with a great fix so far .

Tonight I will test it again after my local powers down but i'm sure the results will be about the same,and i want to see how far i can push this loop. :)

If i can get some magic bullet for this problem i'm going to build a second loop and try to phase them both in the crawl space,as soon as i figure a way to adjust the tuning cap from 10 feet away ? lol :\

Any help appreciated Thanks

Dean_0

6717. Re: [loopantennas] New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 03:56:53 UTC
From: Jim Dunstan
Topic: 162 Message: 6717

At 11:29 PM 8/11/2009 +0000, you wrote:

>But as you might suspect my old nemesis is back ,besides the home freg. I
>now have several harmonics above and below 1350 ,so what i'm wondering is
>if there is a way to block that 1350khz signal,and if that's possible will
>it also kill the harmonics?
>
>Iv'e been looking around for a fix but have'nt come up with a great fix so
>far .

Hi,

Not sure what you mean about harmonics and how they relate to 1350 khz. .... e.g. 'your nemesis'. Is it a strong station on 1350 that appears on your receiver at other points on the dial ??? . Either the station is overloading your receiver front end and/or the image is coming through. What you describe sounds like a receiver problem. 1350 khz can't be a harmonic since the fundamental would have to be 675 and stations are assigned at 10khz intervals ... e.g. either 670 khz or 680 khz. If the station is on 1350 then the harmonic would be 2700 khz ... way out of the MW broadcast band.

Describe what you are hearing. Forgive me if you have already done so.

Jim

6718. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 05:22:32 UTC
From: dean_0_way
Topic: 162 Message: 6718

> Hi,
>
> Not sure what you mean about harmonics and how they relate to 1350
> khz. .... e.g. 'your nemesis'. Is it a strong station on 1350 that
> appears on your receiver at other points on the dial ??? . Either the
> station is overloading your receiver front end and/or the image is coming
> through. >
> Describe what you are hearing. Forgive me if you have already done so.
>
> Jim
>

The station is at 1350 khz and a block and a half from my house ,the harmonics i refered to was i get that station on 1280 and several places above 1350,so i think your right about overload,as you might have guessed i'm putting big antennas on smaller radio's to get distant DX ,just to compare i have a 2100 kaito with a 16 inch tuned loop on it and sometimes it does the same thing although not as bad,

Beside this station my nearset other AM station is 70 miles away so you can see i have a pretty tuff time getting enough gain to recieve far away, with this flame thrower in my back yard, he heh.

But i thought with a little black magic i might figure it out ?
Besides i don't have enything else interesting to do :\

thanks ,
Dean_0

6719. RE: [loopantennas] Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 09:46:09 UTC
From: Notareal
Topic: 162 Message: 6719

Hi !

Have you thought about using band-stop filter or band-rejection filter for that frequency ?

BR

> To: loopantennas@yahoogroups.com
> From: dean_0_way@...
> Date: Wed, 12 Aug 2009 05:22:32 +0000
> Subject: [loopantennas] Re: New Loop
>
> > Hi,
> >
> > Not sure what you mean about harmonics and how they relate to 1350
> > khz. .... e.g. 'your nemesis'. Is it a strong station on 1350 that
> > appears on your receiver at other points on the dial ??? . Either the
> > station is overloading your receiver front end and/or the image is coming
> > through. >
> > Describe what you are hearing. Forgive me if you have already done so.
> >
> > Jim
> >
> The station is at 1350 khz and a block and a half from my house ,the harmonics i refered to was i get that station on 1280 and several places above 1350,so i think your right about overload,as you might have guessed i'm putting big antennas on smaller radio's to get distant DX ,just to compare i have a 2100 kaito with a 16 inch tuned loop on it and sometimes it does the same thing although not as bad,
>
> Beside this station my nearset other AM station is 70 miles away so you can see i have a pretty tuff time getting enough gain to recieve far away, with this flame thrower in my back yard, he heh.
>
>
> But i thought with a little black magic i might figure it out ?
> Besides i don't have enything else interesting to do :\
>
> thanks ,
> Dean_0
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>

> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

Show them the way! Add maps and directions to your party invites.
http://www.microsoft.com/windows/windowslive/products/events.aspx

[Non-text portions of this message have been removed]

6720. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 10:10:11 UTC
From: Ya`akov N. Miles
Topic: 162 Message: 6720

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> After messing around with a mini Bog wire antenna for a few day's
> started to think of my next project;
>
> I have a crawl space in the upper part of the house that would be
> a nice place for a Bigger Loop,so in preperation for that ,today I
> built a 3 foot loop with 4 inch wood ,added 8 turns of 18 ga.
> insulated wire ,and an old 2 stage tuning cap.
>
[--CUT--]
> Dean_0
>

Sorry, I don't see why a big loop is required for RECEIVING.
I have a six transistor AM-only Radio (500-2000 KiloCycles/sec)
that picks up stations from all over North America when I use
it here in my ground floor suite in this multi-story wood frame
apartment building. The loop antenna is a small multi-turn
loop wound on a Ferrite (Ferrite is Magnetic) 1/2 inch diameter
rod. Please note the difference between CAPTURE AREA
(i.e. how much signal an antenna "brings in") as opposed to
the SIGNAL/NOISE ratio. A deficit in CAPTURE AREA can usually
be made up with a high gain low noise solid-state preamplifier.
In my case of my portable "PLAY-MATE" six transistor AM-only
radio, the loop is HIGH-Q (very low loss) and is tuned in
tandem with the oscillator by the two-gang capacitor in the
radio. (One gang for Loop, one gang for Heterodyne Oscillator)

Receiving loops do NOT have to be efficient. Transmitting loops
do, so they are usually bigger. For info on Transmitting loops

http://members.shaw.ca/yehudi2/loop.html

73 de Yakov, VE7ALQ - Same Callsign since 1969, Fists #11117

- Where radios are DC, not AC/DC or AC

http://members.shaw.ca/yehudi2/tim.jpg << When I was little.

http://www.yaakov.ca << When I grew up. Scared of me, U.S.A.?

6721. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 16:18:03 UTC
From: gmcjetpilot
Topic: 162 Message: 6721

> "I have a six transistor AM-only Radio (500-2000 KiloCycles/sec)
> that picks up stations from all over North America when I use
> it here in my ground floor suite in this multi-story wood frame
> apartment building."

>"PLAY-MATE" six transistor AM-only radio"

What kind of super radio is that "Playmate"?
The only one I found that was close with the name playmate.

http://www.richardsradios.co.uk/playmate.html

>"500-2000 KiloCycles/sec" That is an Odd range I have never heard in AM radios. Is that a European thing? How old is this thing?

Please tell us more, where do you live and what stations have you logged. I am impressed if its all over North America. I'm going to get one of those playmates. Also could you give the design specs for that super loop you have. I'd like to replicate it.

I have a tiny pocked Realistic AM/FM radio (late 1990's) with digital tune. With my Terk AM Advantage 9" loop I can tune in some impressive MW DX stations. The internal loop stick is 2.5" long (may be even closer to 2").

What do you have against large loop antennas? The larger loop also serves in other aspects, such as LF reception. Many people DX with crystal radios or one tube radios. If the conditions are right you can do amazing things with basic receivers and antennas.

Cheers George

PS that is a serious home page you have.

--- In loopantennas@yahoogroups.com, "Ya`akov N. Miles" <ve7alq@...> wrote:
>
> Sorry, I don't see why a big loop is required for RECEIVING.
> I have a six transistor AM-only Radio (500-2000 KiloCycles/sec)
> that picks up stations from all over North America when I use
> it here in my ground floor suite in this multi-story wood frame
> apartment building. The loop antenna is a small multi-turn
> loop wound on a Ferrite (Ferrite is Magnetic) 1/2 inch diameter
> rod. Please note the difference between CAPTURE AREA
> (i.e. how much signal an antenna "brings in") as opposed to
> the SIGNAL/NOISE ratio. A deficit in CAPTURE AREA can usually
> be made up with a high gain low noise solid-state preamplifier.
> In my case of my portable "PLAY-MATE" six transistor AM-only
> radio, the loop is HIGH-Q (very low loss) and is tuned in
> tandem with the oscillator by the two-gang capacitor in the
> radio. (One gang for Loop, one gang for Heterodyne Oscillator)

>
> Receiving loops do NOT have to be efficient. Transmitting loops
> do, so they are usually bigger. For info on Transmitting loops
>
> http://members.shaw.ca/yehudi2/loop.html
>
> 73 de Yakov, VE7ALQ - Same Callsign since 1969, Fists #11117
>
> - Where radios are DC, not AC/DC or AC
>
> http://members.shaw.ca/yehudi2/tim.jpg << When I was little.
>
> http://www.yaakov.ca << When I grew up. Scared of me, U.S.A.?
>

6722. Re: [loopantennas] Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 16:51:07 UTC
From: Jim Dunstan
Topic: 162 Message: 6722

At 05:22 AM 8/12/2009 +0000, you wrote:

> > khz. .... e.g. 'your nemesis'. Is it a strong station on 1350 that
> > appears on your receiver at other points on the dial ??? . Either the
> > station is overloading your receiver front end and/or the image is coming
> > through. >
> > Describe what you are hearing. Forgive me if you have already done so.
> >
> > Jim
> >
>The station is at 1350 khz and a block and a half from my house ,the
>harmonics i refered to was i get that station on 1280 and several places
>above 1350,so i think your right about overload,as you might have guessed
>i'm putting big antennas on smaller radio's to get distant DX ,just to
>compare i have a 2100 kaito with a 16 inch tuned loop on it and sometimes
>it does the same thing although not as bad,
>
>Beside this station my nearset other AM station is 70 miles away so you
>can see i have a pretty tuff time getting enough gain to recieve far away,
>with this flame thrower in my back yard, he heh.
>
>But i thought with a little black magic i might figure it out ?
>Besides i don't have enything else interesting to do :\
>
>thanks ,
>Dean_O

Hi Dean_O

I understand your problem and empathize with you. At my location ... I have no local MW broadcast stations within a couple of hundred miles!! MW DXing is a pleasure. back to your problem. If you want to work DX on MW with a strong local station the ideal receiving combination would be as follows:

1. A receiver WITHOUT a built-in ferrite loop antenna .... or at least disconnects the ferrite loop antenna when you plug in an external antenna.
2. Construct or purchase a HI-Q band pass filter (pre-selector) which can be placed between your external antenna and your receiver antenna input.
3. Construct your external loop (not too big ... and located where you can adjust both orientation and coupling to the receiver)
4. You could make 2 similar loops .... The first loop that tunes the desired station must be oriented for maximum null on the 1350 station. Jiggle orientation and tuning for best reception of DX station. The second loop can then be oriented in relation to the first loop and tuned to the 1350 station. Jiggle orientation and tuning to

minimize 1350 reception. In other words, the second loop is simply brought into the vicinity of the first loop and will 'suck out 1350 signals. This is an old trick used by crystal set radio aficionados.

When you 'jiggle' the tuning in the second loop you are adjusting the phase of the 1350 signal such that one loop field cancels the other loop field. There is commercial gear available that will accomplish this ... and they are advertised as noise cancelling devices. MFJ makes such a device.

Between nulling and phasing your 2 small loops the DX station is maximized and the interfering station is maximized. Ideally the first loop would be coupled to the radio via the preselector. However if your radio has a ferrite loop then it will be inductively coupled to the loops and will have to 'jiggled' as well.

Jim

6723. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 17:22:00 UTC
From: dean_0_way
Topic: 162 Message: 6723

--- In loopantennas@yahoogroups.com, Notareal <not_a_real@...> wrote:
>
>
> Hi !
>
> Have you thought about using band-stop filter or band-rejection filter for that frequency
?
>
> BR
>
There yaa go! now we are on the right track .

Thanks

Dean_0

6724. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 17:35:12 UTC
From: dean_0_way
Topic: 162 Message: 6724

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
> I understand your problem and empathize with you. At my location ... I
> have no local MW broadcast stations within a couple of hundred miles!! MW
> DXing is a pleasure.

OK now along with my other problem..... I'm jealous -Hahah
---
2. Construct or purchase a HI-Q band pass filter (pre-selector) which can
be placed between your external antenna and your receiver antenna input.

Thanks ..this is the direction i'm going with this idea,i was hoping to avoid buying a bunch of stuff ,but a phaser and a few other things are on my wish list ;\

thanks all

Dean-0

6725. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 21:37:04 UTC
From: dean_0_way
Topic: 162 Message: 6725

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> --- In loopantennas@yahoogroups.com, Notareal <not_a_real@> wrote:
> >
> >
> > Hi !
> >
> > Have you thought about using band-stop filter or band-rejection filter for that
frequency ?
> >
> > BR
> >
> There yaa go! now we are on the right track .
>
> Thanks
>
> Dean_0
>
I did some more research and it looks like what i might need is a notch filter ?
Dean-0

6726. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-12 22:14:02 UTC
From: Hiram
Topic: 162 Message: 6726

Dean-o,
I think a simple filter can be made with a coil and variable cap in series with the antenna (that is, between the antenna and radio, coil and cap in series with each other) and tuning the variable to null out the offending station. I read this somewhere, but my computer is in the shop and all my links, etc. are on it. Capacitor should be standard 365Pf variable, coil can be anything that will resonate on the BC band, a small ferrite from an old radio would probably work. However, if it's overloading the front end of your radio and getting into the IF stage, then this probably won't work!
Then I would try to shield the whole radio; if it's small enough, you could put it in a cookie tin or similar, if it's big, you could foil the inside, just make sure the foil doesn't short out to anything, and make sure it's grounded.

Some things to try, anyway. Good luck and keep us informed,

Pappy Hiram

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@> wrote:
> >
> > --- In loopantennas@yahoogroups.com, Notareal <not_a_real@> wrote:
> > >
> > >
> > > Hi !
> > >
> > > Have you thought about using band-stop filter or band-rejection filter for that frequency ?
> > >
> > > BR
> > >
> > There yaa go! now we are on the right track .
> >
> > Thanks
> >
> > Dean_0
> >
> I did some more research and it looks like what i might need is a notch filter ?
> Dean-0
>

6727. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-13 12:12:08 UTC
From: gmcjetpilot
Topic: 162 Message: 6727

The first person to mentioned band pass filters, rightly so, gold star for them. You can build a band-pass or band-stop/notch, low, high for that freq.

http://en.wikipedia.org/wiki/Band-pass_filter

Lots of info on the web. There are plans to make a filter box with selectable freq. This goes on the front end.

Try making some filters, they are easy to make.
http://www.arrl.org/tis/info/rf-filter.html
http://focus.ti.com/lit/an/sloa093/sloa093.pdf

There could be some local RFI on that freq. Have you tried to hunt it down, Direction find or is it omnipresent? Have you tried different radios?

I have two strong MW stations near my home at 850KHz 3 miles (10KW Day 5 KW Night) ... AND ... 680 KHz 6.6 mile due East (50KW Clear channel, Omni day, N-S Night). Thankfully at night they go directional (I'm to the side of pattern) or drop power in half. Surprisingly they don't cause much problem; except I forget DX'ing any stations on those exact two freq, especially to the West or S-West and N-West, which is too bad. A loop is great, but if I point it West, it is pointing East as well. When I point my Loop more or less N-S the two strong stations to the East almost disappeared. YEA for LOOPS!

May be I can get a omni directional antenna, but my loops have classic bi-directional semi omni patterns. If I point them West they are pointing right at these stations East. There are stations on these two freq to the West in TX, MO, IA, GA, NM, MT, CA, WA I just can't get. When the stations are North or South no problem with the loop and good radio.

These stations don't cause to much problems for me with a loop antenna an a digital PPL Dual conversion radio with a dozen internal RF microprocessor controlled filters and selectable band width, I don't have problems.

However with my old 1940's and 50's tube radios (just Zenith AM/FM, no super SW boat-anchors), there are intermodulation issues and may be image rejection issues. Superhet radios have good qualities but some draw backs. You may know all about superheterodyne radio design. I am no expert but Image response or image response rejection ratio (IMRR) can cause problems. If you have an issue with 1350Khz the problem may be 455Khz lower, say at 890Khz or 900Khz. Is this a problem on all your radios? What kind of radios do you have? Do you have a strong station nearby (radio-locator.com).

Also Graveyard channels, where lots of low powered stations operate, typically 1220-1500khz, 1230, 1240, 1340, 1400, 1450, and 1490khz, makes a mess at night anyway. 1350Khz is in that ball park.

Cheers

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>

> After messing around with a mini Bog wire antenna for a few day's i started to think of my next project;
>
> I have a crawl space in the upper part of the house that would be a nice place for a Bigger Loop,so in preperation for that ,today i built a 3 foot loop with 4 inch wood ,added 8 turns of 18 ga. insulated wire ,and an old 2 stage tuning cap.
>
> I went outside with it for the first test,in the middle of the afternoon it will clearly bring in stations of the 5000w range from 300-400 miles away,also had one from 200 miles away that is a 500w.
>
> But as you might suspect my old nemesis is back ,besides the home freg. I now have several harmonics above and below 1350 ,so what i'm wondering is if there is a way to block that 1350khz signal,and if that's possible will it also kill the harmonics?
>
> Iv'e been looking around for a fix but have'nt come up with a great fix so far .
>
> Tonight I will test it again after my local powers down but i'm sure the results will be about the same,and i want to see how far i can push this loop. :)
>
> If i can get some magic bullet for this problem i'm going to build a second loop and try to phase them both in the crawl space,as soon as i figure a way to adjust the tuning cap from 10 feet away ? lol :\
>
> Any help appreciated Thanks
>
> Dean_0
>

6728. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-13 12:27:25 UTC
From: aircheckIover
Topic: 162 Message: 6728

Like Jim suggests, I use a 2ft multi-turn loop and a CCrane Twin-Ferrite. The T-F direct connects to the radio, the head of the T-F is placed very close to the loop. I play one pickup pattern atgainst the other and can null two stations which are physically only 30 degrees apart. That's impressive. Yes, it takes some "jiggling" but not only do I get super-tight nulls, the gain from the two antennas is literally 1+1 (doubling gain of either single antenna) and since both loops are tuned circuits, I get no overloading or image problems.

-Mark

==========

> Hi Dean_O
>
> I understand your problem and empathize with you. At my location ... I
> have no local MW broadcast stations within a couple of hundred miles!! MW
> DXing is a pleasure. back to your problem. If you want to work DX on MW
> with a strong local station the ideal receiving combination would be as
> follows:
>
> 1. A receiver WITHOUT a built-in ferrite loop antenna .... or at least
> disconnects the ferrite loop antenna when you plug in an external antenna.
> 2. Construct or purchase a HI-Q band pass filter (pre-selector) which can
> be placed between your external antenna and your receiver antenna input.
> 3. Construct your external loop (not too big ... and located where you can
> adjust both orientation and coupling to the receiver)
> 4. You could make 2 similar loops .... The first loop that tunes the
> desired station must be oriented for maximum null on the 1350
> station. Jiggle orientation and tuning for best reception of DX
> station. The second loop can then be oriented in relation to the first
> loop and tuned to the 1350 station. Jiggle orientation and tuning to
> minimize 1350 reception. In other words, the second loop is simply brought
> into the vicinity of the first loop and will 'suck out 1350 signals. This
> is an old trick used by crystal set radio aficionados.
>
> When you 'jiggle' the tuning in the second loop you are adjusting the phase
> of the 1350 signal such that one loop field cancels the other loop
> field. There is commercial gear available that will accomplish this ...
> and they are advertised as noise cancelling devices. MFJ makes such a device.
>
> Between nulling and phasing your 2 small loops the DX station is maximized
> and the interfering station is maximized. Ideally the first loop would be
> coupled to the radio via the preselector. However if your radio has a
> ferrite loop then it will be inductively coupled to the loops and will have
> to 'jiggled' as well.
>

> Jim
>

6729. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-13 23:22:42 UTC
From: dean_0_way
Topic: 162 Message: 6729

--- In loopantennas@yahoogroups.com, "Hiram" <daveleb55@...> wrote:
>
> Dean-o,
> I think a simple filter can be made with a coil and variable cap in series with the antenna
>
> Pappy Hiram
>
Ok great maybe when you get your machine back if you have a link you can post it for me?

Thanks for all the info guy's i found many of the same links that were posted ,the only problem is that i am schematically challenged , or was that schematic A-D-D? ;0

Dean_0

6730. Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-15 15:44:08 UTC
From: brian russell
Topic: 6715 Message: 6730

Hi,
Has anyone joined this new group, I have had no luck
as ' subscribe messages ' just bounce back !!!!!
72, Brian, G0NSL-QRP.

----- Original Message -----
From: Stan
To: loopantennas@yahoogroups.com
Sent: Monday, August 10, 2009 2:36 PM
Subject: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

This is to let the amateur radio and SWL community know about a new Yahoo group for the discussion on simple antenna construction.
http://groups.yahoo.com/group/Radio_Antenna/

A discussion group restricted to the technical aspects, methods and techniques for developing and building amateur and short wave listener radio antenna

Members of the list are encouraged to ask questions and post answers, links, photos and files with the discussion directed to their experience, needs and solutions.

Portable and QRP applications are of special interest to the group.

Please feel free to post your EZNEC files and results. I am in the process of learning how to use this powerful tool and expect others interested in building antenna would be also.

Stan AK0B

[Non-text portions of this message have been removed]

6731. Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-15 20:55:11 UTC
From: Andy
Topic: 6715 Message: 6731

> Has anyone joined this new group, I have had no luck
> as ' subscribe messages ' just bounce back !!!!!

Yes. I subscribed via the web (go to the URL specified and click on Join).
Of course you need a Yahoo ID to join that way.

If you prefer the email method to join, if your emails sent to
"Radio_Antenna-subscribe (at) yahoogroups.com" bounce back to you, then you
probably have a typo in that address. The address of that form is
universal to all Yahoogroups and ought to work.

Andy

6732. Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-16 07:50:21 UTC
From: brian russell
Topic: 6715 Message: 6732

Andy,
Thank you for the information, I will try again
paying attention to my spelling hi!
72, Brian, G0NSL-QRP.

----- Original Message -----
From: Andy
To: loopantennas@yahoogroups.com
Sent: Saturday, August 15, 2009 9:55 PM
Subject: Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

[Non-text portions of this message have been removed]

6733. Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-16 18:01:05 UTC
From: Mike-WE0H
Topic: 6715 Message: 6733

It's a very active Group. I joined last week.

Mike
WE0H

brian r wrote:
> Hi,
> Has anyone joined this new group, I have had no luck
> as ' subscribe messages ' just bounce back !!!!!
> 72, Brian, G0NSL-QRP.

6734. Re: New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-16 22:42:46 UTC
From: jr_dakota
Topic: 162 Message: 6734

That's pretty much how I built mine, I bought a 3 dollar radio at a dollar store and took out the loopstick and tuning cap since it's already set up to tune the AM band and placed them in series between the antenna feedpoint and ground

I would recommend putting it in a shielded box and place it right at the feedpoint of the antenna ... It'll be outdoors but you only need to tune it once so that's not a big deal

The notch will be kinda broad so you'll lose a station or two just below and just above the target station .... If you need a narrower notch then you need a higher Q inductor/coil like an aircore wound on a piece of 1 1/2" PVC

But for most people the ferrite loopstick will do just fine

JR

--- In loopantennas@yahoogroups.com, "Hiram" <daveleb55@...> wrote:
>
> Dean-o,
> I think a simple filter can be made with a coil and variable cap in series with the antenna (that is, between the antenna and radio, coil and cap in series with each other) and tuning the variable to null out the offending station. I read this somewhere, but my computer is in the shop and all my links, etc. are on it. Capacitor should be standard 365Pf variable, coil can be anything that will resonate on the BC band, a small ferrite from an old radio would probably work. However, if it's overloading the front end of your radio and getting into the IF stage, then this probably won't work!
> Then I would try to shield the whole radio; if it's small enough, you could put it in a cookie tin or similar, if it's big, you could foil the inside, just make sure the foil doesn't short out to anything, and make sure it's grounded.
>
> Some things to try, anyway. Good luck and keep us informed,
>
> Pappy Hiram
>
>
>
>
>
>
> --- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@> wrote:
> >
> > --- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@> wrote:
> > >
> > > --- In loopantennas@yahoogroups.com, Notareal <not_a_real@> wrote:
> > > >
> > > >
> > > > Hi !

> > > >
> > > > Have you thought about using band-stop filter or band-rejection filter for that frequency ?
> > > >
> > > > BR
> > > >
> > > There yaa go! now we are on the right track .
> > >
> > > Thanks
> > >
> > > Dean_0
> > >
> > I did some more research and it looks like what i might need is a notch filter ?
> > Dean-0
> >
>

6735. Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-15 16:18:37 UTC
From: Randy Brown
Topic: 6715 Message: 6735

Hi Brian

Yes, I just joined this Group a couple days ago. I just clicked on the link which took me to the Group's home page. Then I clicked on "Join this Group" and filled in the necessary info.

Randy

--- On Sat, 8/15/09, brian russell <brian-nsl@...> wrote:

From: brian russell <brian-nsl@...>
Subject: Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome
To: loopantennas@yahoogroups.com
Date: Saturday, August 15, 2009, 11:44 AM

Hi,
Has anyone joined this new group, I have had no luck
as ' subscribe messages ' just bounce back !!!!!
72, Brian, G0NSL-QRP.

----- Original Message -----
From: Stan
To: loopantennas@ yahoogroups. com
Sent: Monday, August 10, 2009 2:36 PM
Subject: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

This is to let the amateur radio and SWL community know about a new Yahoo group for the discussion on simple antenna construction.
http://groups. yahoo.com/ group/Radio_ Antenna/

A discussion group restricted to the technical aspects, methods and techniques for developing and building amateur and short wave listener radio antenna

Members of the list are encouraged to ask questions and post answers, links, photos and files with the discussion directed to their experience, needs and solutions.

Portable and QRP applications are of special interest to the group.

Please feel free to post your EZNEC files and results. I am in the process of learning how to use this powerful tool and expect others interested in building antenna would be also.

Stan AK0B

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6736. Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-17 18:01:59 UTC
From: brian russell
Topic: 6715 Message: 6736

Hi All,
Thanks for the tips on subscribing, attempt No 3 seems to have worked hi!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Randy Brown
To: loopantennas@yahoogroups.com
Sent: Saturday, August 15, 2009 5:18 PM
Subject: Re: [loopantennas] New Yahoo group formed to discuss simple antenna building - all welcome

[Non-text portions of this message have been removed]

6737. Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-19 14:28:05 UTC
From: Frits PE2G
Topic: 6737 Message: 6737

Hello all,

I'm new on the list.

I'm contemplating to build a (small) loop antenna for Direction Finding on UHF, mainly because of its simplicity and handy size. The freqs used are in the 401-406 MHz band (weather sondes in Europe) with a center freq of 403 MHz. The loop should provide a good null on a signal from a radiosonde that is already on the ground and at close range.

Would you recommend a full wave loop or one smaller than that?

Any other suggestions are appreciated!

Many thanks and 73,

Frits PE2G
JO32HI

6738. Re: [loopantennas] Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-20 01:34:32 UTC
From: Stanley Reynolds
Topic: 6737 Message: 6738

Either a Moxon Rectangle antenna, or a Yagi would work better as you would have a null or peek in one direction.

http://www.ac6la.com/moxgen.html

Stanley

6739. Re: [loopantennas] Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-20 13:19:26 UTC
From: Andy
Topic: 6737 Message: 6739

This is not meant to be an endorsement (and I have no experience with this model) ... but Arrow Antennas sells a small loop that includes UHF:

http://www.arrowantennas.com/fhl.html
http://www.arrowantennas.com/loopdemo.html

They appear to be "shielded" loops (though the mention of a "Faraday shield" is incorrect, it is not a true Faraday shield, if it were the antenna would not receive at all), and they probably contain a balun in the base to maintain the loop's balance (essential for good DF nulls). Given the frequency ranges (no lower limit), and the diagram showing the null perpendicular to the plane of the loop, these would be small loops.

Andy

6740. magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-20 21:50:48 UTC
From: byron johnson
Topic: 6740 Message: 6740

hi brian,
i'm also interested in magnetic loops, for AM broadcast band reception and QRP xmit/receive.

my first AM antenna netted me 146 stations with best DX about 1000 miles. using 8 turns of 22 ga wire and a 1100 pf var cap. I plan on upgrading it with litz wire.

i'm getting ready to build a multi-turn loop for 40/30/20 meters. using 8 ga wire (0.125" or about 3 mm). it will be 4 turns.

what have you done so far with loops ?

byron WA8LCZ/QRP

[Non-text portions of this message have been removed]

6741. Re: [loopantennas] magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-21 01:35:33 UTC
From: Chris Trask
Topic: 6740 Message: 6741

>
> i'm also interested in magnetic loops, for AM broadcast band reception and QRP
> xmit/receive.
>
> my first AM antenna netted me 146 stations with best DX about 1000 miles. using
> 8 turns of 22 ga wire and a 1100 pf var cap. I plan on upgrading it with litz
> wire.
>
> i'm getting ready to build a multi-turn loop for 40/30/20 meters. using 8 ga
> wire (0.125" or about 3 mm). it will be 4 turns.
>
> what have you done so far with loops ?
>

For reception, the bulk and induced resistive losses are of little consequence if the loop is parallel-tuned, such as we would commonly see for ferrite-loaded (aka ferrite rod) loop antennas:

http://www.home.earthlink.net/~christrask/Paper006.html

and the same is roughly applicable to other forms of loop antennas, especially when using multiple turns. However, when transmitting these resistive losses have a heavy impact on the antenna efficiency, especially since the antenna must be series-resonant in order for current to pass through it to generate a radiating EM field.

To get the best overall efficiency for transmitting, the loop should have as few turns as possible, and the conductor should be of fairly large diameter, 1/2" being a practical lower limit:

http://www.home.earthlink.net/~christrask/Paper012.html

At low frequencies, multiple turns become necessary so as to avoid a large loop diameter, and in such cases the turns should be at least 5 conductor diameters apart so as to avoid excessive intra-winding capacitance.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY

_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6742. Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-21 11:37:26 UTC
From: sal.cerda
Topic: 6740 Message: 6742

Thanks for that, Chris.
I used up 500 feet of 14 ga. stranded wire in an attempt to make a super broomstick. It turned out to be a lousy reception antenna.

Has anyone experimented with a 'ball antenna'. This could be formed of a very stiff wire and the windings would cross at the top and bottom. In some places the wire would be much further apart and obviously they would be overlapping at the poles. Any idea on what properties it might have before I invent another way waste wire?

6743. Re: [loopantennas] Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-23 09:47:05 UTC
From: Frits PE2G
Topic: 6737 Message: 6743

Thanks, Stanley and Andy, for your suggestions. The small loop from Arrow Antennas looks most promising to me. I usually know in which general direction I have to search, the problem is the final stage of the search, when the radiosonde is somewhere on the terrain at a range of <100 meters. When the transmitter is at close range, but still invisible in the vegetation, I need a sharp null.

73,
Frits PE2G

6744. Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-23 15:14:01 UTC
From: wa8lcz
Topic: 6740 Message: 6744

hi chris,

i sent a response to this email but it got lost in yahoo-land. so the short answer is:
1. the litz wire is for the AM broadcast receive loop, and it will be coupled to my receiver. litz works extremely well in crystal radio coils and should work well here.

2. the 40/30/20m transmit loop will be 8 ga wire, because thats what i have on hand and the loop needs to be portable, lightweight and i'm not sure how well it will work, so i dont want to put too much money into it. i ran the numbers in a loop calculator and realize how much more efficient 1 inch copper tube would be and how much less bandwidth i would have.
dia mhz bandwidth efficiency pwr in/out
.125" 7 35 khz 45% 10/4.5 watts
1.0" 7 26 khz 88% 10/8.8 watts
all i have to do is increase power to 10 or even 20 watts and i'll have a respectable signal. even at 50w the rf voltage won't be higher than 2.3 kv. the var cap i'm using is rated at 4.5 kv and probably good to twice that amount.

but life and ham radio are a compromise.

alex py1ahd www.alexloop.com is using a 3 turn loop on 80/40m and its working on 40m fairly well, and his turn spacing doesnt look much more than 1 or 2 turn diameters. once again, compromise for a portable lightweight loop. by the way, check out his website, its loaded with interesting ways to build loop antennas. for adjusting them, he uses dc motors, RC servo motors, two surringes hooked together with tubing and filled with water to adjust a var cap, homebrew var cap made from pc board material and other cool tricks.

byron WA8LCZ

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
> For reception, the bulk and induced resistive losses are of little
> consequence if the loop is parallel-tuned, such as we would commonly see for
> ferrite-loaded (aka ferrite rod) loop antennas:
>
> http://www.home.earthlink.net/~christrask/Paper006.html
>
> and the same is roughly applicable to other forms of loop antennas,
> especially when using multiple turns. However, when transmitting these
> resistive losses have a heavy impact on the antenna efficiency, especially
> since the antenna must be series-resonant in order for current to pass
> through it to generate a radiating EM field.
>
> To get the best overall efficiency for transmitting, the loop should
> have as few turns as possible, and the conductor should be of fairly large
> diameter, 1/2" being a practical lower limit:
>
> http://www.home.earthlink.net/~christrask/Paper012.html

>
> At low frequencies, multiple turns become necessary so as to avoid a
> large loop diameter, and in such cases the turns should be at least 5
> conductor diameters apart so as to avoid excessive intra-winding
> capacitance.
>
> Chris
> >
> >

6745. Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-24 21:20:16 UTC
From: dean_0_way
Topic: 6740 Message: 6745

> alex py1ahd www.alexloop.com is using a 3 turn loop on 80/40m and its working on 40m fairly well, and his turn spacing doesnt look much more than 1 or 2 turn diameters.

There are some interseting things there but i cant figure why he is going to the trouble of having the tuning cap at the top of the loop ,seems like it would be much simpler to have it at the bottom ?
Maybe i'm missing somthing?

Dean-0

6746. Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-25 05:05:11 UTC
From: pappy_hiram
Topic: 6740 Message: 6746

if you feed the loop at the bottom, the capacitor goes on the opposite side. Makes for some interesting contraptions.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> > alex py1ahd www.alexloop.com is using a 3 turn loop on 80/40m and its working on 40m fairly well, and his turn spacing doesnt look much more than 1 or 2 turn diameters.
>
> There are some interseting things there but i cant figure why he is going to the trouble of having the tuning cap at the top of the loop ,seems like it would be much simpler to have it at the bottom ?
> Maybe i'm missing somthing?
>
> Dean-0
>

6747. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-25 14:23:37 UTC
From: Chris Trask
Topic: 6740 Message: 6747

```
>
> >
> > > alex py1ahd www.alexloop.com is using a 3 turn loop on 80/40m and
> > > its working on 40m fairly well, and his turn spacing doesnt look much
> > > more than 1 or 2 turn diameters.
> >
> > There are some interseting things there but i cant figure why he is
going
> > to the trouble of having the tuning cap at the top of the loop ,seems
> > like it would be much simpler to have it at the bottom ?
> > Maybe i'm missing somthing?
> >
>
> if you feed the loop at the bottom, the capacitor goes on the opposite
side.
> Makes for some interesting contraptions.
>

I designed out the need for placing the variable capacitor at the top:

http://www.home.earthlink.net/~christrask/Paper012.html

The far end of the loop has the highest voltage gradient, and the high
voltage vacuum variables needs to accomdate that tend to be very expensve,
let alone leading to mechanical difficulties in mounting it out on the far
end and then needing a non-conducting shaft going that distance to adjust
it.

The base end of the loop has the lowest voltage gradient, and you can
use alomost any dual air variable for tuning. Thre is some difficulty in
accomodating variables with a common shaft and a grounded frame, but I
eliminated that problem as well. If I wanted to go to the effort, I could
use a single variable, but that gets into problems of insulating the
variable from ground.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
```

\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6748. Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-25 16:08:10 UTC
From: wa8lcz
Topic: 6740 Message: 6748

hi dean-o

some loop construction articles say the loop works better with the feed (loop or delta or gamma match) closest to ground. when the var cap is high, it makes the loop top heavy, but it seems to be the way most loops are made. alex adds an extenstion shaft to his caps to keep the tuning knob low, to make adjustments easier. it would be interesting to try it both ways. cap high or cap low.

byron

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> > alex py1ahd www.alexloop.com is using a 3 turn loop on 80/40m and its working on 40m fairly well, and his turn spacing doesnt look much more than 1 or 2 turn diameters.
>
> There are some interseting things there but i cant figure why he is going to the trouble of having the tuning cap at the top of the loop ,seems like it would be much simpler to have it at the bottom ?
> Maybe i'm missing somthing?
>
> Dean-0
>

6749. Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-25 17:52:00 UTC
From: pappy_hiram
Topic: 6740 Message: 6749

Chris,
what sort of losses do you experience in the toroids?
Looks interesting, maybe I'll try and build one for my trailer.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > >
> > > > alex py1ahd www.alexloop.com is using a 3 turn loop on 80/40m and
> > > > its working on 40m fairly well, and his turn spacing doesnt look much
> > > > more than 1 or 2 turn diameters.
> > >
> > > There are some interseting things there but i cant figure why he is
> going
> > > to the trouble of having the tuning cap at the top of the loop ,seems
> > > like it would be much simpler to have it at the bottom ?
> > > Maybe i'm missing somthing?
> > >
> >
> > if you feed the loop at the bottom, the capacitor goes on the opposite
> side.
> > Makes for some interesting contraptions.
> >
>
> I designed out the need for placing the variable capacitor at the top:
>
> http://www.home.earthlink.net/~christrask/Paper012.html
>
> The far end of the loop has the highest voltage gradient, and the high
> voltage vacuum variables needs to accomdate that tend to be very expensve,
> let alone leading to mechanical difficulties in mounting it out on the far
> end and then needing a non-conducting shaft going that distance to adjust
> it.
>
> The base end of the loop has the lowest voltage gradient, and you can
> use alomost any dual air variable for tuning. Thre is some difficulty in
> accomodating variables with a common shaft and a grounded frame, but I
> eliminated that problem as well. If I wanted to go to the effort, I could
> use a single variable, but that gets into problems of insulating the
> variable from ground.
>
> Chris
>

> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

6752. Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-25 19:29:24 UTC
From: dean_0_way
Topic: 6740 Message: 6752

--- In loopantennas@yahoogroups.com, "dean_0_way" <dean_0_way@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "wa8lcz" <wa8lcz@> wrote:
> >
> > hi dean-o
> >
> > some loop construction articles say the loop works better with the feed (loop or delta or gamma match) closest to ground. when the var cap is high, it makes the loop top heavy, but it seems to be the way most loops are made. alex adds an extenstion shaft to his caps to keep the tuning knob low, to make adjustments easier. it would be interesting to try it both ways. cap high or cap low.
> >
> > byron
> >
> > While reading this remember that my loops are only recieve loops and only for MW so far:
>
> My two main loops are fed differently one is a smaller foam box loop that had one of those UHF loops 6 inch ? mounted in the middle of the box (there are pictures called (stryo loop) in the photo section

>
> The new configuration of this one is a single piece of wire taped to the inside of the box and twisted ,about 5 feet long to attach to the Kaito 2100,it sets on the floor next to my computer desk , the cap is directly across from the place where the wire exits the box .(btw i don't think it improved the overall signal from this loop,in fact i think it has a tiny bit more noise floor than before ,i may go back to the steel UHF loop soon).
>
> My newest loop is 3 feet square 9 turns of wire ,tunning cap in one corner of the frame ,at first i used it mutually coupled but iv'e added to it the same steel UHF loop, mounted to the middle of the frame and used small wire,with no twist , these go right past the tuning cap on the same corner of the frame,to feed to the radio, one interesting thing i found out, is that a loop of this size has an effect from a distance ,any radio with a loop stick ,begins picking up signal from the loop at about 2-3 feet away? and anywhere inside it's center is equally strong ,so a small pickup loop is all that is necessary even if it is steel. (i would like to try a single turn pickup loop on this one ,to see if the noise floor goes up).
>
> I have used this loop outside in the evening to DX it sets by my chair on the concrete patio while im using it,the other night i picked it up about 6 inches , to change position ,and the signal changed ,noise came up ,so there must be an interaction with the ground or concrete? might be a challange to buid a stand to raise it about 2 feet above ground?
>
> Now for the feed point ,cap position part :
> I have 'nt noticed any difference between my 2 loops, but as i said before a transmitting

loop may be affected more .
>
> A little knowledge being a dangerous thing?
> :)
> Dean_0
>

6753. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-25 22:57:58 UTC
From: Chris Trask
Topic: 6740 Message: 6753

```
>
> >
> > >
> > > >
> > > > > alex py1ahd www.alexloop.com is using a 3 turn loop on 80/40m
and
> > > > > its working on 40m fairly well, and his turn spacing doesnt look
much
> > > > > more than 1 or 2 turn diameters.
> > > >
> > > > There are some interseting things there but i cant figure why he is
> > > > going to the trouble of having the tuning cap at the top of the
loop,
> > > > seems like it would be much simpler to have it at the bottom ?
> > > > Maybe i'm missing somthing?
> > > >
> > >
> > > if you feed the loop at the bottom, the capacitor goes on the opposite
> > > side. Makes for some interesting contraptions.
> >
> >
> > I designed out the need for placing the variable capacitor at the top:
> >
> > http://www.home.earthlink.net/~christrask/Paper012.html
> >
> > The far end of the loop has the highest voltage gradient, and the
high
> > voltage vacuum variables needs to accomdate that tend to be very
expensve,
> > let alone leading to mechanical difficulties in mounting it out on the
far
> > end and then needing a non-conducting shaft going that distance to
adjust
> > it.
> >
> > The base end of the loop has the lowest voltage gradient, and you
can
> > use alomost any dual air variable for tuning. Thre is some difficulty
in
> > accomodating variables with a common shaft and a grounded frame, but I
> > eliminated that problem as well. If I wanted to go to the effort, I
could
> > use a single variable, but that gets into problems of insulating the
> > variable from ground.
> >
```

>
> what sort of losses do you experience in the toroids?
> Looks interesting, maybe I'll try and build one for my trailer.
>

Less than 1dB for the entire network. The first one, the 1:4 BalBal built on the powdered iron toroid, was an important factor in the losses, and the transformer that couples the variable capacitor was second, which is why it also was built on a powdered iron toroid. Ferrite toroids are very lossy when used in low impedance circuitry.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6754. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-25 23:57:41 UTC
From: John Popelish
Topic: 6740 Message: 6754

Chris Trask wrote:

> Less than 1dB for the entire network. The first one, the 1:4 BalBal built
> on the powdered iron toroid, was an important factor in the losses, and the
> transformer that couples the variable capacitor was second, which is why it
> also was built on a powdered iron toroid. Ferrite toroids are very lossy
> when used in low impedance circuitry.

That last line is news to me. Can you help me understand
why it is true?

I am pretty sure I can beat any powdered iron core
transformer you make with one made with the best ferrite
material and core size and shape for the job.

What am I missing?

--
Regards,

John Popelish

6755. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 00:12:54 UTC
From: Chris Trask
Topic: 6740 Message: 6755

>
> > Less than 1dB for the entire network. The first one, the 1:4 BalBal
built
> > on the powdered iron toroid, was an important factor in the losses, and
the
> > transformer that couples the variable capacitor was second, which is why
it
> > also was built on a powdered iron toroid. Ferrite toroids are very
lossy
> > when used in low impedance circuitry.
>
> That last line is news to me. Can you help me understand
> why it is true?
>

Not entirely certain of the mechanism surrounding the higher losses,
except that it has to do with the induced eddy current and bulk losses of
the material. I found out the hard way by experimentation. I made the
first of those two transformers using the familiar Fair Rite 43 material,
then tried 61 (which is far less lossy), then tried powdered iron.

In 50-ohm circuitry, the difference in losses is almost unnoticable.
But in the 3 to 4 ohm range of the first transformer, there was a great deal
of difference. The difference was not as noticable for the second
transformer, but it was still a factor in deciding which material to use.
For the third transfomer, which is a 12.5 ohm to 50 ohm BalUn, there was
little difference.

I found the same to be true for the varactor-tuned receiving loops, and
that's why those have the same mix of materials for the transformers.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask

c__; c__; '-..'>.__

Graphics by Loek Frederiks

6756. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 01:34:47 UTC
From: John Popelish
Topic: 6740 Message: 6756

Chris Trask wrote:
(snip)
>>> Ferrite toroids are very lossy
>>> when used in low impedance circuitry.

>> That last line is news to me. Can you help me
>> understand why it is true?
>
> Not entirely certain of the mechanism surrounding the
> higher losses, except that it has to do with the induced
> eddy current and bulk losses of the material. I found
> out the hard way by experimentation. I made the first of
> those two transformers using the familiar Fair Rite 43
> material, then tried 61 (which is far less lossy), then
> tried powdered iron.
>
> In 50-ohm circuitry, the difference in losses is almost
> unnoticable. But in the 3 to 4 ohm range of the first
> transformer, there was a great deal of difference. The
> difference was not as noticable for the second
> transformer, but it was still a factor in deciding which
> material to use. For the third transfomer, which is a
> 12.5 ohm to 50 ohm BalUn, there was little difference.
>
> I found the same to be true for the varactor-tuned
> receiving loops, and that's why those have the same mix
> of materials for the transformers.

Thanks for the explanation.

Were those different versions all made with essentially the
same size and shape of core, and with the same number of
turns? If so, I don't think you made best use of material
with at least two of them.

I guess I should review the design you have provided and
suggest how I would replace those transformers with ferrite
cored versions that I think would work better, if I can.

--
Regards,

John Popelish

6757. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 01:40:22 UTC
From: Chris Trask
Topic: 6740 Message: 6757

>
> >
> > > (snip)
> > >
> > > >
> > > > > Ferrite toroids are very lossy
> > > > > when used in low impedance circuitry.
> > > > >
> > > > > That last line is news to me. Can you help me
> > > > > understand why it is true?
> > > >
> > > > Not entirely certain of the mechanism surrounding the
> > > > higher losses, except that it has to do with the induced
> > > > eddy current and bulk losses of the material. I found
> > > > out the hard way by experimentation. I made the first of
> > > > those two transformers using the familiar Fair Rite 43
> > > > material, then tried 61 (which is far less lossy), then
> > > > tried powdered iron.
> > > >
> > > > In 50-ohm circuitry, the difference in losses is almost
> > > > unnoticable. But in the 3 to 4 ohm range of the first
> > > > transformer, there was a great deal of difference. The
> > > > difference was not as noticable for the second
> > > > transformer, but it was still a factor in deciding which
> > > > material to use. For the third transfomer, which is a
> > > > 12.5 ohm to 50 ohm BalUn, there was little difference.
> > > >
> > > > I found the same to be true for the varactor-tuned
> > > > receiving loops, and that's why those have the same mix
> > > > of materials for the transformers.
> > >
> > > Thanks for the explanation.
> > >
> > > Were those different versions all made with essentially the
> > > same size and shape of core, and with the same number of
> > > turns? If so, I don't think you made best use of material
> > > with at least two of them.
> > >
> > > I guess I should review the design you have provided and
> > > suggest how I would replace those transformers with ferrite
> > > cored versions that I think would work better, if I can.
> >

They were entirely different. The ones for the transmitting loop were
about 1" in diameter, using parallel wires. The ones for the receiving

loops were T44-6 cores using twisted wire, and in those only the first transformer was a toroid, the others being balun cores, plus I used a different impedance ratio. Still, the results for the 4:1 balun were essentially the same.

It makes me wonder about the losses in the input matching transformers for HF bipolar power amplifiers, as that is very low impedance circuitry.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

6758. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 02:39:48 UTC
From: Paul V Birke PEng
Topic: 6740 Message: 6758

Dear Chris and John
following with interest
and

just wondering is Dr. Jerry Sevick address this issue in his famous book on Baluns (which I do not have btw)

best wishes

Paul in Guelph ON VE3PVB

From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, August 25, 2009 9:40:22 PM
Subject: Re: [loopantennas] Re: magnetic loops for xmit and receive

> > > > (snip)
> > > > > > > > Ferrite toroids are very lossy
> > > > > > > > when used in low impedance circuitry.
> > > > > > > > That last line is news to me. Can you help me
> > > > > > > > understand why it is true?
> > > > > > > Not entirely certain of the mechanism surrounding the
> > > > > > > higher losses, except that it has to do with the induced
> > > > > > > eddy current and bulk losses of the material. I found
> > > > > > > out the hard way by experimentation. I made the first of
> > > > > > > those two transformers using the familiar Fair Rite 43
> > > > > > > material, then tried 61 (which is far less lossy), then
> > > > > > > tried powdered iron.
> > > > > > > In 50-ohm circuitry, the difference in losses is almost
> > > > > > > unnoticable. But in the 3 to 4 ohm range of the first
> > > > > > > transformer, there was a great deal of difference. The
> > > > > > > difference was not as noticable for the second
> > > > > > > transformer, but it was still a factor in deciding which
> > > > > > > material to use. For the third transfomer, which is a
> > > > > > > 12.5 ohm to 50 ohm BalUn, there was little difference.
> > > > > > > I found the same to be true for the varactor-tuned
> > > > > > > receiving loops, and that's why those have the same mix

> > > of materials for the transformers.
> >
> > Thanks for the explanation.
> >
> > Were those different versions all made with essentially the
> > same size and shape of core, and with the same number of
> > turns? If so, I don't think you made best use of material
> > with at least two of them.
> >
> > I guess I should review the design you have provided and
> > suggest how I would replace those transformers with ferrite
> > cored versions that I think would work better, if I can.
>

They were entirely different. The ones for the transmitting loop were about 1" in diameter, using parallel wires. The ones for the receiving loops were T44-6 cores using twisted wire, and in those only the first transformer was a toroid, the others being balun cores, plus I used a different impedance ratio. Still, the results for the 4:1 balun were essentially the same.

It makes me wonder about the losses in the input matching transformers for HF bipolar power amplifiers, as that is very low impedance circuitry.

Chris

,---------- --------- --. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,---- --------- -' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlin k.net
| | | | \ '. http://www.home. earthlink. net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

6759. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 03:18:25 UTC
From: John Popelish
Topic: 6740 Message: 6759

Paul V Birke PEng wrote:
> Dear Chris and John following with interest and
>
> just wondering is Dr. Jerry Sevick address this issue in
> his famous book on Baluns (which I do not have btw)

Thanks for the heads up, Paul.
I found these two and both look interesting.
http://www.amazon.com/Building-Using-Baluns-Ununs-Experimenter/dp/0943016096
http://www.amazon.com/Understanding-Building-Using-Baluns-Ununs/dp/094301624X
I've spent my hobby budget this month, but I might get one
of these in a month or two.

--
Regards,

John Popelish

6760. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 05:19:33 UTC
From: Paul V Birke PEng
Topic: 6740 Message: 6760

Dear John

know the feeling

however those are pretty good prices

just sending Jerry a letter re "optimal fractal counterpoise" btw as regular low height antenna (something I might try for 80 and 160 m) requires so many radials ~ 100, just thought I would ask Dr Sevick if he has considered the use of other geometry to achieve a good counterpoise or reasonable counterpoise.

back to the discussion with Chris

this question of inherent losses has become important to me as I might have to make a 100 watt balun some for antenna for my HF TS-180S transceiver

I just ordered two 240FT61 thinking this might be ok

I am thinking about 80m here so what you guys come up with might affect my consideration here

I do not think I have any iron powder toroids in my limited inventory

being retired I also have to consider carefully ordering ham stuff, although my wife is very good about things

not drunk, not on the golf course and not chasing other women is one of her rationalizations to keep me happy in my hobby

best wishes to you and Chris

Paul in Guelph ON Canada

From: John Popelish <jpopelish@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, August 25, 2009 11:18:25 PM
Subject: Re: [loopantennas] Re: magnetic loops for xmit and receive

Paul V Birke PEng wrote:
> Dear Chris and John following with interest and
>
> just wondering is Dr. Jerry Sevick address this issue in
> his famous book on Baluns (which I do not have btw)

Thanks for the heads up, Paul.
I found these two and both look interesting.
http://www.amazon. com/Building- Using-Baluns- Ununs-Experiment er/dp/0943016096
http://www.amazon. com/Understandin g-Building- Using-Baluns- Ununs/dp/ 094301624X

I've spent my hobby budget this month, but I might get one
of these in a month or two.

--
Regards,

John Popelish

[Non-text portions of this message have been removed]

6761. Flag / Pennant antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 16:02:42 UTC
From: brian russell
Topic: 6761 Message: 6761

> Hi,
> After seeing several comments about using a Flag antenna in the
> horizontal mode I turned my Pennant version through 90 degrees,
> in a word, magic !!!!!
> The difference is unreal !!!!!
> As with any antenna change it is early days though.
> 72, Brian, G0NSL-QRP.

6762. Re: [loopantennas] Flag / Pennant antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 18:18:20 UTC
From: david
Topic: 6761 Message: 6762

hi whats the difference ie does it affect back null etc etc ... cheers david
h

----- Original Message -----
From: "brian russell" <brian-nsl@...>
To: <loopantennas@yahoogroups.com>
Cc: <Radio_Antenna@yahoogroups.com>
Sent: Wednesday, August 26, 2009 5:02 PM
Subject: [loopantennas] Flag / Pennant antenna !!!!

>
>
>> Hi,
>> After seeing several comments about using a Flag antenna in the
>> horizontal mode I turned my Pennant version through 90 degrees,
>> in a word, magic !!!!!
>> The difference is unreal !!!!!
>> As with any antenna change it is early days though.
>> 72, Brian, G0NSL-QRP.
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

6763. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 18:42:45 UTC
From: John Popelish
Topic: 6740 Message: 6763

Chris Trask wrote:

> They were entirely different. The ones for the
> transmitting loop were about 1" in diameter, using
> parallel wires. The ones for the receiving loops were
> T44-6 cores using twisted wire, and in those only the
> first transformer was a toroid, the others being balun
> cores, plus I used a different impedance ratio. Still,
> the results for the 4:1 balun were essentially the same.
>
> It makes me wonder about the losses in the input matching
> transformers for HF bipolar power amplifiers, as that is
> very low impedance circuitry.

Chris,

I reread the details of the transformer designs for the
transmitting loop in:
http://www.home.earthlink.net/~christrask/Transmitting%20Loop%20Antenna.pdf

I need to clear up some details of your design.

You write, "Transformers T1 and T2 are both constructed
with a pair of six-turn windings of parallel #22 AWG wire on
Micrometals T106-6 toroidal cores."

By your description, it sounds like windings are made of
paralleled strands, but you mention only two pairs (4
strands total, for the 4 winding transformer in the
schematic, so I am not sure I am understanding the
construction. In the photo, It looks like only 2 or 4
strands side by side per turn, definitely not eight per turn.

I will assume 4 strands total (a pair of pairs of strands),
wound 6 turns. But the transformer schematic shows 4
windings, so I can only assume that each of the 4
schematically represented windings is only 1 strand of #22
(0.025" diameter.

In T1 the loop current passes through with 2 windings, in
parallel. That concentrates about 2.5 times as much
resistive loss per length of conductor in the transformer as
in the loop ((1/2 the current) squared through 1/10th the
circumference or 10 times the resistance per length),
assuming AC resistance is proportional to conductor
circumference and neglecting any proximity effects (which
may get worse for the windings on higher permeability cores).

T2 looks to have the same resistive loss per length of winding as T1 (about 2.5 times that of the loop conductor), because half the loop current passes through 1 strand of #22 in each winding, so same current per strand as in T1.

T3 has the same loss per length on its 12 turn winding, because it passes the same series resonant current as the windings of T2 (half the loop current) through 1 strand of #22.

The 24 turn winding of T3, (with (1/4 of the loop current) squared times 10 times the loop resistance per length) has the about the 5/8 the loss per length as the loop and about 1/4 that of the windings on T1, T2 and the 12 turn winding of T3.

All this is based on a conductor circumference that assumes the skin depth is significantly less than the radius of the smallest conductor. I think this is the case, here, at 40 meters (7 MHz), with a skin depth less than 0.001" and the radius of #22 at about 0.0125" or at least 10 skin depths.

Can you confirm or correct this part of my understanding of your design, so far, especially the strands per winding of T1 and T2? Thank you.

--
Regards,

John Popelish

6764. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 18:45:14 UTC
From: Chris Trask
Topic: 6740 Message: 6764

```
>
> > They were entirely different. The ones for the
> > transmitting loop were about 1" in diameter, using
> > parallel wires. The ones for the receiving loops were
> > T44-6 cores using twisted wire, and in those only the
> > first transformer was a toroid, the others being balun
> > cores, plus I used a different impedance ratio. Still,
> > the results for the 4:1 balun were essentially the same.
> >
> > It makes me wonder about the losses in the input matching
> > transformers for HF bipolar power amplifiers, as that is
> > very low impedance circuitry.
>
> Chris,
>
> I reread the details of the transformer designs for the
> transmitting loop in:
>
http://www.home.earthlink.net/~christrask/Transmitting%20Loop%20Antenna.pdf
>
> I need to clear up some details of your design.
>
> You write, "Transformers T1 and T2 are both constructed
> with a pair of six-turn windings of parallel #22 AWG wire on
> Micrometals T106-6 toroidal cores."
>
> By your description, it sounds like windings are made of
> paralleled strands, but you mention only two pairs (4
> strands total, for the 4 winding transformer in the
> schematic, so I am not sure I am understanding the
> construction. In the photo, It looks like only 2 or 4
> strands side by side per turn, definitely not eight per turn.
>

The windings on T1 and T2 are arranged in parallel pairs, six turns on
either side of the core. They were done that way so as to make the
interconnections easier.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
```

(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6765. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 19:19:43 UTC
From: John Popelish
Topic: 6740 Message: 6765

Chris Trask wrote:

> http://www.home.earthlink.net/~christrask/Transmitting%20Loop%20Antenna.pdf

> The windings on T1 and T2 are arranged in parallel pairs, six turns on
> either side of the core. They were done that way so as to make the
> interconnections easier.

Duh! I didn't notice that 12 turns were shown, not 6. So is each of the 4 schematically shown windings only 1 strand of #22 as I assumed?

Do you still have this assembly handy for testing? If so, would you be interested in testing any transformers in it that I construct to compare with those you made? Or has that train left the station?

I don't have much in the way of test equipment to test a complete unit on my own.

--
Regards,

John Popelish

6766. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 19:32:28 UTC
From: Chris Trask
Topic: 6740 Message: 6766

>
> > The windings on T1 and T2 are arranged in parallel pairs, six turns
on
> > either side of the core. They were done that way so as to make the
> > interconnections easier.
>
> Duh! I didn't notice that 12 turns were shown, not 6. So is
> each of the 4 schematically shown windings only 1 strand of
> #22 as I assumed?
>

Yes, just one, and they're arranged in pairs similar to how you would assemble a 1:4 Guanella BalBal on a binocular core. As you noted earlier, the wire losses enter into the picture at these impedance levels, so the toroid material and number of turns became a real design issue. You can also use -6, -10, or -17 material for higher frequencies and -1, -8, or -3 for lower. But, the bulk of the losses earlier were due entirely to using mix 43 and 61 ferrite materials.

Because of the losses and nonlinearities of ferrites, I devised a method for improving the performance of lossless feedback (aka Norton) amplifiers by keeping the wires arranged such that they do not couplke to the transformer core. This is a bit tricky, but the results are worthwhile. I'm working on an article for High Frequency Electronics about it.

>
> Do you still have this assembly handy for testing? If so,
> would you be interested in testing any transformers in it
> that I construct to compare with those you made? Or has
> that train left the station?
>
> I don't have much in the way of test equipment to test a
> complete unit on my own.
>

The assembly is intact, but I have a limited amount of cores (toroids and binocular) in the larger sizes. I was going to put up a minimal stock of a wide range of sizes and materials, but the economy (or rather lack thereof) caught up with me.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY

_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6767. Re: [loopantennas] Flag / Pennant antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 19:58:41 UTC
From: Paul V Birke PEng
Topic: 6761 Message: 6767

all I can say is WOW

please give more details

height off ground etc

thanks Paul VE3PVB

not everyday one hears about a breakthrough

From: brian russell <brian-nsl@...>
To: loopantennas@yahoogroups.com
Cc: Radio_Antenna@yahoogroups.com
Sent: Wednesday, August 26, 2009 12:02:42 PM
Subject: [loopantennas] Flag / Pennant antenna !!!!

> Hi,
> After seeing several comments about using a Flag antenna in the
> horizontal mode I turned my Pennant version through 90 degrees,
> in a word, magic !!!!!
> The difference is unreal !!!!!
> As with any antenna change it is early days though.
> 72, Brian, G0NSL-QRP.

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6768. Re: [loopantennas] Re: magnetic loops for xmit and receive

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-26 20:06:47 UTC
From: John Popelish
Topic: 6740 Message: 6768

Chris Trask wrote:

> Yes, just one, and they're arranged in pairs similar to how you would
> assemble a 1:4 Guanella BalBal on a binocular core. As you noted earlier,
> the wire losses enter into the picture at these impedance levels, so the
> toroid material and number of turns became a real design issue. You can
> also use -6, -10, or -17 material for higher frequencies and -1, -8, or -3
> for lower. But, the bulk of the losses earlier were due entirely to using
> mix 43 and 61 ferrite materials.

I am developing a hunch that the higher permeability of the ferrite cores allows a lot more flux per amp to encircle each conductor that is against the core, compared to the flux that goes all the way around the core. In effect, this raises the transmission line impedance of a pair of paralleled wires (more inductance per length without changing much the capacitance per length) which would make the transmission line transformer a poorer match to low impedance loads, effectively reducing the part of the energy that was carried by the transmission line versus that carried by the transformer. Having the high permeability material against one side of the conductor may also crowd the current away from the core (a proximity effect), increasing the effective AC resistance of the wire.

If the wires were spaced just their own diameter or so from the core, this effect would be significantly reduced and would be a simple test of this hunch is it increased the efficiency of the ferrite core versions. And if that worked, other means could also be used to reduce the effect, like interleaving winding strands that share the total winding current and lower the transmission line impedance.

> Because of the losses and nonlinearities of ferrites, I devised a method
> for improving the performance of lossless feedback (aka Norton) amplifiers
> by keeping the wires arranged such that they do not couplke to the
> transformer core. This is a bit tricky, but the results are worthwhile.
> I'm working on an article for High Frequency Electronics about it.

I very much look forward to seeing that.

>> Do you still have this assembly handy for testing? If so,
>> would you be interested in testing any transformers in it
>> that I construct to compare with those you made? Or has
>> that train left the station?
>>

>> I don't have much in the way of test equipment to test a
>> complete unit on my own.
>>
>
> The assembly is intact, but I have a limited amount of cores (toroids
> and binocular) in the larger sizes. I was going to put up a minimal stock
> of a wide range of sizes and materials, but the economy (or rather lack
> thereof) caught up with me.

I make all my binocular cores out of a pair of long form ferrite beads. A pair of these are often cheaper that a single binocular core and there are more choices of sizes and materials. This is what I am thinking of as a replacement for T1 and T2, with only 1 turn (made of two or more strands in parallel) passing through each of the tubular cores.

Very simple to wind, compared to larger toroid cores. Especially good for low impedance transformers. Separate windings can exit either end of the core pair, just as with the binocular cores, so some flexibility for the connections. A typical open circuit 1 turn winding impedance is on the order of 100 ohms at 5MHz. No more turns are needed to match 3 ohms to 6 ohms. A plastic sleeve slid into each core hole to keep the wire from contact with the core reduces the hypothetical proximity effect I mentioned at the top.

--
Regards,

John Popelish

6769. Re: [loopantennas] Flag / Pennant antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-27 05:55:07 UTC
From: brian russell
Topic: 6761 Message: 6769

Hi,
I have found by orientating the antenna in the horizontal mode
that I can hear UK stations that there is no sign of in the vertical mode.
Living on the coast I have always found it difficult in respect of ' nulls '
as there is nothing to the West other than Ireland.
In general it ' hears ' better all round if less directional.
72, Brian, G0NSL-QRP.

----- Original Message -----
From: "david" <dhamilton1@...>
To: <loopantennas@yahoogroups.com>
Sent: Wednesday, August 26, 2009 7:18 PM
Subject: Re: [loopantennas] Flag / Pennant antenna !!!!

6770. Re: [loopantennas] Flag / Pennant antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-27 18:16:09 UTC
From: brian russell
Topic: 6761 Message: 6770

Paul, (VE3PVB)
Mail me direct then I can attach the details to a reply.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@yahoogroups.com
Sent: Wednesday, August 26, 2009 8:58 PM
Subject: Re: [loopantennas] Flag / Pennant antenna !!!!

[Non-text portions of this message have been removed]

6771. Fw: [loopantennas] Flag / Pennant antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-08-28 18:04:58 UTC
From: brian russell
Topic: 6771 Message: 6771

----- Original Message -----
From: brian russell
To: loopantennas@yahoogroups.com
Sent: Thursday, August 27, 2009 7:16 PM
Subject: Re: [loopantennas] Flag / Pennant antenna !!!!

Paul, (VE3PVB)
Mail me direct then I can attach the details to a reply.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@yahoogroups.com
Sent: Wednesday, August 26, 2009 8:58 PM
Subject: Re: [loopantennas] Flag / Pennant antenna !!!!

[Non-text portions of this message have been removed]

6772. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-01 13:41:54 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6772

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6773. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-01 13:41:54 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6773

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6774. New to the Group

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 12:54:17 UTC
From: Franco ISØVSU
Topic: 6774 Message: 6774

Hi all,

I' m new to this Group that I joined having a strong interest in building Loop Antennas. The QRM is one of the biggest problems of my QTH, so I think I will use a Loop for receiving and a Vertical for transmitting.... But I have to read a lot, before that.

Thank you in advance for your suggestions and

73 de

Franco IS0VSU
IS QRP#01
****
IS-QRP Club

Associazione Radioamatoriale Sardinia QRP Club (on Facebook too)
http://www.sardiniaqrp.com
sms : +393473406679
email: iq0qp@...
ww.qrz.com/iq0qp

[Non-text portions of this message have been removed]

6775. Re: [loopantennas] New to the Group

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 14:26:55 UTC
From: m c
Topic: 6774 Message: 6775

Hi Franco,

Same situation for my QTH. I build a loop for 7MHz, you can see some details on my site: www.qsl.net/yo4dft

Let me know if you need more info.

Cristian - YO4DFT

--- On Thu, 9/10/09, Franco ISØVSU <is0vsu@yahoo.com> wrote:

From: Franco ISØVSU <is0vsu@...>
Subject: [loopantennas] New to the Group
To: loopantennas@yahoogroups.com
Date: Thursday, September 10, 2009, 8:54 AM

Hi all,

I' m new to this Group that I joined having a strong interest in building Loop Antennas. The QRM is one of the biggest problems of my QTH, so I think I will use a Loop for receiving and a Vertical for transmitting.... But I have to read a lot, before that.

Thank you in advance for your suggestions and

73 de

Franco IS0VSU
IS QRP#01
****
IS-QRP Club

Associazione Radioamatoriale Sardinia QRP Club (on Facebook too)
http://www.sardiniaqrp.com
sms : +393473406679
email: iq0qp@...
ww.qrz.com/iq0qp

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6776. NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 14:41:00 UTC
From: Richard (Rick) Karlquist
Topic: 6774 Message: 6776

There is an article on loop receiving antennas in the Sept./Oct. 2009
issue of the ARRL National Contest Journal on page 18.
(http://www.arrl.org/ncj/2009/09/toc.pdf).

Rick N6RK

Franco IS?VSU wrote:
>
>
> Hi all,
>
> I' m new to this Group that I joined having a strong interest in
> building Loop Antennas.
> The QRM is one of the biggest problems of my QTH, so I think I will use
> a Loop for receiving and a Vertical for transmitting.... But I have to
> read a lot, before that.

>
> Franco IS0VSU
> IS QRP#01

6777. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 15:20:10 UTC
From: Chris Trask
Topic: 6774 Message: 6777

Rick,
Since you are the author, could you pass along a copy of that article to me?

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Richard (Rick) Karlquist" <richard@...>
To: <loopantennas@yahoogroups.com>
Sent: Thursday, September 10, 2009 7:41 AM
Subject: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

> There is an article on loop receiving antennas in the Sept./Oct. 2009
> issue of the ARRL National Contest Journal on page 18.
> (http://www.arrl.org/ncj/2009/09/toc.pdf).
>
> Rick N6RK
>
> Franco IS?VSU wrote:
> >
> >
> > Hi all,
> >
> > I' m new to this Group that I joined having a strong interest in
> > building Loop Antennas.
> > The QRM is one of the biggest problems of my QTH, so I think I will use
> > a Loop for receiving and a Vertical for transmitting.... But I have to

> > read a lot, before that.
>
> >
> > Franco IS0VSU
> > IS QRP#01
>

6778. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 21:19:47 UTC
From: al_ka5jgv
Topic: 6774 Message: 6778

I likewise am interested in the article, or information on where this publication is available without a full subscription.

Thank you.

Al KA5JGV
San Antonio, TX

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> Rick,
> Since you are the author, could you pass along a copy of that article to
> me?
>
> Chris

6779. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 21:54:49 UTC
From: Paul V Birke PEng
Topic: 6774 Message: 6779

et moi aussitot

merci en advance

Paul VE3PVB en Guelph ON Canada

From: al_ka5jgv <aburzynski@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, September 10, 2009 5:19:47 PM
Subject: Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

I likewise am interested in the article, or information on where this publication is available without a full subscription.

Thank you.

Al KA5JGV
San Antonio, TX

--- In loopantennas@ yahoogroups. com, "Chris Trask" <christrask@ ...> wrote:
>
> Rick,
> Since you are the author, could you pass along a copy of that article to
> me?
>
> Chris

[Non-text portions of this message have been removed]

6780. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Gro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 22:01:36 UTC
From: ve7alq
Topic: 6774 Message: 6780

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> et moi aussitot
>
> merci en advance
>
> Paul VE3PVB en Guelph ON Canada
>

http://translate.google.com/?hl=en# << Make Yahoo! Groups Happy.

- Just a suggestion OM. Yahoo won't tolerate some languages.

6781. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Gro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 22:26:30 UTC
From: Paul V Birke PEng
Topic: 6774 Message: 6781

sorry

I more or less said just me too

thanks Paul

From: ve7alq <ve7alq@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, September 10, 2009 6:01:36 PM
Subject: Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Gro

--- In loopantennas@ yahoogroups. com, Paul V Birke PEng <nonlinear@. ..> wrote:
>
> et moi aussitot
>
> merci en advance
>
> Paul VE3PVB en Guelph ON Canada
>

http://translate. google.com/ ?hl=en# << Make Yahoo! Groups Happy.

- Just a suggestion OM. Yahoo won't tolerate some languages.

[Non-text portions of this message have been removed]

6782. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Gro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 23:04:05 UTC
From: Chris Trask
Topic: 6774 Message: 6782

```
>
> > et moi aussitot
> >
> > merci en advance
> >
> > Paul VE3PVB en Guelph ON Canada
>
>
> http://translate.google.com/?hl=en# << Make Yahoo! Groups Happy.
>
> - Just a suggestion OM. Yahoo won't tolerate some languages.
>

?Ne parlez vous en fran?ais?

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks
```

6783. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 23:57:31 UTC
From: Rick Karlquist
Topic: 6774 Message: 6783

al_ka5jgv wrote:
> I likewise am interested in the article, or information on where this
> publication is available without a full subscription.

Individual issues are available at Ham Radio Outlet stores.

Rick N6RK

6784. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-11 00:02:08 UTC
From: dannibou
Topic: 6774 Message: 6784

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> et moi aussitot
>
> merci en advance
>
> Paul VE3PVB en Guelph ON Canada

Paul...
Do you speak french,(my mother tongue), Just curious
Danny

6785. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-11 01:39:10 UTC
From: Paul V Birke PEng
Topic: 6774 Message: 6785

I speak so little that is why I did not say too much

but thanks for asking

wish my French was much better

Paul

From: dannibou <dannibou@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, September 10, 2009 8:02:08 PM
Subject: Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Group)

--- In loopantennas@ yahoogroups. com, Paul V Birke PEng <nonlinear@. ..> wrote:
>
> et moi aussitot
>
> merci en advance
>
> Paul VE3PVB en Guelph ON Canada

Paul...
Do you speak french,(my mother tongue), Just curious
Danny

[Non-text portions of this message have been removed]

6786. Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Gro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-11 01:40:35 UTC
From: Paul V Birke PEng
Topic: 6774 Message: 6786

thanks Chris,

likely you know how to speak Swahelli (spelling ??)

Paul

From: Chris Trask <christrask@earthlink.net>
To: loopantennas@yahoogroups.com
Sent: Thursday, September 10, 2009 7:04:05 PM
Subject: Re: NCJ article on loop receiving antennas (was: [loopantennas] New to the Gro

>
> > et moi aussitot
> >
> > merci en advance
> >
> > Paul VE3PVB en Guelph ON Canada
>
>
> http://translate. google.com/ ?hl=en# << Make Yahoo! Groups Happy.
>
> - Just a suggestion OM. Yahoo won't tolerate some languages.
>

¿Ne parlez vous en français?

Chris

,---------- --------- --. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,---- --------- -' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlin k.net
| | | | \ '. http://www.home. earthlink. net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

6787. FM only Home Theatre System

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-10 16:02:32 UTC
From: dmpienta
Topic: 6787 Message: 6787

Not sure this is the right group to help me out....

I bought my mom and dad a new 5-disc all in one home theatre system. But, it only has FM receiver/channels. No AM. I hooked it up to their whole house surround speaker system. They like their morning AM station. How do I get the broadcast of that AM station through the speaker system and /or the new surround system? I need a simple solution as I am not an expert in this field.

What to buy and how to hook it up.

Thanks,

Dana

6789. (no subject)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-11 20:26:07 UTC
From: Bill McGraw
Topic: 6789 Message: 6789

¿Ne parlez vous en français?

Chris

My high school French was weak but I learned to say, "Je parle Francais un peu" and I can belt out the French National Anthem somewhat poorly. French speaking groups in Quebec (and other languages throughout the world) do appreciate even a few phrases we "American version of English" speaking folks have. But then there are the Cajuns that wreck both English and French in such a cute way that generates Boudreaux and Thibadeaux stories. Thanks for the translation page.
 Bill McGraw
"Somewhere South of Chicago"
Greenville, Mississippi

6790. Re: [loopantennas] FM only Home Theatre System

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-11 22:57:32 UTC
From: Andy
Topic: 6787 Message: 6790

(Yeah, not really the right group because it isn't antenna related.)

Long ago, it used to be possible to buy an AM/FM tuner, but those days are long gone. You can still get separate AM tuners, used, but it's not easy to find them.

You can purchase a separate AM radio, or AM/FM receiver, and hook it in. There are all kinds of possibilities, not all cheap, and some with "some assembly required."

For example, even a portable AM radio can be hooked in, by taking its speaker or headphone output and running it into any available line-in jack on the home theater system, probably with a Y-adapter to send it to both channels.. It works, even if it's not ideal and may or may not sound that good.

Unless you swap it for a new all-on-one system that includes AM, you would end up with separate components which might be more than your folks want to deal with.

By the way, most AM/FM stereo systems have incredibly crappy AM receivers. They can be improved by adding a real longwire antenna instead of using the built-in one, but even then they tend to be very muffled.

If I remember correctly, the GE Superadio(?) is supposed to have a good AM section, but from what I read the Superadio 3 is not nearly as good as earlier models were, so it may not be such a good choice anymore.

Andy

6791. Re: [loopantennas] FM only Home Theatre System

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-12 02:18:41 UTC
From: wharpt@aol.com
Topic: 6787 Message: 6791

Go over to e-bay and search for AM/FM tuners, such as Sony and Bogen.
You'll find them with RCA L/R outputs to feed to the stereo system. Some come
with small loop antennas for the AM reception.

Jim S.

In a message dated 9/11/2009 5:58:03 P.M. Central Daylight Time,
ai.egrps@... writes:

(Yeah, not really the right group because it isn't antenna related.)

Long ago, it used to be possible to buy an AM/FM tuner, but those days
are long gone. You can still get separate AM tuners, used, but it's
not easy to find them.

[Non-text portions of this message have been removed]

6792. Re: 40/80m Magnetic Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-14 09:08:14 UTC
From: hsdx@btinternet.com
Topic: 6788 Message: 6792

--- In loopantennas@yahoogroups.com, "hsdx@..." <hsdx@...> wrote:
>
> I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm diameter copper tube is ideal. Diameter is 1m and it receives well enough to use with my softrock SDR receiver. The tuning is critical and a variable capacitor is required. I used a 34-1325 pF variable capacitor and I can tune 40m to 80m with it. The variable capacitor joins the two ends of the loop together and the coax cable screen connects to one side of the variable capacitor. The centre of the coax is connected to an insulated 1mm sq. cross sectional area cable. The cable is wrapped around the loop about 10 turns and clipped onto the loop with a large crocdile clip about 3/4 the way round. The winding starts at the point you connected the coax screen to the loop. For receive the croc clip position doesn't matter. For transmitting the SWR can be adjusted by moving the position of the crocodile clip. By tuning the capacitor different frequencies can be selected. This is a high Q antenna and great for nulling out noise.
>

6793. Re: 40/80m Magnetic Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-14 15:53:51 UTC
From: jaafes
Topic: 6788 Message: 6793

Some pictures of your antenna would be interesting.
Jose

> --- In loopantennas@yahoogroups.com, "hsdx@" <hsdx@> wrote:
> >
> > I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm diameter copper tube is ideal. Diameter is 1m and ...
> .....

6794. Re: [loopantennas] Re: 40/80m Magnetic Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-14 16:42:03 UTC
From: corizza
Topic: 6788 Message: 6794

picture is possible that i'm interesting
----- Original Message -----
From: jaafes
To: loopantennas@yahoogroups.com
Sent: Monday, September 14, 2009 5:53 PM
Subject: [loopantennas] Re: 40/80m Magnetic Receive/Transmit G3LHZ Loop Aerial

Some pictures of your antenna would be interesting.
Jose

> --- In loopantennas@yahoogroups.com, "hsdx@" <hsdx@> wrote:
> >
> > I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm diameter copper tube is ideal. Diameter is 1m and ...
.....

[Non-text portions of this message have been removed]

6795. Re: 40/80m Magnetic Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-15 15:43:00 UTC
From: hsdx@btinternet.com
Topic: 6788 Message: 6795

--- In loopantennas@yahoogroups.com, "corizza" <giovannicorizza@...> wrote:
>
> picture is possible that i'm interesting
> ----- Original Message -----
> From: jaafes
> To: loopantennas@yahoogroups.com
> Sent: Monday, September 14, 2009 5:53 PM
> Subject: [loopantennas] Re: 40/80m Magnetic Receive/Transmit G3LHZ Loop Aerial
>
>
> Some pictures of your antenna would be interesting.
> Jose
>
> > --- In loopantennas@yahoogroups.com, "hsdx@" <hsdx@> wrote:
> > >
> > > I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm diameter copper tube is ideal. Diameter is 1m and ...
> > ......
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
I will try and remember to do photo tonight!
M0ZEH

6796. Re: 40/80m Magnetic Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-16 10:41:18 UTC
From: hsdx@btinternet.com
Topic: 6788 Message: 6796

--- In loopantennas@yahoogroups.com, "hsdx@..." <hsdx@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "corizza" <giovannicorizza@> wrote:
> >
> > picture is possible that i'm interesting
> > ----- Original Message -----
> > From: jaafes
> > To: loopantennas@yahoogroups.com
> > Sent: Monday, September 14, 2009 5:53 PM
> > Subject: [loopantennas] Re: 40/80m Magnetic Receive/Transmit G3LHZ Loop Aerial
> >
> >
> > Some pictures of your antenna would be interesting.
> > Jose
> >
> > > --- In loopantennas@yahoogroups.com, "hsdx@" <hsdx@> wrote:
> > > >
> > > I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm diameter copper tube is ideal. Diameter is 1m and ...
> > .....
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
> I will try and remember to do photo tonight!
> M0ZEH
>
Photos are now posted.
M0ZEH

6797. 40/80m loop Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-17 15:35:37 UTC
From: Steve
Topic: 6797 Message: 6797

I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm diameter copper tube is ideal. Diameter of loop is 1m and it receives well enough to use with my softrock SDR receiver. The tuning is critical and a variable capacitor is required. I used a 34-1325 pF variable capacitor and I can tune 40m to 80m with it. The variable capacitor joins the two ends of the loop together and the coax cable screen connects to one side of the variable capacitor. The centre of the coax is connected to an insulated 1mm sq. cross sectional area cable. The cable is wrapped around the loop about 10 turns and clipped onto the loop with a large crocdile clip about 3/4 the way round. The winding starts at the point you connected the coax screen to the loop. For
receive the croc clip position doesn't matter. For transmitting the SWR can be adjusted by moving the position of the crocodile clip. By tuning the capacitor different frequencies can be selected. This is a high Q antenna and great for nulling out noise. Make sure you use a wide air spaced variable capacitor if transmitting. Photos are posted here
http://groups.yahoo.com/group/loopantennas/photos/album/1727953826/pic/list

6798. Re: [loopantennas] 40/80m loop Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-17 17:55:03 UTC
From: Paul V Birke PEng
Topic: 6797 Message: 6798

Dear Steve

very very nice and slick
how many watts do you run thru this
I know an old guy in Guelph here who needs something like this for his appartment building
He is on the ground floor and has a little balcony

this looks perfect and he runs a barefoot Kenwood machine 100 watts I believe

best wishes and thanks for posting
Paul in Guelph ON Canada
VE3PVB

From: Steve <hsdx@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, September 17, 2009 11:35:37 AM
Subject: [loopantennas] 40/80m loop Receive/Transmit G3LHZ Loop Aerial

I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm
diameter copper tube is ideal. Diameter of loop is 1m and it receives well enough to use
with my softrock SDR receiver. The tuning is critical and a variable capacitor is required.
I used a 34-1325 pF variable capacitor and I can tune 40m to 80m with it. The variable
capacitor joins the two ends of the loop together and the coax cable screen connects to one
side of the variable capacitor. The centre of the coax is connected to an insulated 1mm sq.
cross sectional area cable. The cable is wrapped around the loop about 10 turns and clipped
onto the loop with a large crocdile clip about 3/4 the way round. The winding starts at the
point you connected the coax screen to the loop. For
receive the croc clip position doesn't matter. For transmitting the SWR can be adjusted by
moving the position of the crocodile clip. By tuning the capacitor different frequencies
can be selected. This is a high Q antenna and great for nulling out noise. Make sure you
use a wide air spaced variable capacitor if transmitting. Photos are posted here
http://groups. yahoo.com/ group/loopantenn as/photos/ album/1727953826 /pic/list

[Non-text portions of this message have been removed]

6799. Re: 40/80m loop Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-21 09:52:06 UTC
From: Steve
Topic: 6797 Message: 6799

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> Dear Steve
>
> very very nice and slick
> how many watts do you run thru this
> I know an old guy in Guelph here who needs something like this for his appartment building
> He is on the ground floor and has a little balcony
>
> this looks perfect and he runs a barefoot Kenwood machine 100 watts I believe
>
> best wishes and thanks for posting
> Paul in Guelph ON Canada
> VE3PVB
>
>
>
>
> _____
> From: Steve <hsdx@...>
> To: loopantennas@yahoogroups.com
> Sent: Thursday, September 17, 2009 11:35:37 AM
> Subject: [loopantennas] 40/80m loop Receive/Transmit G3LHZ Loop Aerial
>
>
> I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm
> diameter copper tube is ideal. Diameter of loop is 1m and it receives well enough to use with my softrock SDR receiver. The tuning is critical and a variable capacitor is required. I used a 34-1325 pF variable capacitor and I can tune 40m to 80m with it. The variable capacitor joins the two ends of the loop together and the coax cable screen connects to one side of the variable capacitor. The centre of the coax is connected to an insulated 1mm sq. cross sectional area cable. The cable is wrapped around the loop about 10 turns and clipped onto the loop with a large crocdile clip about 3/4 the way round. The winding starts at the point you connected the coax screen to the loop. For
> receive the croc clip position doesn't matter. For transmitting the SWR can be adjusted by moving the position of the crocodile clip. By tuning the capacitor different frequencies can be selected. This is a high Q antenna and great for nulling out noise. Make sure you use a wide air spaced variable capacitor if transmitting. Photos are posted here http://groups. yahoo.com/ group/loopantenn as/photos/ album/1727953826 /pic/list
>
> [Non-text portions of this message have been removed]
>
I haven't transmitted on it yet as the capacitors I use are only low voltage rated. With the correct capacitor 100W should be possible.

I have now built a rectangular loop that covers 180m, 80m and 40m. I converted an old aluminium FM yagi (commercial radio receive) antenna that I had in storage. I will publish the results and pictures in due course.
73
M0ZEH

6800. Re: 40/80m loop Receive/Transmit G3LHZ Loop Aerial

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-09-22 10:04:31 UTC
From: Steve
Topic: 6797 Message: 6800

--- In loopantennas@yahoogroups.com, "Steve" <hsdx@...> wrote:
>
> --- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@> wrote:
> >
> > Dear Steve
> >
> > very very nice and slick
> > how many watts do you run thru this
> > I know an old guy in Guelph here who needs something like this for his appartment building
> > He is on the ground floor and has a little balcony
> >
> > this looks perfect and he runs a barefoot Kenwood machine 100 watts I believe
> >
> > best wishes and thanks for posting
> > Paul in Guelph ON Canada
> > VE3PVB
> >
> >
> >
> >
> > _____
> > From: Steve <hsdx@>
> > To: loopantennas@yahoogroups.com
> > Sent: Thursday, September 17, 2009 11:35:37 AM
> > Subject: [loopantennas] 40/80m loop Receive/Transmit G3LHZ Loop Aerial
> >
> >
> > I built a passive 40/80m loop antenna with 35mm sq. copper cable, 10mm
> > diameter copper tube is ideal. Diameter of loop is 1m and it receives well enough to use with my softrock SDR receiver. The tuning is critical and a variable capacitor is required. I used a 34-1325 pF variable capacitor and I can tune 40m to 80m with it. The variable capacitor joins the two ends of the loop together and the coax cable screen connects to one side of the variable capacitor. The centre of the coax is connected to an insulated 1mm sq. cross sectional area cable. The cable is wrapped around the loop about 10 turns and clipped onto the loop with a large crocdile clip about 3/4 the way round. The winding starts at the point you connected the coax screen to the loop. For
> > receive the croc clip position doesn't matter. For transmitting the SWR can be adjusted by moving the position of the crocodile clip. By tuning the capacitor different frequencies can be selected. This is a high Q antenna and great for nulling out noise. Make sure you use a wide air spaced variable capacitor if transmitting. Photos are posted here http://groups. yahoo.com/ group/loopantenn as/photos/ album/1727953826 /pic/list
> >
> > [Non-text portions of this message have been removed]
> >

> I haven't transmitted on it yet as the capacitors I use are only low voltage rated. With the correct capacitor 100W should be possible.
> I have now built a rectangular loop that covers 180m, 80m and 40m. I converted an old aluminium FM yagi (commercial radio receive) antenna that I had in storage. I will publish the results and pictures in due course.
> 73
> M0ZEH
>
I have now posted pictures of the rectangular loop, the dimensions are 820x1450mm and the loop tubing is 10mm diameter aluminium.
M0ZEH

6801. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-01 13:39:43 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6801

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6802. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-01 13:39:43 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6802

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6803. operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-07 20:43:57 UTC
From: Zephyr
Topic: 6803 Message: 6803

Greetings fellow hams,

Thanks for having me. I want to pick your brains already :)

1. If you could choose a city apartment rental floor from which to work DX (and local) on all HF ham bands to include 160m (and VHF & UHF), which floor would you choose? This includes operating from indoors, and from a balcony or fire escape. Let's assume for simplicity's sake that any floor you choose has a clear line of sight to the horizon in at least one cardinal direction. (The apartment building isn't surrounded on all sides by taller buildings.)

2. Which floor would be the lowest floor you would consider?

3. Is there such a thing as a floor that's too high for good radiowave propagation? (Let's be reasonable. There is no Tower of Babel Apartment Complex in this city ;)

4. What if you could choose any rooftop from which to operate from time to time? How high would your rooftop be? How many stories?

5. What kind(s) of antennas not permanently installed would you use?

Thanks in advance.

73,
Frank

6804. Re: operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 02:35:43 UTC
From: Ya`akov
Topic: 6803 Message: 6804

--- In loopantennas@yahoogroups.com, "Zephyr" <ZephyrNewYork@...> wrote:
>
> Greetings fellow hams,
>
> Thanks for having me. I want to pick your brains already :)
>
> 1. If you could choose a city apartment rental floor from which to
> work DX (and local) on all HF ham bands to include 160m (and VHF &
> UHF), which floor would you choose? This includes operating from
> indoors, and from a balcony or fire escape. Let's assume for
> simplicity's sake that any floor you choose has a clear line of
> sight to the horizon in at least one cardinal direction.
> (The apartment building isn't surrounded on all sides by
> taller buildings.)
>
[--CUT--]
>
> 73,
> Frank
>

Out of curiosity, what is the construction of the apartment?
Wood-frame? Reinforced Concrete? Masonry?

Indoor antennas may work well from wood-frame apartments yet
be useless inside reinforced concrete apartments.

73 de Yakov, VE7ALQ - Same Callsign since 1969, Fist #11117

6805. Re: [loopantennas] operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 07:29:44 UTC
From: m c
Topic: 6803 Message: 6805

Hi,

15 years ago I worked from 9th floor with a magnetic antenna in the balcony, on 7 Mhz band with 80 wtts. It was OK for local contacts and also inside Europe. In same location I put a monoband vertical for 28Mhz on the top of the building (30mtrs high) and it was great !!!
If I could choose again, I try to put a delta loop on the top of building, calculated for 40 mtrs band and feeded with paralell line with ZMATCH for tuning on 7, 14, 21, 28 Mhz.
About dimension, you can see my antenna. If you want to work on 80 mtrs band, you have to multiply everything with 2. So, depending the space on the building and your local regulations. About mast, you cand use a fiberglass mast from Spiderbeam.
About your question, what level is better for you, I'll prefer the highest possible.

Cristian - YO4DFT
www.qsl.net/yo4dft

--- On Wed, 10/7/09, Zephyr <ZephyrNewYork@...> wrote:

From: Zephyr <ZephyrNewYork@...>
Subject: [loopantennas] operating from apartments
To: loopantennas@yahoogroups.com
Date: Wednesday, October 7, 2009, 4:43 PM

Greetings fellow hams,

Thanks for having me. I want to pick your brains already :)

1. If you could choose a city apartment rental floor from which to work DX (and local) on all HF ham bands to include 160m (and VHF & UHF), which floor would you choose? This includes operating from indoors, and from a balcony or fire escape. Let's assume for simplicity's sake that any floor you choose has a clear line of sight to the horizon in at least one cardinal direction. (The apartment building isn't surrounded on all sides by taller buildings.)

2. Which floor would be the lowest floor you would consider?

3. Is there such a thing as a floor that's too high for good radiowave propagation? (Let's be reasonable. There is no Tower of Babel Apartment Complex in this city ;)

4. What if you could choose any rooftop from which to operate from time to time? How high would your rooftop be? How many stories?

5. What kind(s) of antennas not permanently installed would you use?

Thanks in advance.

73,
Frank

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6806. Re: [loopantennas] Re: operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 09:26:51 UTC
From: zephyrnewyork
Topic: 6803 Message: 6806

Yakov,
Yes, I have read about wooden buildings. Unfortunately, we're talking about New York City, where most of the apartment buildings are made of concrete, brick, or brownstone. The reason I'm asking is because I'm apartment hunting right now.

73,
Frank

On Wed, Oct 7, 2009 at 22:35, Ya`akov <ve7alq@...> wrote:

>
>
> Out of curiosity, what is the construction of the apartment?
> Wood-frame? Reinforced Concrete? Masonry?
>
> Indoor antennas may work well from wood-frame apartments yet
> be useless inside reinforced concrete apartments.
>
> 73 de Yakov, VE7ALQ - Same Callsign since 1969, Fist #11117
>
>
>

[Non-text portions of this message have been removed]

6807. Re: [loopantennas] operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 09:30:15 UTC
From: zephyrnewyork
Topic: 6803 Message: 6807

Cristian,
Thanks for the tip about Spiderbeam. I've looked at two apartments so far.
One of them is on the 5th of 5 floors and has roof access. However, it is
surrounded on 3 sides by taller buildings and has a clear line of sight on 1
side to the West. I'd prefer a clear line of sight to the eastern horizon
for DX if I was forced to choose one direction because I'm in New York City.

73,
Frank

On Thu, Oct 8, 2009 at 03:29, m c <carsium2000@...> wrote:

>
>
> Hi,
>
> 15 years ago I worked from 9th floor with a magnetic antenna in the
> balcony, on 7 Mhz band with 80 wtts. It was OK for local contacts and also
> inside Europe. In same location I put a monoband vertical for 28Mhz on the
> top of the building (30mtrs high) and it was great !!!
> If I could choose again, I try to put a delta loop on the top of building,
> calculated for 40 mtrs band and feeded with paralell line with ZMATCH for
> tuning on 7, 14, 21, 28 Mhz. About dimension, you can see my antenna. If you
> want to work on 80 mtrs band, you have to multiply everything with 2. So,
> depending the space on the building and your local regulations. About mast,
> you cand use a fiberglass mast from Spiderbeam.
> About your question, what level is better for you, I'll prefer the highest
> possible.
>
> Cristian - YO4DFT
> www.qsl.net/yo4dft
>
> --- On Wed, 10/7/09, Zephyr <ZephyrNewYork@...<ZephyrNewYork%40gmail.com>>
> wrote:
>
> From: Zephyr <ZephyrNewYork@... <ZephyrNewYork%40gmail.com>>
> Subject: [loopantennas] operating from apartments
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Date: Wednesday, October 7, 2009, 4:43 PM
>
>
> Greetings fellow hams,
>
> Thanks for having me. I want to pick your brains already :)
>
> 1. If you could choose a city apartment rental floor from which to

> work DX (and local) on all HF ham bands to include 160m (and VHF &
> UHF), which floor would you choose? This includes operating from
> indoors, and from a balcony or fire escape. Let's assume for
> simplicity's sake that any floor you choose has a clear line of sight
> to the horizon in at least one cardinal direction. (The apartment
> building isn't surrounded on all sides by taller buildings.)
>
> 2. Which floor would be the lowest floor you would consider?
>
> 3. Is there such a thing as a floor that's too high for good
> radiowave propagation? (Let's be reasonable. There is no Tower of
> Babel Apartment Complex in this city ;)
>
> 4. What if you could choose any rooftop from which to operate from
> time to time? How high would your rooftop be? How many stories?
>
> 5. What kind(s) of antennas not permanently installed would you use?
>
> Thanks in advance.
>
> 73,
> Frank
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

6808. Re: [loopantennas] operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 09:36:13 UTC
From: m c
Topic: 6803 Message: 6808

Hi Frank,

I suppose it's very hard to be hamradio in NY city. Check your regulation about antennas, if you can obtain permit to install on the roof and check how much space do you have. You can look for mast on Spiderbeam web site.

http://www.spiderbeam.com/home/index.php

Regards,
Cristian - YO4DFT

--- On Thu, 10/8/09, zephyrnewyork <ZephyrNewYork@...> wrote:

From: zephyrnewyork <ZephyrNewYork@...>
Subject: Re: [loopantennas] operating from apartments
To: loopantennas@yahoogroups.com
Date: Thursday, October 8, 2009, 5:30 AM

Cristian,
Thanks for the tip about Spiderbeam. I've looked at two apartments so far.
One of them is on the 5th of 5 floors and has roof access. However, it is
surrounded on 3 sides by taller buildings and has a clear line of sight on 1
side to the West. I'd prefer a clear line of sight to the eastern horizon
for DX if I was forced to choose one direction because I'm in New York City.

73,
Frank

On Thu, Oct 8, 2009 at 03:29, m c <carsium2000@...> wrote:

>
>
> Hi,
>
> 15 years ago I worked from 9th floor with a magnetic antenna in the
> balcony, on 7 Mhz band with 80 wtts. It was OK for local contacts and also
> inside Europe. In same location I put a monoband vertical for 28Mhz on the
> top of the building (30mtrs high) and it was great !!!
> If I could choose again, I try to put a delta loop on the top of building,
> calculated for 40 mtrs band and feeded with paralell line with ZMATCH for
> tuning on 7, 14, 21, 28 Mhz. About dimension, you can see my antenna. If you
> want to work on 80 mtrs band, you have to multiply everything with 2. So,
> depending the space on the building and your local regulations. About mast,
> you cand use a fiberglass mast from Spiderbeam.
> About your question, what level is better for you, I'll prefer the highest
> possible.
>

> Cristian - YO4DFT
> www.qsl.net/yo4dft
>
> --- On Wed, 10/7/09, Zephyr <ZephyrNewYork@...<ZephyrNewYork%40gmail.com>>
> wrote:
>
> From: Zephyr <ZephyrNewYork@... <ZephyrNewYork%40gmail.com>>
> Subject: [loopantennas] operating from apartments
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Date: Wednesday, October 7, 2009, 4:43 PM
>
>
> Greetings fellow hams,
>
> Thanks for having me. I want to pick your brains already :)
>
> 1. If you could choose a city apartment rental floor from which to
> work DX (and local) on all HF ham bands to include 160m (and VHF &
> UHF), which floor would you choose? This includes operating from
> indoors, and from a balcony or fire escape. Let's assume for
> simplicity's sake that any floor you choose has a clear line of sight
> to the horizon in at least one cardinal direction. (The apartment
> building isn't surrounded on all sides by taller buildings.)
>
> 2. Which floor would be the lowest floor you would consider?
>
> 3. Is there such a thing as a floor that's too high for good
> radiowave propagation? (Let's be reasonable. There is no Tower of
> Babel Apartment Complex in this city ;)
>
> 4. What if you could choose any rooftop from which to operate from
> time to time? How high would your rooftop be? How many stories?
>
> 5. What kind(s) of antennas not permanently installed would you use?
>
> Thanks in advance.
>
> 73,
> Frank
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF

> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6809. Re: [loopantennas] operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 12:18:10 UTC
From: zephyrnewyork
Topic: 6803 Message: 6809

Cristian,
Their products look nice :) I found their US distributor's site too.

http://www.spiderbeam.us/

<http://www.spiderbeam.us/>73,
Frank

On Thu, Oct 8, 2009 at 05:36, m c <carsium2000@...> wrote:

>
>
> Hi Frank,
>
> I suppose it's very hard to be hamradio in NY city. Check your regulation
> about antennas, if you can obtain permit to install on the roof and check
> how much space do you have.
> You can look for mast on Spiderbeam web site.
>
> http://www.spiderbeam.com/home/index.php
>
> Regards,
> Cristian - YO4DFT
>
> --- On Thu, 10/8/09, zephyrnewyork <ZephyrNewYork@...<ZephyrNewYork%40gmail.com>>
> wrote:
>
> From: zephyrnewyork <ZephyrNewYork@... <ZephyrNewYork%40gmail.com>>
> Subject: Re: [loopantennas] operating from apartments
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Date: Thursday, October 8, 2009, 5:30 AM
>
>
> Cristian,
> Thanks for the tip about Spiderbeam. I've looked at two apartments so far.
> One of them is on the 5th of 5 floors and has roof access. However, it is
> surrounded on 3 sides by taller buildings and has a clear line of sight on
> 1
> side to the West. I'd prefer a clear line of sight to the eastern horizon
> for DX if I was forced to choose one direction because I'm in New York
> City.
>
> 73,
> Frank
>
> On Thu, Oct 8, 2009 at 03:29, m c <carsium2000@...<carsium2000%40yahoo.com>>

> wrote:
>
> >
> >
> > Hi,
> >
> > 15 years ago I worked from 9th floor with a magnetic antenna in the
> > balcony, on 7 Mhz band with 80 wtts. It was OK for local contacts and
> also
> > inside Europe. In same location I put a monoband vertical for 28Mhz on
> the
> > top of the building (30mtrs high) and it was great !!!
> > If I could choose again, I try to put a delta loop on the top of
> building,
> > calculated for 40 mtrs band and feeded with paralell line with ZMATCH for
> > tuning on 7, 14, 21, 28 Mhz. About dimension, you can see my antenna. If
> you
> > want to work on 80 mtrs band, you have to multiply everything with 2. So,
> > depending the space on the building and your local regulations. About
> mast,
> > you cand use a fiberglass mast from Spiderbeam.
> > About your question, what level is better for you, I'll prefer the
> highest
> > possible.
> >
> > Cristian - YO4DFT
> > www.qsl.net/yo4dft
> >
> > --- On Wed, 10/7/09, Zephyr <ZephyrNewYork@...<ZephyrNewYork%40gmail.com>
> <ZephyrNewYork%40gmail.com>>
> > wrote:
> >
> > From: Zephyr <ZephyrNewYork@... <ZephyrNewYork%40gmail.com><ZephyrNewYork%
> 40gmail.com>>
> > Subject: [loopantennas] operating from apartments
> > To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com><loopantennas%
> 40yahoogroups.com>
>
> > Date: Wednesday, October 7, 2009, 4:43 PM
> >
> >
> > Greetings fellow hams,
> >
> > Thanks for having me. I want to pick your brains already :)
> >
> > 1. If you could choose a city apartment rental floor from which to
> > work DX (and local) on all HF ham bands to include 160m (and VHF &
> > UHF), which floor would you choose? This includes operating from
> > indoors, and from a balcony or fire escape. Let's assume for
> > simplicity's sake that any floor you choose has a clear line of sight

> > to the horizon in at least one cardinal direction. (The apartment
> > building isn't surrounded on all sides by taller buildings.)
> >
> > 2. Which floor would be the lowest floor you would consider?
> >
> > 3. Is there such a thing as a floor that's too high for good
> > radiowave propagation? (Let's be reasonable. There is no Tower of
> > Babel Apartment Complex in this city ;)
> >
> > 4. What if you could choose any rooftop from which to operate from
> > time to time? How high would your rooftop be? How many stories?
> >
> > 5. What kind(s) of antennas not permanently installed would you use?
> >
> > Thanks in advance.
> >
> > 73,
> > Frank
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the
> > Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and
> GIF
> > into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> > [Non-text portions of this message have been removed]
> >
> >
> >
>
> [Non-text portions of this message have been removed]
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files

>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

6810. Re: operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 12:47:34 UTC
From: tcurtola
Topic: 6803 Message: 6810

Hi Frank,

From my personal experience, I live in Toronto, Ontario on the 30th floor of a 31 story building. Reinforced concrete construction so lots of rebar metal. South facing balcony.

Because of the construction type, indoor antennas are useless. From the balcony I use a MFJ-1788 40m - 15m small loop antenna.

I can work DX when condx are good. I'm not really a dx chaser and mainly concentrate on North America CW work on 40m and 20m. I am pleased with my results. I would like to build a broadband rx'ing loop because the transmitting loop is very narrow and I like to scan the H.F. band.

80m and 160m would be more difficult in an apartment building but I know of a couple local hams doing that. They have permission to string long wires to other nearby buildings owned by the same landlord or have permission to put up antennas on the roof.

73,

Tom Curtola
VA3TY

--- In loopantennas@yahoogroups.com, "Zephyr" <ZephyrNewYork@...> wrote:
>
> 1. If you could choose a city apartment rental floor from which to
> work DX (and local) on all HF ham bands to include 160m (and VHF &
> UHF), which floor would you choose? This includes operating from
> indoors, and from a balcony or fire escape. Let's assume for
> simplicity's sake that any floor you choose has a clear line of sight
> to the horizon in at least one cardinal direction. (The apartment
> building isn't surrounded on all sides by taller buildings.)
>
> 2. Which floor would be the lowest floor you would consider?
>
> 3. Is there such a thing as a floor that's too high for good
> radiowave propagation? (Let's be reasonable. There is no Tower of
> Babel Apartment Complex in this city ;)
>
> 4. What if you could choose any rooftop from which to operate from
> time to time? How high would your rooftop be? How many stories?
>
> 5. What kind(s) of antennas not permanently installed would you use?
>
>
> Thanks in advance.
>
>

> 73,
> Frank
>

6811. Re: [loopantennas] Re: operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 12:58:39 UTC
From: zephyrnewyork
Topic: 6803 Message: 6811

Tom,
Thanks. I'm definitely looking for roof access.

73,
Frank

On Thu, Oct 8, 2009 at 08:47, tcurtola <tcurtola@...> wrote:

>
>
> Hi Frank,
>
> From my personal experience, I live in Toronto, Ontario on the 30th floor
> of a 31 story building. Reinforced concrete construction so lots of rebar
> metal. South facing balcony.
>
> Because of the construction type, indoor antennas are useless. From the
> balcony I use a MFJ-1788 40m - 15m small loop antenna.
>
> I can work DX when condx are good. I'm not really a dx chaser and mainly
> concentrate on North America CW work on 40m and 20m. I am pleased with my
> results. I would like to build a broadband rx'ing loop because the
> transmitting loop is very narrow and I like to scan the H.F. band.
>
> 80m and 160m would be more difficult in an apartment building but I know of
> a couple local hams doing that. They have permission to string long wires to
> other nearby buildings owned by the same landlord or have permission to put
> up antennas on the roof.
>
> 73,
>
> Tom Curtola
> VA3TY
> >
> > 5. What kind(s) of antennas not permanently installed would you use?
> >
> >
> > Thanks in advance.
> >
> >
> > 73,
> > Frank
>

[Non-text portions of this message have been removed]

6812. RE: [loopantennas] operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-08 15:50:44 UTC
From: D Anderson
Topic: 6803 Message: 6812

I've operated from a metal 12 story bldg.
When on 5th floor I had a crushing signal 40-10m
When I was on the top floor (same antenna assy) my signal was poor.
I used a hygain 18v style antenna stuck horizontally out the window.
Mounting was done with a C-clamp attached to wood rail.
Tuning was done by tapping loading coil at base and I used a Z-match-to-gnd
and VSWR meter(zero refl power).
My gnd was not great but I used some short wires to anything metal I could
clip onto.
I ran 500w and had a great sig on 20+40m, mainly helped by the bldg's metal
ground plane!
At the bldg's top (after I moved), gnd plane wasn't good so my sigs were
poor.

Hope that helps - Dave K6QDD

-----Original Message-----
From: loopantennas@yahoogroups.com
[mailto:loopantennas@yahoogroups.com]On Behalf Of Zephyr
Sent: Wednesday, October 07, 2009 1:44 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] operating from apartments

Greetings fellow hams,

Thanks for having me. I want to pick your brains already :)

1. If you could choose a city apartment rental floor from which to
work DX (and local) on all HF ham bands to include 160m (and VHF &
UHF), which floor would you choose? This includes operating from
indoors, and from a balcony or fire escape. Let's assume for
simplicity's sake that any floor you choose has a clear line of sight
to the horizon in at least one cardinal direction. (The apartment
building isn't surrounded on all sides by taller buildings.)

2. Which floor would be the lowest floor you would consider?

3. Is there such a thing as a floor that's too high for good
radiowave propagation? (Let's be reasonable. There is no Tower of
Babel Apartment Complex in this city ;)

4. What if you could choose any rooftop from which to operate from
time to time? How high would your rooftop be? How many stories?

5. What kind(s) of antennas not permanently installed would you use?

Thanks in advance.

73,
Frank

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

--
Internal Virus Database is out-of-date.
Checked by AVG Free Edition.
Version: 7.1.413 / Virus Database: 268.18.8/714 - Release Date: 3/8/07

6813. Re: [loopantennas] operating from apartments

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-09 15:26:04 UTC
From: zephyrnewyork
Topic: 6803 Message: 6813

Thanks, Dave :)
73,
Frank

On Thu, Oct 8, 2009 at 11:50, D Anderson <lacydog@...> wrote:

>
>
> I've operated from a metal 12 story bldg.
> When on 5th floor I had a crushing signal 40-10m
> When I was on the top floor (same antenna assy) my signal was poor.
> I used a hygain 18v style antenna stuck horizontally out the window.
> Mounting was done with a C-clamp attached to wood rail.
> Tuning was done by tapping loading coil at base and I used a Z-match-to-gnd
> and VSWR meter(zero refl power).
> My gnd was not great but I used some short wires to anything metal I could
> clip onto.
> I ran 500w and had a great sig on 20+40m, mainly helped by the bldg's metal
> ground plane!
> At the bldg's top (after I moved), gnd plane wasn't good so my sigs were
> poor.
>
> Hope that helps - Dave K6QDD
>
>
> -----Original Message-----
> From: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> [mailto:loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>]On
> Behalf Of Zephyr
> Sent: Wednesday, October 07, 2009 1:44 PM
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Subject: [loopantennas] operating from apartments
>
> Greetings fellow hams,
>
> Thanks for having me. I want to pick your brains already :)
>
> 1. If you could choose a city apartment rental floor from which to
> work DX (and local) on all HF ham bands to include 160m (and VHF &
> UHF), which floor would you choose? This includes operating from
> indoors, and from a balcony or fire escape. Let's assume for
> simplicity's sake that any floor you choose has a clear line of sight
> to the horizon in at least one cardinal direction. (The apartment
> building isn't surrounded on all sides by taller buildings.)
>

> 2. Which floor would be the lowest floor you would consider?
>
> 3. Is there such a thing as a floor that's too high for good
> radiowave propagation? (Let's be reasonable. There is no Tower of
> Babel Apartment Complex in this city ;)
>
> 4. What if you could choose any rooftop from which to operate from
> time to time? How high would your rooftop be? How many stories?
>
> 5. What kind(s) of antennas not permanently installed would you use?
>
> Thanks in advance.
>
> 73,
> Frank
>
> ---
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
> --
> Internal Virus Database is out-of-date.
> Checked by AVG Free Edition.
> Version: 7.1.413 / Virus Database: 268.18.8/714 - Release Date: 3/8/07
>
>
>

[Non-text portions of this message have been removed]

6814. 160 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-10 14:12:30 UTC
From: wrenchwerk1
Topic: 6814 Message: 6814

Hi, just joined thanks for the opportunity. I have an 80 meter loop. works well but I want more, as I always do. I will be adding the correct amount of wire to go to 160 very soon but wanted to play with heights and slopes. I am at ~15' now and thought perhaps 1/4 to 1/2 wave would enhance receive and transmit capabilities, as well as SWR which is a problem on low freq. now. I have read a lot on this and know that horizontal and vertical installation radically changes takeoff angle but? Any thoughts or experience would be a great help once I get the ladder out. Thanks 73 KD8HSK Bill

6815. Re: 160 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-12 00:14:10 UTC
From: capntripps2000
Topic: 6814 Message: 6815

What size loop are you using, full size or compact loop?
If you can get the loop mounted vertically the losses (or gains for that matter) would be significant.

I use 1/4 wave wire magnetic loops based on Ben G0CWT's patented feed system and the 80M version works great on 160M when I modify the impedance transformer.

Give his website a look: http://g0cwt.co.uk/magloops/

I built and had his 80M version up and running in 2 hours.

Andrew N3LCW

--- In loopantennas@yahoogroups.com, "wrenchwerk1" <wrenchwerk1@...> wrote:
>
> Hi, just joined thanks for the opportunity. I have an 80 meter loop. works well but I want more, as I always do. I will be adding the correct amount of wire to go to 160 very soon but wanted to play with heights and slopes. I am at ~15' now and thought perhaps 1/4 to 1/2 wave would enhance receive and transmit capabilities, as well as SWR which is a problem on low freq. now. I have read a lot on this and know that horizontal and vertical installation radically changes takeoff angle but? Any thoughts or experience would be a great help once I get the ladder out. Thanks 73 KD8HSK Bill
>

6816. Re: 160 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-12 00:56:26 UTC
From: capntripps2000
Topic: 6814 Message: 6816

I meant losses would be reduced while overall gains would be significant.

--- In loopantennas@yahoogroups.com, "capntripps2000" <capntripps2000@...> wrote:
>
> What size loop are you using, full size or compact loop?
> If you can get the loop mounted vertically the losses (or gains for that matter) would be significant.
>
> I use 1/4 wave wire magnetic loops based on Ben G0CWT's patented feed system and the 80M version works great on 160M when I modify the impedance transformer.
>
> Give his website a look: http://g0cwt.co.uk/magloops/
>
> I built and had his 80M version up and running in 2 hours.
>
> Andrew N3LCW
>
>

6817. Re: [loopantennas] Re: 160 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-12 03:31:13 UTC
From: Paul V Birke PEng
Topic: 6814 Message: 6817

Give his website a look: http://g0cwt. co.uk/magloops/

I built and had his 80M version up and running in 2 hours.

Dead Andrew N3LCW

very nice just downloaded the patents

it is the first time I see the variable cap "beside'' the transformer

will read with relish

thanks
Paul in Guelph ON Canada
VE3PVB

[Non-text portions of this message have been removed]

6818. Re: [loopantennas] 160 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-12 19:09:31 UTC
From: M HOLDEN
Topic: 6814 Message: 6818

Since we are talking wire loops and not magnetic ones, the old formula for wire length is as usual 1005 / f (MHz) . So you are looking at around 500 feet plus. If you use thin wire it has less capacity to ground than thick wire.Therefore the detuning effect is a little less when you are relatively close to the ground. At any practical height it will always give you a "hot air balloon" type of radiation pattern and will toast worms if it is too close to the ground. You really need to adopt the suck it and see technique with an antenna analyser by starting with your loop cut for say 1850khz and then see where it rattles best. A quarter wave (remember to include the velocity factor) of 75 or 80 ohm twin will present something close to 50 ohms at the shack end. The usual impedance of a full wave wire loop is around 110 ohms at its feedpoint.
Good luck. Mike Holden, G4HOL
--- On Sat, 10/10/09, wrenchwerk1 <wrenchwerk1@...> wrote:

From: wrenchwerk1 <wrenchwerk1@aol.com>
Subject: [loopantennas] 160 loop
To: loopantennas@yahoogroups.com
Date: Saturday, 10 October, 2009, 3:12 PM

Hi, just joined thanks for the opportunity. I have an 80 meter loop. works well but I want more, as I always do. I will be adding the correct amount of wire to go to 160 very soon but wanted to play with heights and slopes. I am at ~15' now and thought perhaps 1/4 to 1/2 wave would enhance receive and transmit capabilities, as well as SWR which is a problem on low freq. now. I have read a lot on this and know that horizontal and vertical installation radically changes takeoff angle but? Any thoughts or experience would be a great help once I get the ladder out. Thanks 73 KD8HSK Bill

[Non-text portions of this message have been removed]

6819. VVC endpoint detection?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-13 01:41:21 UTC
From: Jim Miller
Topic: 6819 Message: 6819

If any of you who have used a vacuum variable capacitor: what method did you use to detect the end of travel?

tnx
jim ab3cv

[Non-text portions of this message have been removed]

6820. Re: 160 loop - related question

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-13 12:02:26 UTC
From: wild_bill_yonder
Topic: 6814 Message: 6820

Hi all! Here's a quick question. Earlier this year we purchased an old house sitting on a bit more land than we have at present. I wanted to put up a 160m loop, but once up, using the trees most convenient, it only amounts to about 120m of wire. I feed it with twinlead, run it through a 4:1 balun and a short (3') piece of RG8 to the tuner (at some point I want to try making a balanced tuner with a 1:1 on the radio side). Other than not tuning 160m, what difference will there be on other bands besides where my lobes will be. I modeled both sizes and I do see the different patterns. I have also noticed that the 2:1 bandwidth on 80m seems to be narrow, but I haven't measured it as of yet.

The antenna seems to perform really well. It's only been a month, and I'm only at that qth after work and I can't spend much time on the air because I need to get the work done at the house! I can tell you, the noise level is extremely low. On most bands it is S1 or less, at least on ssb. Of course, the only things on the electric right now is the radio and the pump for the well. It talks real well into G land and northern Europe, and my first qso was Nigeria. I haven't been on enough to see how it is stateside other than it seems to do quite well on 80m. I just run barefoot.

Well, so much for a quick question! I'm just wonder if I should reduce it to an 80m loop or just leave it alone!

Thanks a bunch!

Bill W2NVD

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> Since we are talking wire loops and not magnetic ones, the old formula for wire length is as usual 1005 / f (MHz) . So you are looking at around 500 feet plus. If you use thin wire it has less capacity to ground than thick wire.Therefore the detuning effect is a little less when you are relatively close to the ground. At any practical height it will always give you a "hot air balloon" type of radiation pattern and will toast worms if it is too close to the ground. You really need to adopt the suck it and see technique with an antenna analyser by starting with your loop cut for say 1850khz and then see where it rattles best. A quarter wave (remember to include the velocity factor) of 75 or 80 ohm twin will present something close to 50 ohms at the shack end. The usual impedance of a full wave wire loop is around 110 ohms at its feedpoint.
> Good luck. Mike Holden, G4HOL

6821. Re: [loopantennas] Re: 160 loop - related question

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-13 20:32:22 UTC
From: M HOLDEN
Topic: 6814 Message: 6821

The best one for top band would be two wavelengths circumference, horizontal loop. Great if you own a ranch ! It should throw a 4 leaf clover pattern at about 60 degrees elevation......rather similar to crossed dipole effect but 3dB better.
In practice, use the biggest and highest available and tune it as one would with a doublet on open wire feeder or 300 or 450 ohm line. Another dodge is to put an auto tuner up in the sky at the feed point, and then the normal 50 ohm coaxial back to the shack. That way it should tune all the hf bands. Wow wouldn't we all like a quiet neighbourhood like yours !
Mike G4HOL

--- On Tue, 13/10/09, wild_bill_yonder <wild_bill_yonder@yahoo.com> wrote:

From: wild_bill_yonder <wild_bill_yonder@...>
Subject: [loopantennas] Re: 160 loop - related question
To: loopantennas@yahoogroups.com
Date: Tuesday, 13 October, 2009, 1:02 PM

Hi all! Here's a quick question. Earlier this year we purchased an old house sitting on a bit more land than we have at present. I wanted to put up a 160m loop, but once up, using the trees most convenient, it only amounts to about 120m of wire. I feed it with twinlead, run it through a 4:1 balun and a short (3') piece of RG8 to the tuner (at some point I want to try making a balanced tuner with a 1:1 on the radio side). Other than not tuning 160m, what difference will there be on other bands besides where my lobes will be. I modeled both sizes and I do see the different patterns. I have also noticed that the 2:1 bandwidth on 80m seems to be narrow, but I haven't measured it as of yet.

The antenna seems to perform really well. It's only been a month, and I'm only at that qth after work and I can't spend much time on the air because I need to get the work done at the house! I can tell you, the noise level is extremely low. On most bands it is S1 or less, at least on ssb. Of course, the only things on the electric right now is the radio and the pump for the well. It talks real well into G land and northern Europe, and my first qso was Nigeria. I haven't been on enough to see how it is stateside other than it seems to do quite well on 80m. I just run barefoot.

Well, so much for a quick question! I'm just wonder if I should reduce it to an 80m loop or just leave it alone!

Thanks a bunch!

Bill W2NVD

--- In loopantennas@ yahoogroups. com, M HOLDEN <mholden909@ ...> wrote:

>

> Since we are talking wire loops and not magnetic ones, the old formula for wire length is as usual 1005 / f (MHz) . So you are looking at around 500 feet plus. If you use thin wire it has less capacity to ground than thick wire.Therefore the detuning effect is a little

less when you are relatively close to the ground. At any practical height it will always give you a "hot air balloon" type of radiation pattern and will toast worms if it is too close to the ground. You really need to adopt the suck it and see technique with an antenna analyser by starting with your loop cut for say 1850khz and then see where it rattles best. A quarter wave (remember to include the velocity factor) of 75 or 80 ohm twin will present something close to 50 ohms at the shack end. The usual impedance of a full wave wire loop is around 110 ohms at its feedpoint.

> Good luck. Mike Holden, G4HOL

[Non-text portions of this message have been removed]

6822. Re: 160 loop - related question

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-14 12:36:48 UTC
From: wild_bill_yonder
Topic: 6814 Message: 6822

Thanks, Mike! Sounds like, for now at least, I should leave it as it is. Maybe once I get the house done I'll have more time to look the trees over and see if I can get some more length in the air. Now that the leaves are going bye-bye I can see a possible route, but the power lines cross the property and I need to see what I can do and still stay away from them. Unfortunate story making the rounds today of a father, mother and son putting up a mast or tower for new ham grandma that were all killed when the wind got hold of it and it hit the wires.

Last night I got on and heard a guy in Italy calling and gave a shout. Didn't last long, I was only about S5 and down in his noise. After we called it quits I realized that I never turned the power back up after tuning and was only putting out about 25 or 30 watts! I think I'm going to like it up there!

73

Bill W2NVD

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> The best one for top band would be two wavelengths circumference, horizontal loop. Great if you own a ranch ! It should throw a 4 leaf clover pattern at about 60 degrees elevation......rather similar to crossed dipole effect but 3dB better.
> In practice, use the biggest and highest available and tune it as one would with a doublet on open wire feeder or 300 or 450 ohm line. Another dodge is to put an auto tuner up in the sky at the feed point, and then the normal 50 ohm coaxial back to the shack. That way it should tune all the hf bands. Wow wouldn't we all like a quiet neighbourhood like yours ! Mike G4HOL
>
>

6823. Re: [loopantennas] Re: 160 loop - related question

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-14 21:24:10 UTC
From: M HOLDEN
Topic: 6814 Message: 6823

Easily done, I worked 3 W6 stations in quick succession one summer day in the eighties. I was surprised that a half size G5RV did so well. Then, like you, I found out it was just 25 Watts instead of 120 W of ssb. I think we had a few sunspots then. Regards, Mike.

--- On Wed, 14/10/09, wild_bill_yonder <wild_bill_yonder@...> wrote:

From: wild_bill_yonder <wild_bill_yonder@...>
Subject: [loopantennas] Re: 160 loop - related question
To: loopantennas@yahoogroups.com
Date: Wednesday, 14 October, 2009, 1:36 PM

Thanks, Mike! Sounds like, for now at least, I should leave it as it is. Maybe once I get the house done I'll have more time to look the trees over and see if I can get some more length in the air. Now that the leaves are going bye-bye I can see a possible route, but the power lines cross the property and I need to see what I can do and still stay away from them. Unfortunate story making the rounds today of a father, mother and son putting up a mast or tower for new ham grandma that were all killed when the wind got hold of it and it hit the wires.

Last night I got on and heard a guy in Italy calling and gave a shout. Didn't last long, I was only about S5 and down in his noise. After we called it quits I realized that I never turned the power back up after tuning and was only putting out about 25 or 30 watts! I think I'm going to like it up there!

73

Bill W2NVD

--- In loopantennas@ yahoogroups. com, M HOLDEN <mholden909@ ...> wrote:

>

> The best one for top band would be two wavelengths circumference, horizontal loop. Great if you own a ranch ! It should throw a 4 leaf clover pattern at about 60 degrees elevation... ...rather similar to crossed dipole effect but 3dB better.

> In practice, use the biggest and highest available and tune it as one would with a doublet on open wire feeder or 300 or 450 ohm line. Another dodge is to put an auto tuner up in the sky at the feed point, and then the normal 50 ohm coaxial back to the shack. That way it should tune all the hf bands. Wow wouldn't we all like a quiet neighbourhood like yours ! Mike G4HOL

>

>

[Non-text portions of this message have been removed]

6824. LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-18 12:28:06 UTC
From: C. Beijersbergen
Topic: 6824 Message: 6824

In the past we have seen threads in this or other groups about buying or building LCR meters to measure the values of components to be used for building antennas. Ready made items or kits have been mentioned and circuit diagrams heve been made available.
Recently I came across an approach by ON7YD that makes use of very simple hardware, a few resistors and capacitors and PCV software that uses the sound card in the PC. I have not tried it yet, so I cannot support the claims, but I think you would like to know ande decide for yourselves.

Go to:
http://www.qsl.net/on7yd/

select "software"and then scroll down to: "LCR meter".

You could go there directly through:
http://www.rcl-meter.strobbe.eu/

But then you will miss a large amount of other radio and antenna related material.

regards,

Cor Beijersbergen

[Non-text portions of this message have been removed]

6825. Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-18 13:09:05 UTC
From: geo
Topic: 6824 Message: 6825

Seems to me that having to connect your computer to anything experimental just makes your computer vulnerable to ESD damage or worse.

Why not go with a stand-alone LCR meter kit? They're easy to build, pretty accurate and not as expensive as they used to be?

At least if you have to measure a cap that has still some charge left in it, you won't risk frying your computer.

73s,
geo
VE3GZB

--- In loopantennas@yahoogroups.com, "C. Beijersbergen" <c.beijersbergen@...> wrote:
>
> In the past we have seen threads in this or other groups about buying or building LCR meters to measure the values of components to be used for building antennas. Ready made items or kits have been mentioned and circuit diagrams heve been made available.
> Recently I came across an approach by ON7YD that makes use of very simple hardware, a few resistors and capacitors and PCV software that uses the sound card in the PC. I have not tried it yet, so I cannot support the claims, but I think you would like to know ande decide for yourselves.
>
> Go to:
> http://www.qsl.net/on7yd/
>
> select "software"and then scroll down to: "LCR meter".
>
> You could go there directly through:
> http://www.rcl-meter.strobbe.eu/
>
> But then you will miss a large amount of other radio and antenna related material.
>
> regards,
>
> Cor Beijersbergen
>
> [Non-text portions of this message have been removed]
>

6826. Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-19 19:21:35 UTC
From: capntripps2000
Topic: 6824 Message: 6826

I use the LCR meter I bought from:

http://www.aade.com/

It works great, is low cost enough, and has been very handy for my antenna projects.

Andrew

6827. Re: [loopantennas] Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-19 20:30:59 UTC
From: Paul V Birke PEng
Topic: 6824 Message: 6827

ditto

From: capntripps2000 <capntripps2000@...>
To: loopantennas@yahoogroups.com
Sent: Mon, October 19, 2009 3:21:35 PM
Subject: [loopantennas] Re: LCR meter

I use the LCR meter I bought from:

http://www.aade. com/

It works great, is low cost enough, and has been very handy for my antenna projects.

Andrew

[Non-text portions of this message have been removed]

6828. Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-20 18:16:57 UTC
From: AlienRelics
Topic: 6824 Message: 6828

I don't normally like to respond just to say "me, too", but...

Me, too.

I have also placed the schematic of a capacitance meter in the Files under "Useful Test Equipment". It uses a couple of 555 timers or a dual timer 556, I've built many of them (and sold them, that's why I kept building more). You can use your DMM as the readout, or put an analog meter on the output.
<http://groups.yahoo.com/group/loopantennas/files/UsefulTestEquipment/>

I also put a tentative schematic for a dual 555 inductance meter there. I have -not- breadboarded that one yet.

Steve Greenfield

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> ditto

> _____
> From: capntripps2000 <capntripps2000@...>

>
> I use the LCR meter I bought from:
>
> http://www.aade. com/
>
> It works great, is low cost enough, and has been very handy for my antenna projects.

6829. Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-21 02:21:45 UTC
From: gmcjetpilot
Topic: 6824 Message: 6829

That is a cool tool and web site.

I bought an el-cheapo Capacitance/Inductance/Ohms and NPN/PNP transistor tester off of ebay for $21 total. They are Chinese made and sold off of ebay. I am sure the unit you recommend is better.

Seach eBay for:

LCR RCL INDUCTANCE CAPACITANCE RESISTANCE METER W/Leads

--- In loopantennas@yahoogroups.com, "capntripps2000" <capntripps2000@...> wrote:
>
> I use the LCR meter I bought from:
>
> http://www.aade.com/
>
> It works great, is low cost enough, and has been very handy for my antenna projects.
>
> Andrew
>

6830. Re: [loopantennas] Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-21 02:28:57 UTC
From: Mike-WE0H
Topic: 6824 Message: 6830

I own one of those AADE meters but how well does this import meter function? Sure a nice price and seems like a lot of the recent Chinese electronics is high quality with super affordable prices.

Mike
WE0H

> From: gmcjetpilot
> That is a cool tool and web site.
>
> I bought an el-cheapo Capacitance/Inductance/Ohms and
> NPN/PNP transistor tester off of ebay for $21 total. They
> are Chinese made and sold off of ebay. I am sure the unit
> you recommend is better.
>
> Seach eBay for:
>
> LCR RCL INDUCTANCE CAPACITANCE RESISTANCE METER W/Leads
>
>
>
> "capntripps2000" wrote:
> >
> > I use the LCR meter I bought from:
> >
> > http://www.aade.com/
> >
> > It works great, is low cost enough, and has been very
> handy for my antenna projects.
> >
> > Andrew

6831. Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-21 16:00:15 UTC
From: c6alk
Topic: 6824 Message: 6831

Hi Mike and Gang:

I own and use both the AADE and a cheap Chinese import model as described. The advantage of the Chinese model is that it will measure larger inductors that might be used at audio frequencies, switching power supplies etc. The AADE is more accurate, as it uses a higher test frequency. I have often been quite impressed with the overall measuring qualities of the AADE. What is the measurement difference of the two units at HF? That is vary hard to quantify. There are just too many factors involved. I do a lot of building here, so the AADE unit has been a very worthwhile purchase for me. I use both units as required by the use at that moment.

Brian K7RE

--- In loopantennas@yahoogroups.com, Mike-WE0H <we0h@...> wrote:
>
> I own one of those AADE meters but how well does this import meter function? Sure a nice price and seems like a lot of the recent Chinese electronics is high quality with super affordable prices.
>
> Mike
> WE0H
>
>
> > From: gmcjetpilot
> > That is a cool tool and web site.
> >
> > I bought an el-cheapo Capacitance/Inductance/Ohms and
> > NPN/PNP transistor tester off of ebay for $21 total. They
> > are Chinese made and sold off of ebay. I am sure the unit
> > you recommend is better.
> >
> > Seach eBay for:
> >
> > LCR RCL INDUCTANCE CAPACITANCE RESISTANCE METER W/Leads
> >
> >
> >
> > "capntripps2000" wrote:
> > >
> > > I use the LCR meter I bought from:
> > >
> > > http://www.aade.com/
> > >
> > > It works great, is low cost enough, and has been very
> > handy for my antenna projects.
> > >

> > > Andrew
>

6832. Re: [loopantennas] Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-21 16:05:56 UTC
From: Mike-WE0H
Topic: 6824 Message: 6832

I think it would be worthwhile, like you, to own both meters. That Chinese meter is so affordable. Good to hear that it works well for you. I will be ordering one when I return home. I use my AADE meter almost daily. A guy can never have enough tools or test equipment...hi hi

Mike
WE0H

> From: c6alk
> Hi Mike and Gang:
>
>   I own and use both the AADE and a cheap
> Chinese import model as described. The advantage of the
> Chinese model is that it will measure larger inductors that
> might be used at audio frequencies, switching power supplies
> etc. The AADE is more accurate, as it uses a higher test
> frequency. I have often been quite impressed with the
> overall measuring qualities of the AADE. What is the
> measurement difference of the two units at HF? That is
> vary hard to quantify. There are just too many factors
> involved. I do a lot of building here, so the AADE unit has
> been a very worthwhile purchase for me. I use both
> units as required by the use at that moment.
>
> Brian K7RE

6833. Re: LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-21 18:21:06 UTC
From: gmcjetpilot
Topic: 6824 Message: 6833

I'll tell you this. The first Chinese electronics I bought was about 2 years ago AND COULD NOT BE HAPPIER. I got a Degen DE1103 portable SW radio ($80), 100Khz to 29.99Mhz plus the BEST FM STEREO SOUND I HAVE EVER HEARD (with headset). The radio has a single speaker and is super compact, so for stereo FM you need cans. I use Sennheiser HD280 Pro's. The Best stereo I have heard with fantastic sensitivity and range. We all think BIG is better with SWL or Ham gear. This is ONE of the best RADIOS you can buy for under $600. IT IS THE BEST RADIO BAR NONE YOU CAN BUY FOR UNDER $100. It beats all the radios in my opinion in the same category at four or five times the money. This is common wisdom among SWL fans who use portable radios, the DE1103 (or KA1103) is a winner.

The DE1103 can be held in one hand, runs on batteries for almost 10 hours and has self contained antennas (a very long telescopic antenna and loop stick). The DE1103 plugged into an external antenna, like the active loop I bought at the same time for $20, the TG34, performance is very close to the RX320D on a random wire. The TG34 is a generic version of the Kaito KA33 and Degen 31MS. They go for $30 but got a deal on mine with the radio. AMAZING PERFORMANCE AND UNDER $100. The Degen DE1103 also comes in the Kaito KA1103 brand, which is the US import name brand.

The Chinese often throw in extras. The DE1103 came with 4 NiMh AA's, wall-wart power supply (which charges the batteries inside the radio), 30 foot wire antenna, storage bag. I got the radio, optional TG34 antenna and optional leatherette soft storage case for about $100.

I also find the Chinese eBay vendors responsive and cooperative. Their English is actually pretty good. You get some Engl-nese some times, but they are cooperative. The LC meter I got had a yellow rubber cover. The picture showed blue. I was not too upset, but I wrote them to just point that out for the future. They gave me 10% off the already low price.

Shipping time may be a little long but not bad. You just can't expect it in 2 days. Depending on what it is, it can take more than a week. I really forget how long things take. What I can tell you, I get stuff faster from China than Canada! Orders from Canada can take forever.

I bought some NiMh batteries. I have got great deals on charger and battery packages. The battery performance is GOOD and compared to Wal-Mart, it is 1/4th the price (including shipping). I bought some 3000mAh Ni-Mh knowing it was not likely to be that much. Well I have

no idea what their capacity is. I doubt 3000 but they work well. I find they are getting better with time. I may need a better charger that does some fancy higher voltage cycle. Regardless they are a steal at twice or three times the price.

Since buying the above radio and batteries, I bought a LC capacitance/inductance meter and oscilloscope probes. Build and performance are good. Fantastic lab quality accuracy gear built to last decades under heavy use? No. Serviceable and accurate enough? Yes, especially at the price.

I have a friend who bought a bench Freq counter for less than $100. It looks very nice. It came out of Hong Kong. I got a used HP Freq counter for less, but his has way more features. Accuracy? I don't know but I bet it's GOOD ENOUGH for radio work. They have a bunch of hand-held battery powered antenna based freq counters as well, which intrigues me; they go for about $50-$60.

Signal Gens. Another friend bought a Chinese S/gen; it is nice. They go for about $120 total. When it comes to basic signal/audio Gens you have limited choices. You can buy a boat-anchor, big tube job. Nothing wrong with them, but chances are you'll need to "Re-Cap" it & celebrate it. Also they need to warm up to get good accuracy and min drift. Than there are solid state signal Gens. Cost of a used signal gens can go from $60 to $12,000. I have never used the China made signal gen, but I am sure they are fine. I'd hope it would not need repair, but if they come with schematics and parts list (generic not proprietary), I wouldn't worry about it.

What I would like to see is a cheap modern task specific sweep/marker signal Gens for radio alignment work (I.F. of 455Khz and 10.7Mhz). It is hard to find good stuff that works. Either you need some rocks (Crystals, Xtal) or the sweep/marker is for other higher freq applications. The old good gear is hard to find at a good price. Even than chances are it will need to be fully restored, caps, resistors and so on.

Tube Audio AMPS: The Chinese have a few Valve amps I lust after. I have been SO TEMPTED to buy one. They sell them for less than what I could make one for from parts. The sound is very good from what I read, but some times they need some small modifications to really make them sound fantastic. However overall they're bargains. For the money the Chinese Tube amps are clearly a deal. I have heard only a few complaints about build quality. Some have said there were extra parts in the amp, not in the schematics on a few models. Some models are fine out of the box. Some need a few mods. All of them end up sounding fantastic from what I read about them. $400-$500 Chinese tube amps compare to tube amps which cost $2000-$12,000). Of course I think it is crazy to spend thousands on a stereo amp of any kind, but than I am not an Audiophile (fool with money who thinks they have a golden ear and spend $100's or $1000's extra if the word Audiophile

is added). Who am I to say how people should spend their money.

Bottom line on Chinese test gear. Research, shop around and ask questions. Also the Chinese undercut each other. Right now the LC meter I have is flooding eBay. Some go for Buy Me Now $20 total, some $24. They have other makes that go for $30-$40 that might be better. If you spend a little more you can get a DMM/DVM combined with a LC meter that reads volts, ohms and temperature as well!

PS I have seen some color storage oscilloscopes as well.

--- In loopantennas@yahoogroups.com, Mike-WE0H <we0h@...> wrote:
>
> I own one of those AADE meters but how well does this import meter function? Sure a nice price and seems like a lot of the recent Chinese electronics is high quality with super affordable prices.
>
> Mike
> WE0H

6834. Spacing Between Loop and Rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-23 10:13:04 UTC
From: VK1OO
Topic: 6834 Message: 6834

All,

Another question. I'm thinking of mounting my octagonal loop above an antenna rotator. Theory suggests keeping magnetic loops away from metal objects. So the question is, how much space is required between a loop and a rotator?

Mike
VK1OO

6835. Loop Size

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-23 10:11:14 UTC
From: VK1OO
Topic: 6835 Message: 6835

Hi,

I'm building an octagonal magnetic loop. I'd like to use it on 40m and higher frequencies.

The theory suggests:
For highest efficiency, the conductor length for a small transmitting loop antenna should be greater than 1/8 wavelength.
To avoid self-resonance, the conductor length for a small transmitting loop antenna should be less than 1/4 wavelength.

I've got enough copper tubing to make a loop of about 1.2m "diameter". This would be good for 40m because of the larger area, but would be greater than the desirable 1/4 wavelength on higher frequencies. So, the question is, do I reduce the "diameter" to make the loop more suited to higher frequencies or keep the full length for 40m?

Mike
VK1OO

6836. Re: [loopantennas] Loop Size

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-24 03:44:10 UTC
From: Mike-WE0H
Topic: 6835 Message: 6836

As long as your variable cap has a low enough minimum capacitance, it'll work just fine on the higher bands. The larger loop will be more efficient on the lower bands than a smaller loop. Bigger is better...hi hi

Mike
WE0H

> From: VK1OO Mike
> Hi,
>
> I'm building an octagonal magnetic loop. I'd like to use it
> on 40m and
> higher frequencies.
>
> The theory suggests:
> For highest efficiency, the conductor length for a small
> transmitting
> loop antenna should be greater than 1/8 wavelength.
> To avoid self-resonance, the conductor length for a small
> transmitting
> loop antenna should be less than 1/4 wavelength.
>
> I've got enough copper tubing to make a loop of about 1.2m
> "diameter".
> This would be good for 40m because of the larger area, but
> would be
> greater than the desirable 1/4 wavelength on higher
> frequencies. So, the
> question is, do I reduce the "diameter" to make the loop
> more suited to
> higher frequencies or keep the full length for 40m?
>
> Mike
> VK1OO

6837. Re: [loopantennas] Spacing Between Loop and Rotator

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-24 03:47:38 UTC
From: Mike-WE0H
Topic: 6834 Message: 6837

I ran a loop on 1750 meters for many years that was 24" from a steel dog kennel. The loop ran along the kennel for 12'. It worked just fine. I wouldn't worry about a tiny rotator under a HF band TX loop.

Mike
WE0H

> From: VK1OO Mike
> All,
>
> Another question. I'm thinking of mounting my
> octagonal loop above an
> antenna rotator. Theory suggests keeping magnetic loops
> away from metal
> objects. So the question is, how much space is required
> between a loop
> and a rotator?
>
> Mike
> VK1OO

6838. Re: Loop Size

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-24 17:13:08 UTC
From: capntripps2000
Topic: 6835 Message: 6838

You have the right idea. I design my mag loops for two bands at a time for most efficiency although I load them for lower than intended frequencies with very good results. My 40M loop is 1/4wave minus 5%, that help keep away from self resonance. I use that loop on 40, 60, and 80M.

Good luck, I'm certain you will be absolutely impressed with these loops.

While you're at it, give this web site a look:
http://g0cwt.co.uk/magloops/

I built the 80/160 version with excellent results.

ATD

--- In loopantennas@yahoogroups.com, VK1OO <mike.walkington@...> wrote:
>
> Hi,
>
> I'm building an octagonal magnetic loop. I'd like to use it on 40m and
> higher frequencies.
>
> The theory suggests:
> For highest efficiency, the conductor length for a small transmitting
> loop antenna should be greater than 1/8 wavelength.
> To avoid self-resonance, the conductor length for a small transmitting
> loop antenna should be less than 1/4 wavelength.
>
> I've got enough copper tubing to make a loop of about 1.2m "diameter".
> This would be good for 40m because of the larger area, but would be
> greater than the desirable 1/4 wavelength on higher frequencies. So, the
> question is, do I reduce the "diameter" to make the loop more suited to
> higher frequencies or keep the full length for 40m?
>
> Mike
> VK1OO
>

6839. Re: [loopantennas] LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-25 06:23:40 UTC
From: Art
Topic: 6824 Message: 6839

The AADE is tough to beat, I have one. It eats batteries because I always leave it on after measurements are made. The meter works great, the battery problem is operator error I suppose::>

Be aware that some inexpensive meters don't cover the low and high capacitance/inductance ranges well. And, all will be marginally useful on toroidal (or any other type of coil that uses anything other than air dielectric). The error can be significant. This happens with all capacitors and inductors unless they use air dielectric, although capacitors are less affected than inductors. Basically, you need to measure the inductance/capacitance at the frequency you will use it at. For instance, a given toroidal inductor that measures 10 uH on the AADE (at 10 KHz) will actually be 14 uH when you test it at 3.7 MHz. It's always best to measure toroidal inductors at the frequency where they will be used, not at audio frequencies.

Even non-air dielectric capacitors vary in capacitance as the frequency changes, although not quite so much as toroidal inductors do. I recently became interested in making capacitors for my own use, and had a tough time finding frequency characterization data for teflon.

Also note that all capacitors vary in capacitance when biased with a dc voltage, especially electrolytic and tantalum. And, inductors vary as the dc current passing through them changes.

Regards,

Art

>In the past we have seen threads in this or other groups about
>buying or building LCR meters to measure the values of components to
>be used for building antennas. Ready made items or kits have been
>mentioned and circuit diagrams heve been made available.
>Recently I came across an approach by ON7YD that makes use of very
>simple hardware, a few resistors and capacitors and PCV software
>that uses the sound card in the PC. I have not tried it yet, so I
>cannot support the claims, but I think you would like to know ande
>decide for yourselves.
>
>Go to:
><http://www.qsl.net/on7yd/>http://www.qsl.net/on7yd/
>
>select "software"and then scroll down to: "LCR meter".
>
>You could go there directly through:
><http://www.rcl-meter.strobbe.eu/>http://www.rcl-meter.strobbe.eu/

>
>But then you will miss a large amount of other radio and antenna
>related material.
>
>regards,
>
>Cor Beijersbergen

[Non-text portions of this message have been removed]

6840. Re: [loopantennas] LCR meter

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-25 17:07:52 UTC
From: Paul V Birke PEng
Topic: 6824 Message: 6840

no doubt Art one of the best
it is the only one I have
I have left the switch on also
but it is me not the thingie
best wishes
Paul in Guelph ON
VE3PVB

From: Art <KY1K@...>
To: loopantennas@yahoogroups.com
Sent: Sun, October 25, 2009 2:23:40 AM
Subject: Re: [loopantennas] LCR meter

The AADE is tough to beat, I have one. It eats batteries because I always leave it on after measurements are made. The meter works great, the battery problem is operator error I suppose::>

Be aware that some inexpensive meters don't cover the low and high capacitance/ inductance ranges well. And, all will be marginally useful on toroidal (or any other type of coil that uses anything other than air dielectric). The error can be significant. This happens with all capacitors and inductors unless they use air dielectric, although capacitors are less affected than inductors. Basically, you need to measure the inductance/capacita nce at the frequency you will use it at. For instance, a given toroidal inductor that measures 10 uH on the AADE (at 10 KHz) will actually be 14 uH when you test it at 3.7 MHz. It's always best to measure toroidal inductors at the frequency where they will be used, not at audio frequencies.

Even non-air dielectric capacitors vary in capacitance as the frequency changes, although not quite so much as toroidal inductors do. I recently became interested in making capacitors for my own use, and had a tough time finding frequency characterization data for teflon.

Also note that all capacitors vary in capacitance when biased with a dc voltage, especially electrolytic and tantalum. And, inductors vary as the dc current passing through them changes.

Regards,

Art

[Non-text portions of this message have been removed]

6841. Wellbrook ALA330S

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-28 13:33:25 UTC
From: mrkeeks
Topic: 6841 Message: 6841

I asked on the Wellbrook group but got no replies so I'll try here.

Has anyone or is anyone here using an ALA330S?

Good points?

Bad points?

Because of where I will be living a wire antenna is pretty well out of the question but a smaller loop like the 330S would fit perfectly.

I am a Utilities DXer...mostly HFDL and mostly hunt in the 4mhz to 18mhz range.

Ken

6842. Re: Wellbrook ALA330S

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 04:48:50 UTC
From: jr_dakota
Topic: 6841 Message: 6842

--- In loopantennas@yahoogroups.com, "mrkeeks" <mrkeeks@...> wrote:
>
> I asked on the Wellbrook group but got no replies so I'll try here.
>
> Has anyone or is anyone here using an ALA330S?
>
> Good points?
>
> Bad points?
>
> Because of where I will be living a wire antenna is pretty well out of
> the question but a smaller loop like the 330S would fit perfectly.
>
> I am a Utilities DXer...mostly HFDL and mostly hunt in the 4mhz to 18mhz
> range.
>
> Ken
>

All I can say is I've yet to meet someone who owned a Wellbrook product who complained or felt they got less than their money's worth. It's a quality product with quality support

I prefer to build my own stuff (and I have built a couple of broadband loops that are close to Wellbrook's specs but not quite there) but if I were to purchase a commercially built antenna one of the Wellbrook units would be it

I'd bet once you get one you'll be working lower frequencies too (NDBs, NAVTEX) because you are probably going to find there is suddenly a whole bunch of stuff down there you could never hear before

JR

6843. Re: Wellbrook ALA330S

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 18:26:26 UTC
From: gmcjetpilot
Topic: 6841 Message: 6843

I have lusted after the Wellbrooks for awhile. I plan on getting one. Occasionally you see them for sale, and they get a good price. Wanting one I did my research and read every review I could find. The book "Passport" is a SWL book that comes out annually I believe. It has all kinds of info gear and SW radio schedules. The year I have reviewed the Wellbrooks (both ALA330 and ALA1530). The ALA1530 is the object of my desire.

I just never heard a bad thing about them. The COOL trick is they get broad band coverage with out TUNING!!!! That is cool. One down side of course is powerful BCB stations bleeding into the SW band. That is where the ALA330 comes in (rejects BCB).

The down side of LOOPS to me is always having to tune them. That is why I will always have at least a RANDOM WIRE to augment a loop. Because of tuning and directional characteristics of most LOOPS, they are not great for scanning the whole SW spectrum. To be fair no antenna is optimal for a broad band of freq. However Wellbrook seems to have done it a good job. If I know the freq, location and time of a station I want to target, a loop is killer.

The biggest complaint of the Wellbrook I can find (besides cost) was they come somewhat incomplete with out cables and connectors (I recall). However as far as performance, I heard no complaint. In fact in demanding environments it was the only antenna that worked for some folks (reducing RFI). I guess cost is high really the main objection, but you get what you pay for. Think of all the time and effort you take to make a DIY antenna. The antenna is more than half the radio, so I don't think cost is too bad. What is bad is the buying power of the dollar.

As far as DIY I have a killer design for a remote tuned SWL loop that is all electronic. The antenna needs to be feed DC power and is tuned by a variable capacitor or varactor (varicap). Unlike the Wellbrook you need a little control box to tune it. The good part is I can make it for less than $100. The most expensive part is getting a nice 1-meter metal hoop. I could use a hula-hoop with a wire in it, or use PVC pipe and make the loop square. Any way I just have to build it.

IF ANY ONE KNOWS WHERE I CAN GET A ONE-METER (or less) HOOP MADE OF ALUMINUM OR COPPER LET ME KNOW.

George

--- In loopantennas@yahoogroups.com, "jr_dakota" <SG2112@...> wrote:
>
>

>
> --- In loopantennas@yahoogroups.com, "mrkeeks" <mrkeeks@> wrote:
> >
> > I asked on the Wellbrook group but got no replies so I'll try here.
> >
> > Has anyone or is anyone here using an ALA330S?
> >
> > Good points?
> >
> > Bad points?
> >
> > Because of where I will be living a wire antenna is pretty well out of
> > the question but a smaller loop like the 330S would fit perfectly.
> >
> > I am a Utilities DXer...mostly HFDL and mostly hunt in the 4mhz to 18mhz
> > range.
> >
> > Ken
> >
>
> All I can say is I've yet to meet someone who owned a Wellbrook product who complained or felt they got less than their money's worth. It's a quality product with quality support
>
> I prefer to build my own stuff (and I have built a couple of broadband loops that are close to Wellbrook's specs but not quite there) but if I were to purchase a commercially built antenna one of the Wellbrook units would be it
>
> I'd bet once you get one you'll be working lower frequencies too (NDBs, NAVTEX) because you are probably going to find there is suddenly a whole bunch of stuff down there you could never hear before
>
> JR
>

6844. RE: [loopantennas] Re: Wellbrook ALA330S

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 18:52:44 UTC
From: Fredric J. Einstein
Topic: 6841 Message: 6844

I live in the United States and got two defective antennas from Wellbrook. Sending them back cost me quite a bit of money and hassle. If you're in the the U.K., then your risk is quite a bit less. Wellbrook would be wise to sell their product through Universal Radio or Grove.

> >
> > I asked on the Wellbrook group but got no replies so I'll try here.
> >
> > Has anyone or is anyone here using an ALA330S?
> >
> > Good points?
> >
> > Bad points?
> >
> > Because of where I will be living a wire antenna is pretty well out of
> > the question but a smaller loop like the 330S would fit perfectly.
> >
> > I am a Utilities DXer...mostly HFDL and mostly hunt in the 4mhz to 18mhz
> > range.
> >
> > Ken
> >

[Non-text portions of this message have been removed]

6845. RE: [loopantennas] Wellbrook ALA330S versus 9v1vv broadband loop amp

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 19:10:59 UTC
From: Notareal
Topic: 6841 Message: 6845

Hi !
Check this amplifier:

http://tupala.mine.nu/utility/fkuvat8/9v1vv.jpg

It is field tested to be quite good versus ALA100.
In some cases even better.
Parts dont cost much and easy to build.

BR

> To: loopantennas@yahoogroups.com
> From: mrkeeks@...
> Date: Wed, 28 Oct 2009 13:33:25 +0000
> Subject: [loopantennas] Wellbrook ALA330S
>
> I asked on the Wellbrook group but got no replies so I'll try here.
>
> Has anyone or is anyone here using an ALA330S?
>
> Good points?
>
> Bad points?
>
> Because of where I will be living a wire antenna is pretty well out of
> the question but a smaller loop like the 330S would fit perfectly.
>
> I am a Utilities DXer...mostly HFDL and mostly hunt in the 4mhz to 18mhz
> range.
>
> Ken
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.

Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

Windows Live: Make it easier for your friends to see what you?re up to on Facebook.
http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-basics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_2:092009

[Non-text portions of this message have been removed]

6846. Re: Wellbrook ALA330S

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 20:00:43 UTC
From: gmcjetpilot
Topic: 6841 Message: 6846

Just to be clear, if you have the money GET IT. Personally I like the ALA1530S+ better but the ALA330S. Both are great (from what I read, don't have one). The 330 is fine if you are not interested in LF and MW. As I said if you are close to AM MW BCB station, they can mess up SW with the ALA1530. If you just want 3Mhz-30Mhz, than go with the ALA330. If you want to go down to 150Khz than the ALA1530 is the way to go. I think the ALA1530S+ is improved and has less problem with strong AM BCB stations.

With that said you will need a pole, rotor system, coaxial cables, adapters to from from BNC to radio or make a cable with appropriate connector. It comes with the antenna, power, electronics box and that is about it. I have seen people hang this up in a picture window or set it on a fixed direction. However rotor is really needed. The point is it does not set it self up in minutes, and you will have to spend another $100 or more to get it going.

They give you fairly simple bare bone instructions, but it should (MUST) be away from the "Radio Shack" (house) a specific height above ground. I plan on roof mounting mine. However I have heard this might be an issue. Some mount in attic with good results? One thing for sure is people with wicked RFI problems find the Wellbrook is a miracle antenna for their noise problems.

George

--- In loopantennas@yahoogroups.com, "jr_dakota" <SG2112@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "mrkeeks" <mrkeeks@> wrote:
> >
> > I asked on the Wellbrook group but got no replies so I'll try here.
> >
> > Has anyone or is anyone here using an ALA330S?
> >
> > Good points?
> >
> > Bad points?
> >
> > Because of where I will be living a wire antenna is pretty well out of
> > the question but a smaller loop like the 330S would fit perfectly.
> >
> > I am a Utilities DXer...mostly HFDL and mostly hunt in the 4mhz to 18mhz
> > range.
> >
> > Ken
> >
>
> All I can say is I've yet to meet someone who owned a Wellbrook product who complained or felt they got less than their money's worth. It's a quality product with quality support

>
> I prefer to build my own stuff (and I have built a couple of broadband loops that are close to Wellbrook's specs but not quite there) but if I were to purchase a commercially built antenna one of the Wellbrook units would be it
>
> I'd bet once you get one you'll be working lower frequencies too (NDBs, NAVTEX) because you are probably going to find there is suddenly a whole bunch of stuff down there you could never hear before
>
> JR
>

6847. Small loop antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 19:24:31 UTC
From: brian russell
Topic: 6847 Message: 6847

George,
Regarding the appeal at the end of your posting.
It is hard to beat a 27 inch diameter Aluminium cycle wheel rim.
They can be had as scrap at a cycle workshop even if they
require a little attention after a knock.
72, Brian, G0NSL-QRP.

----- Original Message -----
From: gmcjetpilot
To: loopantennas@yahoogroups.com
Sent: Thursday, October 29, 2009 6:26 PM
Subject: [loopantennas] Re: Wellbrook ALA330S

[Non-text portions of this message have been removed]

6848. Re: [loopantennas] Wellbrook ALA330S versus 9v1vv broadband loop amp

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 20:57:27 UTC
From: RexR
Topic: 6841 Message: 6848

Greetings,

Nice circuit, 2 questions where do you feed the DC and what voltage?

Thanks,

Rex in Jamestown, CA

Hi !
Check this amplifier:

http://tupala.mine.nu/utility/fkuvat8/9v1vv.jpg

It is field tested to be quite good versus ALA100.
In some cases even better.
Parts dont cost much and easy to build.

BR

> To: loopantennas@yahoogroups.com
> From: mrkeeks@...
> Date: Wed, 28 Oct 2009 13:33:25 +0000
> Subject: [loopantennas] Wellbrook ALA330S
>
> I asked on the Wellbrook group but got no replies so I'll try here.
>
> Has anyone or is anyone here using an ALA330S?
>
> Good points?
>
> Bad points?
>
> Because of where I will be living a wire antenna is pretty well out of
> the question but a smaller loop like the 330S would fit perfectly.
>
> I am a Utilities DXer...mostly HFDL and mostly hunt in the 4mhz to 18mhz
> range.
>
> Ken
>
>
>
>
> ------------------------------------
>

> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

_____
Windows Live: Make it easier for your friends to see what you're up to on
Facebook.
http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-ba
sics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_2:092009

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 8.5.423 / Virus Database: 270.14.38/2467 - Release Date: 10/29/09
07:38:00

No virus found in this outgoing message.
Checked by AVG - www.avg.com
Version: 8.5.423 / Virus Database: 270.14.38/2467 - Release Date: 10/29/09 07:38:00

[Non-text portions of this message have been removed]

6849. Re: [loopantennas] Wellbrook ALA330S versus 9v1vv broadband loop amp

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 22:42:43 UTC
From: C. Beijersbergen
Topic: 6841 Message: 6849

In case you are interested in the 9V1VV loop antenna, then also take a look at the original design as well.

http://www.qrss.thersgb.net/G8CQX-Loop-antenna.html
http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

regards,

Cor Beijersbergen

Hi !
Check this amplifier:

http://tupala.mine.nu/utility/fkuvat8/9v1vv.jpg

It is field tested to be quite good versus ALA100.
In some cases even better.
Parts dont cost much and easy to build.

BR

[Non-text portions of this message have been removed]

6850. Re: [loopantennas] Wellbrook ALA330S versus 9v1vv broadband loop amp

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-29 23:00:58 UTC
From: RexR
Topic: 6841 Message: 6850

Thank you Sir!

Answered my questions,

Rex in Jamestown, CA

In case you are interested in the 9V1VV loop antenna, then also take a look at the original design as well.

http://www.qrss.thersgb.net/G8CQX-Loop-antenna.html
http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

regards,

Cor Beijersbergen

Hi !
Check this amplifier:

http://tupala.mine.nu/utility/fkuvat8/9v1vv.jpg

It is field tested to be quite good versus ALA100.
In some cases even better.
Parts dont cost much and easy to build.

BR

Recent Activity
a.. 3New Members
Visit Your Group
Give Back
Yahoo! for Good

Get inspired

by a good cause.

Y! Toolbar
Get it Free!

easy 1-click access

to your groups.

Yahoo! Groups
Start a group

in 3 easy steps.

Connect with others.
.

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 8.5.423 / Virus Database: 270.14.38/2467 - Release Date: 10/29/09 07:38:00

No virus found in this outgoing message.
Checked by AVG - www.avg.com
Version: 8.5.423 / Virus Database: 270.14.38/2467 - Release Date: 10/29/09 07:38:00

[Non-text portions of this message have been removed]

6851. Re: Wellbrook ALA330S

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-30 04:18:05 UTC
From: mrkeeks
Topic: 6841 Message: 6851

--- In loopantennas@yahoogroups.com, "jr_dakota" <SG2112@...> wrote:

Thanks to all who replied.

I will be getting a 330S and mounting it on a rotor at about 6 feet/2 metres.

Ken

6852. 30 foot loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-30 21:55:11 UTC
From: Bill McGraw
Topic: 6852 Message: 6852

I just taped up a square 30 foot vertical loop on my east office wall, used a V-cap with it to help tune it but seemed not necessary. It worked nearly as well as my horizontal 44 foot loop at the ceiling. I don't know why but I haven't heard any any strong SSB signals on 80 meters in several weeks. 6 MHz stations, China and Cuba come in strong. I haven't heard anything on 20 meters with this radio.

Will someone tell me how best to make a lead-in to my radio (RS DX 398)? Can I just twist some stranded wire together? Do I need to ground the loop? I grounded the horizontal loop, actually a OCF horizontal loop of sorts, one end to my outside ground and both ends fed into a sterio 1/8" plug to the radio.

Bill McGraw
"Somewhere South of Chicago"
Greenville, Mississippi

6853. Re: Small loop antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-31 02:27:11 UTC
From: gmcjetpilot
Topic: 6847 Message: 6853

Good tip! Aluminum bike rim. I will definitely look into that.

The only down side of the rim may be EYE appeal, may be? It might look great, even paint it black. I have the antenna police in my HOA "Home Owner Association" controlled neighborhood. (Last time I buy a new house with HOA). Because of the by-laws I can put up an antenna that is 1 METER or less in dia, so 27" is perfect. The rule is no doubt for Dish antennas, but I am going to push it. Let them sue me. I don't have my ham but I'll get it. Than I claim Fed immunity.

I still don't want to push it too much, so I need to make it as "stealth" and "Pro" looking as I can. I think painting it black would be cool.

The idea of a strip of aluminum rolled onto a hoop might work?

I found professional aluminum hoops used by performing artist (e.g., circus) were about $50 each. I was also thinking of a plastic hoop (like a hula hoop but thicker walled) and running a wire in it, preferably Litz wire.

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...> wrote:
>
> George,
> Regarding the appeal at the end of your posting.
> It is hard to beat a 27 inch diameter Aluminium cycle wheel rim.
> They can be had as scrap at a cycle workshop even if they
> require a little attention after a knock.
> 72, Brian, G0NSL-QRP.
>
>
> ----- Original Message -----
> From: gmcjetpilot
> To: loopantennas@yahoogroups.com
> Sent: Thursday, October 29, 2009 6:26 PM
> Subject: [loopantennas] Re: Wellbrook ALA330S
>
> [Non-text portions of this message have been removed]
>

6854. Re:30 foot loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-31 15:21:49 UTC
From: Paco In Boston
Topic: 6852 Message: 6854

Hi Bill,

What I found that works really well is hooking my loop wire into a balun, I think a 9:1 type that is used for cable tv. On the radio side is a cable wire from the balun that goes directly into the radio with a pal connector, or if you need to, some other adaptor. This hookup reduces radio noise virtually completely and the signal doubles or even triples. It works great for me.

Regards,

Frank

[Non-text portions of this message have been removed]

6855. Re: [loopantennas] Re: Small loop antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-31 17:13:41 UTC
From: brian russell
Topic: 6847 Message: 6855

George,
Thank you for the mail.
Your home situation is quite common over here with lots of the new housing estates, not even a washing line in sight hi!
I use my loop indoors as it is mounted on a photographic tripod using the pan & tilt head to give rotation in two planes, works fine.
Now there's a thought, if you were to mount the loop on a tripod with a black cloth thrown over it circa 1800's style they would think it was just a big lens for bird shots hi!
Somewhere I read that flagpoles are one antenna trick in the US, who could object to you attending to the flag morning and night, a true patriot !!!!!
If you had one with the ' H O A ' logo on they might even buy it for you hi!
Regards,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: gmcjetpilot
To: loopantennas@yahoogroups.com
Sent: Saturday, October 31, 2009 2:27 AM
Subject: [loopantennas] Re: Small loop antenna !!!!!

[Non-text portions of this message have been removed]

6856. Re: 30 foot loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-31 17:56:34 UTC
From: tenorman1952
Topic: 6852 Message: 6856

--- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:

> Will someone tell me how best to make a lead-in to my radio (RS DX 398)? Can I just twist some stranded wire together?

Yes.

Do I need to ground the loop?

No.

Paul
AE5JU

6857. RE: [loopantennas] Re: 30 foot loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-31 18:55:22 UTC
From: Notareal
Topic: 6852 Message: 6857

Hi !
Why dont you use coaxial cable ?
I would not ground loop antenna,
but you can try it, then you know if it helps
BR

> To: loopantennas@yahoogroups.com
> From: tenorman1952@...
> Date: Sat, 31 Oct 2009 17:56:34 +0000
> Subject: [loopantennas] Re: 30 foot loop antenna
>
>
>
> --- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:
>
> > Will someone tell me how best to make a lead-in to my radio (RS DX 398)? Can I just twist some stranded wire together?
>
> Yes.
>
> Do I need to ground the loop?
>
> No.
>
> Paul
> AE5JU
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

>

Windows Live: Friends get your Flickr, Yelp, and Digg updates when they e-mail you.
http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-basics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_3:092010

[Non-text portions of this message have been removed]

6858. Re: Small loop antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-31 19:57:28 UTC
From: gw_one_hin
Topic: 6847 Message: 6858

Hi,
If you buy a Hula Hoop, you can wind a substantial lenth of wire around it to make it resonate, say on 40M, Another trick is to buy a kids 'Slinky and thread it so that it forms a loaded coil around the Hula Hoop , use some sticky patches to hold the slinky in place, Again should resonate on 40M..
Best 73s.
Ron GW1HIN UK

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> Good tip! Aluminum bike rim. I will definitely look into that.
>
> The only down side of the rim may be EYE appeal, may be? It might look great, even paint it black. I have the antenna police in my HOA "Home Owner Association" controlled neighborhood. (Last time I buy a new house with HOA). Because of the by-laws I can put up an antenna that is 1 METER or less in dia, so 27" is perfect. The rule is no doubt for Dish antennas, but I am going to push it. Let them sue me. I don't have my ham but I'll get it. Than I claim Fed immunity.
>
> I still don't want to push it too much, so I need to make it as "stealth" and "Pro" looking as I can. I think painting it black would be cool.
>
> The idea of a strip of aluminum rolled onto a hoop might work?
>
> I found professional aluminum hoops used by performing artist (e.g., circus) were about $50 each. I was also thinking of a plastic hoop (like a hula hoop but thicker walled) and running a wire in it, preferably Litz wire.
>
> --- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@> wrote:
> >
> > George,
> > Regarding the appeal at the end of your posting.
> > It is hard to beat a 27 inch diameter Aluminium cycle wheel rim.
> > They can be had as scrap at a cycle workshop even if they
> > require a little attention after a knock.
> > 72, Brian, G0NSL-QRP.
> >
> >
> > ----- Original Message -----
> > From: gmcjetpilot
> > To: loopantennas@yahoogroups.com
> > Sent: Thursday, October 29, 2009 6:26 PM
> > Subject: [loopantennas] Re: Wellbrook ALA330S
> >
> > [Non-text portions of this message have been removed]

> >
>

6859. Feed impedance and filtering for a small receiving loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-01 03:23:26 UTC
From: david feldman
Topic: 6859 Message: 6859

Want to build a wideband receive loop antenna, about 1.5M diameter, with preamp located at the feedpoint. Put one together last winter (see URL mentioned at end of this posting) like this (I used PVC tubing for structure, and RG6 coax using shield/center shorted together as the conductor) but preamp was overwhelmed by AM BC station about 1km away. Still need a loop receiving antenna (high RFI from neighborhood DSL and other garbage around here), so considering how to mitigate the AM BC interference.

The loop itself (no preamp, just the circle of wire) has ~1.3K feed impedance (according to Autek RF-1, the only instrument I have to measure this) at 3.5 MHz, dropping to ~1K at 4 MHz, and continuing to drop as frequency goes up. Frequency range of interest for the antenna is 3.5-15 MHz. As an aside, the loop itself is resonant with ~50 ohm feed impedance around 30 MHz (but that's not the application I have in mind.)

So here is my thought - use 16:1 balun to transform the loop's basic feed impedance closer to 50 ohms, then feed through a high pass filter with cutoff ~3 MHz (to reduce AM BC band signals but minimize impact on 80M and above signals), then a wideband mmic amp (50 ohms in/out, ~20 dB gain) to drive signal back to shack receiver.

Is this a reasonable way to approach this? Other ideas, resources, suggestions or comments would really be appreciated.

By the way, this is the URL of the original antenna I built, and the basis for the idea to build a version that has high pass filter between the loop and the amplifier:

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

Thanks,

73 Dave WB0GAZ wb0gaz@hotmail.com

_____
Windows 7: It helps you do more. Explore Windows 7.
http://www.microsoft.com/Windows/windows-7/default.aspx?ocid=PID24727::T:WLMTAGL:ON:WL:en-US:WWL_WIN_evergreen3:102009

6860. RE: Feed impedance and filtering for a small receiving loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-01 04:12:42 UTC
From: david feldman
Topic: 6859 Message: 6860

Oops - realized after all this that a major problem exists in my antenna analyzer (high Z into a small loop didn't seem right but....); Will re-post once I work out the correct feedpoint Z for the loop! In the meantime, other than the error in feed Z, any pointers on high pass filter in small receive loop would be appreciated,

Dave

> From: wb0gaz@...
> To: loopantennas@yahoogroups.com
> Subject: Feed impedance and filtering for a small receiving loop antenna
> Date: Sat, 31 Oct 2009 20:23:26 -0700
>
>
> Want to build a wideband receive loop antenna, about 1.5M diameter, with preamp located at the feedpoint. Put one together last winter (see URL mentioned at end of this posting) like this (I used PVC tubing for structure, and RG6 coax using shield/center shorted together as the conductor) but preamp was overwhelmed by AM BC station about 1km away. Still need a loop receiving antenna (high RFI from neighborhood DSL and other garbage around here), so considering how to mitigate the AM BC interference.
>
> The loop itself (no preamp, just the circle of wire) has ~1.3K feed impedance (according to Autek RF-1, the only instrument I have to measure this) at 3.5 MHz, dropping to ~1K at 4 MHz, and continuing to drop as frequency goes up. Frequency range of interest for the antenna is 3.5-15 MHz. As an aside, the loop itself is resonant with ~50 ohm feed impedance around 30 MHz (but that's not the application I have in mind.)
>
> So here is my thought - use 16:1 balun to transform the loop's basic feed impedance closer to 50 ohms, then feed through a high pass filter with cutoff ~3 MHz (to reduce AM BC band signals but minimize impact on 80M and above signals), then a wideband mmic amp (50 ohms in/out, ~20 dB gain) to drive signal back to shack receiver.
>
> Is this a reasonable way to approach this? Other ideas, resources, suggestions or comments would really be appreciated.
>
> By the way, this is the URL of the original antenna I built, and the basis for the idea to build a version that has high pass filter between the loop and the amplifier:
>
> http://www.qrss.thersgb.net/active-loop-receiving-antenna.html
>
> Thanks,
>
> 73 Dave WB0GAZ wb0gaz@...
>
>

> _____
> Windows 7: It helps you do more. Explore Windows 7.
> http://www.microsoft.com/Windows/windows-7/default.aspx?ocid=PID24727::T:WLMTAGL:ON:WL:en-US:WWL_WIN_evergreen3:102009

_____
Windows 7: It works the way you want. Learn more.
http://www.microsoft.com/Windows/windows-7/default.aspx?ocid=PID24727::T:WLMTAGL:ON:WL:en-US:WWL_WIN_evergreen2:102009

6861. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-01 13:27:46 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 6861

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

6862. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-01 13:27:46 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 6862

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

6863. Re: [loopantennas] Feed impedance and filtering for a small receiving loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-01 14:35:31 UTC
From: Chris Trask
Topic: 6859 Message: 6863

>
> So here is my thought - use 16:1 balun to transform the loop's
> basic feed impedance closer to 50 ohms, then feed through a high
> pass filter with cutoff ~3 MHz (to reduce AM BC band signals but
> minimize impact on 80M and above signals), then a wideband mmic
> amp (50 ohms in/out, ~20 dB gain) to drive signal back to shack
> receiver.
>
> Is this a reasonable way to approach this? Other ideas, resources,
> suggestions or comments would really be appreciated.
>

I did an extensive amount of impedance measurements for loop antennas some time ago, which were then used for a series of receiving and transmitting antenna designs. One of the designs, which is remotely tuned using a pair of varactors, is at:

http://www.home.earthlink.net/~christrask/Paper011.html

and an indoor version is at:

http://www.home.earthlink.net/~christrask/Paper018.html

You'll notice that the loop impedance can be seen as a resistor in series with an inductor, plus a parallel-resonant RLC network if you encroach upon the first resonance. For wideband usage, an acive loop antenna is pretty much limited to interfacing with a high input impedance amplifier as the first stage, which is not going to make your AM BCB station interferance problem any easier.

I did make an attempt at wideband passive matching of loop antennas, which is at:

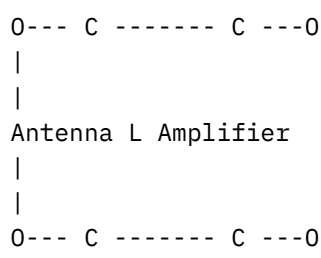
http://www.home.earthlink.net/~christrask/Paper010.html

where you can see that the potential for a passive solution is not on the horizon. One possible solution is to use an active negative inductor, but I have yet to come up with a design that is suitable for applications such as this.

>
> By the way, this is the URL of the original antenna I built, and
> the basis for the idea to build a version that has high pass filter
> between the loop and the amplifier:
>
> http://www.qrss.thersgb.net/active-loop-receiving-antenna.html
>

John's design is a useful and practical approach to wideband loop antennas, however the high amplifier input impedance makes any filtering difficult. You could try implementing a

balanced filter section between the antenna and the amplifier:



Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6864. Re: Small loop antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-10-31 19:14:26 UTC
From: Dave
Topic: 6847 Message: 6864

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> Good tip! Aluminum bike rim. I will definitely look into that.

Don't forget Copper tubing from the plumbing section of the local
home improvement store. You can go with the soft-drawn and shape
it into any shape you like, or you can go with the hard-drawn and
use elbows to put it together.

> The only down side of the rim may be EYE appeal, may be? It might look great, even paint it black. I have the antenna police in my HOA "Home Owner Association" controlled neighborhood. (Last time I buy a new house with HOA). Because of the by-laws I can put up an antenna that is 1 METER or less in dia, so 27" is perfect. The rule is no doubt for Dish antennas, but I am going to push it. Let them sue me. I don't have my ham but I'll get it. Than I claim Fed immunity.
>
> I still don't want to push it too much, so I need to make it as "stealth" and "Pro" looking as I can. I think painting it black would be cool.
>
> The idea of a strip of aluminum rolled onto a hoop might work?
>
> I found professional aluminum hoops used by performing artist (e.g., circus) were about $50 each. I was also thinking of a plastic hoop (like a hula hoop but thicker walled) and running a wire in it, preferably Litz wire.

You can do that with Copper plumbing tubing, too. Just make sure
it's not an electrically complete circle, since that would act as a
shorted turn.

Dave

6865. Re: Feed impedance and filtering for a small receiving loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-01 18:45:34 UTC
From: david feldman
Topic: 6859 Message: 6865

Chris, thank you *very* much for passing along your papers; I'll read them carefully. I had thought about a varactor tuned loop (and picked up some diodes this last spring) but didn't explore further at the time, so this will certainly be helpful to understand.

I'll post back any results once I can get some experimentation underway.

Thanks again very much,

73 Dave WB0GAZ wb0gaz@...

###

> 3c. Re: Feed impedance and filtering for a small receiving loop antenna
> Posted by: "Chris Trask" christrask@earthlink.net chris3trask
> Date: Sun Nov 1, 2009 6:35 am ((PST))
>
>
>>
>> So here is my thought - use 16:1 balun to transform the loop's
>> basic feed impedance closer to 50 ohms, then feed through a high
>> pass filter with cutoff ~3 MHz (to reduce AM BC band signals but
>> minimize impact on 80M and above signals), then a wideband mmic
>> amp (50 ohms in/out, ~20 dB gain) to drive signal back to shack
>> receiver.
>>
>> Is this a reasonable way to approach this? Other ideas, resources,
>> suggestions or comments would really be appreciated.
>>
>
> I did an extensive amount of impedance measurements for loop antennas some time ago, which were then used for a series of receiving and transmitting antenna designs. One of the designs, which is remotely tuned using a pair of varactors, is at:
>
> http://www.home.earthlink.net/~christrask/Paper011.html
>
> and an indoor version is at:
>
> http://www.home.earthlink.net/~christrask/Paper018.html
>
> You'll notice that the loop impedance can be seen as a resistor in series with an inductor, plus a parallel-resonant RLC network if you encroach upon the first resonance. For wideband usage, an acive loop antenna is pretty much limited to interfacing with a high input impedance amplifier as the first stage, which is not going to make your AM BCB station interferance problem any easier.
>
> I did make an attempt at wideband passive matching of loop antennas, which is at:

>
> http://www.home.earthlink.net/~christrask/Paper010.html
>
> where you can see that the potential for a passive solution is not on the horizon. One possible solution is to use an active negative inductor, but I have yet to come up with a design that is suitable for applications such as this.
>
>>
>> By the way, this is the URL of the original antenna I built, and
>> the basis for the idea to build a version that has high pass filter
>> between the loop and the amplifier:
>>
>> http://www.qrss.thersgb.net/active-loop-receiving-antenna.html
>>
>
> John's design is a useful and practical approach to wideband loop antennas, however the high amplifier input impedance makes any filtering difficult. You could try implementing a balanced filter section between the antenna and the amplifier:
>
> O--- C ------- C ---O
> |
> |
> Antenna L Amplifier
> |
> |
> O--- C ------- C ---O
>
>
>
> Chris
>

Windows 7: It works the way you want.
http://www.microsoft.com/Windows/windows-7/default.aspx?ocid=PID24727::T:WLMTAGL:ON:WL:en-US:WWL_WIN_evergreen2:112009

6866. Shortwave schedules, new for the winter, and more info

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-01 20:23:06 UTC
From: Marc Coevoet
Topic: 6866 Message: 6866

Hello,

I put all links together here:

http://users.fulladsl.be/spb13810/radio/

(http://users.fulladsl.be/spb13810/ is the same file)

recently added sites:

So you can select an hour and see which broadcasts start then...

Choose an hour and see transmissions that start in that hour.
GMT Time. 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21
22 23
Not yet a "What's On Shortwave Now Guide", but will come!
http://users.fulladsl.be/spb13810/radio/timelistaoki/

Now with TX Power and location, from other source. Shortwave listings of
300+ languages: English, Deutsch, Francais, Nederlands, Chinese, Russian,
Persian, Swahili, Esperanto, Latin, ...
http://users.fulladsl.be/~spb13810/radio/swlistaoki/

Now with TX Power and location, from other source. Listings of 700+
International Radio stations (mostly on Shortwave)
http://users.fulladsl.be/~spb13810/radio/txlistaoki/

--
Shortwave transmissions in English, Francais, Deutsch, Suid-Afrikaans, Urdu, Cantonese,
Greek, Spanish, Portuguese, ...
http://users.fulladsl.be/spb13810/radio/swlist/
Stations list: http://users.fulladsl.be/spb13810/radio/txlist/

6867. TL and QL loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-01 22:47:08 UTC
From: Hue Miller
Topic: 6867 Message: 6867

Loop Antenna News and Information ForumThe TL loop antenna is no longer in production and the link provided, to Quartzlock, provides
an very interesting data sheet
http://www.quartzlock.com/downloads/datasheets/AE30-300_datasheet.pdf
for their product, However, NO PRICE information provided at all, which I think a very bad sign,
it means I think, "If price is that important to you, look elsewhere, fellow."
Besides, the QL antenna looks not very impressive, certainly nothing impressive when compared to, say, the Wellbrook.
I was very pleased to see the RadCom RSGB antenna project link - I had thought for a long time I would have to buy a back issues compilation to find this.
I also wonder if instead of coax output cable, in the interest of maximum noise rejection, it would be worthwhile using twinax, or perhaps just doubling 2 coaxes bound together.
A moderate impedance mismatch, say 2:1, in this application has no bad effects, I think?
BTW, I note the Grahn (Deutschland) loops in the remote located form, do not work above 4000 kHz, and the one that does tune to 30,000 kHz is a desktop type, not remotely located. This is not what most of us are interested in.
-Hue Miller / Newport, Oregon, USA

[Non-text portions of this message have been removed]

6868. Re: [loopantennas] TL and QL loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-02 09:55:43 UTC
From: C. Beijersbergen
Topic: 6867 Message: 6868

"I was very pleased to see the RadCom RSGB antenna project link - I had thought for a long time I would have to buy a back issues compilation to find this. "

I don't know what you are referring to, did I miss something? Can you give us the link?

thanks,

Cor Beijersbergen

[Non-text portions of this message have been removed]

6869. Re: [loopantennas] 30 foot loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-03 12:16:54 UTC
From: John Hoopes
Topic: 6852 Message: 6869

You can twist the wires from you loop to your phono plug. Several turns per inch should suffice. You should have a nice broad frequency response with that set-up.

John

--- On Fri, 10/30/09, Bill McGraw <mcgr3799@bellsouth.net> wrote:

From: Bill McGraw <mcgr3799@...>
Subject: [loopantennas] 30 foot loop antenna
To: loopantennas@yahoogroups.com
Date: Friday, October 30, 2009, 5:55 PM

I just taped up a square 30 foot vertical loop on my east office wall, used a V-cap with it to help tune it but seemed not necessary. It worked nearly as well as my horizontal 44 foot loop at the ceiling. I don't know why but I haven't heard any any strong SSB signals on 80 meters in several weeks. 6 MHz stations, China and Cuba come in strong. I haven't heard anything on 20 meters with this radio.

Will someone tell me how best to make a lead-in to my radio (RS DX 398)? Can I just twist some stranded wire together? Do I need to ground the loop? I grounded the horizontal loop, actually a OCF horizontal loop of sorts, one end to my outside ground and both ends fed into a sterio 1/8" plug to the radio.

Bill McGraw
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

6870. Height versus lenght in loop antennas, and direction.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-04 09:55:33 UTC
From: Marc Coevoet
Topic: 6870 Message: 6870

Hello:

Suppose the Height/lenght > 1, will the antenna be more directional
than with a Height/lenght <1 antenna??

My idea is that n,ow I'm always using a circular loop 35cm/1 feet to 3
feet, 1 meter, and I'm thinking that a square loop/rectangular loop
might be more directive. Would that be true??
(making onde is not such a big work).

BTW: in the ultralightdx group(yahoo), they are using radios with a
silabs chip in it, like the kchoibo kk-S60L, or the tecsun pl-310, that
canb set am narrow/wide to 1, 2, 3, 4 or 6. Fm is very good too, and
maybe better than the sony digitral hd radio.

Marc
PS/ site renovated with hourly overview of tx on sw!

--
What's on Shortwave guide: choose an hour, go!
http://whatsonshortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

6871. What's Better - Faraday Loop or Wire Coupling Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-06 22:14:10 UTC
From: VK1OO
Topic: 6871 Message: 6871

All,

I'm now looking at the coupling loop for my 1.2m diameter 25mm copper tube loop. Which is better and why - a shielded Faraday Loop or just a plain wire coupling loop or even a gamma match? What's the difference and is there any test reports available measuring and comparing performance?

Mike
VK1OO

6872. Re: [loopantennas] What's Better - Faraday Loop or Wire Coupling Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-07 00:32:13 UTC
From: Chris Trask
Topic: 6871 Message: 6872

>
> I'm now looking at the coupling loop for my 1.2m diameter 25mm copper
> tube loop. Which is better and why - a shielded Faraday Loop or just a
> plain wire coupling loop or even a gamma match? What's the difference
> and is there any test reports available measuring and comparing
performance?
>

Many people have becomd frustrated with the difficulty of tuning a loop
with both Faraday loops and Gamma matching. I decided to try a different
approach using a series of wideband transformers, and the results were
repeatable trouble-free tuning:

http://www.home.earthlink.net/~christrask/Paper011.html

http://www.home.earthlink.net/~christrask/Paper012.html

http://www.home.earthlink.net/~christrask/Paper018.html

Chris

6873. Re: [loopantennas] What's Better - Faraday Loop or Wire Coupling Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-07 04:45:08 UTC
From: Franco ISØVSU
Topic: 6871 Message: 6873

Chris-
thank you for informations. I am building a new loop on these days, and will try the different approach you suggested.

73

Franco IS0VSU

--- Sab 7/11/09, Chris Trask <christrask@...> ha scritto:

Da: Chris Trask <christrask@...>
Oggetto: Re: [loopantennas] What's Better - Faraday Loop or Wire Coupling Loop
A: loopantennas@yahoogroups.com
Data: Sabato 7 novembre 2009, 01:32

>

> I'm now looking at the coupling loop for my 1.2m diameter 25mm copper

> tube loop. Which is better and why - a shielded Faraday Loop or just a

> plain wire coupling loop or even a gamma match? What's the difference

> and is there any test reports available measuring and comparing

performance?

>

Many people have becomd frustrated with the difficulty of tuning a loop

with both Faraday loops and Gamma matching. I decided to try a different

approach using a series of wideband transformers, and the results were

repeatable trouble-free tuning:

http://www.home. earthlink. net/~christrask/ Paper011. html

http://www.home. earthlink. net/~christrask/ Paper012. html

http://www.home. earthlink. net/~christrask/ Paper018. html

Chris

[Non-text portions of this message have been removed]

6874. Re: What's Better - Faraday Loop or Wire Coupling Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-07 05:17:22 UTC
From: capntripps2000
Topic: 6871 Message: 6874

I have used all 4 methods including using the toroid feed.

I've seen no difference between the Faraday shielded feed loop and the bare wire loop, so I use bare wire loops these days. The bare wire will handle more power for continuous duty modes like digital/rtty. The toroid feed method seems to overheat with 100watt continuous duty (at least my T240-43 ferrite does).

I've used gamma method and it may actually be the simplest method.

The variable I have noticed that introduces problems is the loop height above ground. The lower the loop is to ground the larger the feed loop needs to be. I built a 20M loop in the basement and the feedloop was nearly 1/3 the size of the main loop to achieve a 1:1 SWR when testing. When I moved the loop to the attic I needed to reduce the feedloop size to the original 1/5 size in order to get a 1:1 SWR.
Also, the lower the loop to ground the longer the gamma match feed will be. With the toroid feed method you just increase or decrease the number of turns on the coax side. I made a toroid matching section with a switch that selects the turns ratio I need so I can adjust the impedance to match where ever I mount the loop.

I would go ahead and try the bare wire feedloop first and be ready to change the loop size and also the shape. I find I need to compress the feedloop into an oval to achieve the 'perfect' 1:1 match.

Good luck and happy experimenting! You will like the loop results!

atd

--- In loopantennas@yahoogroups.com, VK1OO <mike.walkington@...> wrote:
>
> All,
>
> I'm now looking at the coupling loop for my 1.2m diameter 25mm copper
> tube loop. Which is better and why - a shielded Faraday Loop or just a
> plain wire coupling loop or even a gamma match? What's the difference
> and is there any test reports available measuring and comparing performance?
>
> Mike
> VK1OO
>

6875. Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 16:46:01 UTC
From: Ken
Topic: 6875 Message: 6875

Hi All

I'm looking at a Wellbrook AL-330S. I know they can be mounted on a rotor and show some rejection. Do they reject when the loop is facing the noise or on the loops "edge"?

So is it the "O" or the "|" side that rejects?

Thanks
Ken

6876. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 16:57:55 UTC
From: EDUARDO
Topic: 6875 Message: 6876

Hello Ken

The side is rejecting this "|", the other side "O" is what makes the best capture. The band rejection is 80% in the "|".
Respectfully

Eduardo L. Castaldelli
Mairiporã-SP-Brazil
Grid Locator: GG66qq
www.radiodx.qsl.br

----- Original Message -----
From: Ken
To: loopantennas@yahoogroups.com
Sent: Monday, November 09, 2009 2:46 PM
Subject: ***SPAM*** [loopantennas] Loops null direction

Hi All

I'm looking at a Wellbrook AL-330S. I know they can be mounted on a
rotor and show some rejection. Do they reject when the loop is facing
the noise or on the loops "edge"?

So is it the "O" or the "|" side that rejects?

Thanks
Ken

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6877. Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 18:00:58 UTC
From: jaafes
Topic: 6875 Message: 6877

Are you sure,Eduardo?
Jose

--- In loopantennas@yahoogroups.com, "EDUARDO" <adcas@...> wrote:
>
> Hello Ken
>
> The side is rejecting this "|", the other side "O" is what makes the best capture. The band rejection is 80% in the "|".
> Respectfully
>
> Eduardo L. Castaldelli
> Mairiporã-SP-Brazil
> Grid Locator: GG66qq
> www.radiodx.qsl.br
>
> ----- Original Message -----
> From: Ken
> To: loopantennas@yahoogroups.com
> Sent: Monday, November 09, 2009 2:46 PM
> Subject: ***SPAM*** [loopantennas] Loops null direction
>
>
> Hi All
>
> I'm looking at a Wellbrook AL-330S. I know they can be mounted on a
> rotor and show some rejection. Do they reject when the loop is facing
> the noise or on the loops "edge"?
>
> So is it the "O" or the "|" side that rejects?
>
> Thanks
> Ken
>
>
>
> ------------------------------------

6878. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 19:03:49 UTC
From: EDUARDO
Topic: 6875 Message: 6878

I'm sorry, I did a reversal of position, but to be sure, see the drawing.
Small loop antennas have patterns opposite those of large loops. The minima, or nulls, are perpendicular to the plane of de loop, while the maxima are off the ends. Figure shows the directions of maximum and minimum response. The loop antenna is viewed from above. the nulls (dotted lines) are orthogonal to the loop axis, while the maxima are along the loop axis

Att,

Eduardo L. Castaldelli
Mairiporã- SP- Brasil
Grid Locator: GG66qq
www.radiodx.qsl.br

----- Original Message -----
From: jaafes
To: loopantennas@yahoogroups.com
Sent: Monday, November 09, 2009 4:00 PM
Subject: ***SPAM*** [loopantennas] Re: Loops null direction

Are you sure,Eduardo?
Jose

--- In loopantennas@yahoogroups.com, "EDUARDO" <adcas@...> wrote:
>
> Hello Ken
>
> The side is rejecting this "|", the other side "O" is what makes the best capture. The band rejection is 80% in the "|".
> Respectfully
>
> Eduardo L. Castaldelli
> Mairiporã-SP-Brazil
> Grid Locator: GG66qq
> www.radiodx.qsl.br
>
> ----- Original Message -----
> From: Ken
> To: loopantennas@...m
> Sent: Monday, November 09, 2009 2:46 PM
> Subject: ***SPAM*** [loopantennas] Loops null direction
>
>
> Hi All
>
> I'm looking at a Wellbrook AL-330S. I know they can be mounted on a

> rotor and show some rejection. Do they reject when the loop is facing
> the noise or on the loops "edge"?
>
> So is it the "O" or the "|" side that rejects?
>
> Thanks
> Ken
>
>
>
> ------------------------------------

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6879. Re:[loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 19:16:25 UTC
From: EDUARDO
Topic: 6875 Message: 6879

See de picture!

Respectfully,

Eduardo L. Castaldelli
Mairiporã-SP-Brazil
Grid Locator: GG66qq
www.radiodx.qsl.br

----- Original Message -----
From: jaafes
To: loopantennas@yahoogroups.com
Sent: Monday, November 09, 2009 4:00 PM
Subject: ***SPAM*** [loopantennas] Re: Loops null direction

Are you sure,Eduardo?
Jose

--- In loopantennas@yahoogroups.com, "EDUARDO" <adcas@...> wrote:
>
> Hello Ken
>
> The side is rejecting this "|", the other side "O" is what makes the best capture. The band rejection is 80% in the "|".
> Respectfully
>
> Eduardo L. Castaldelli
> Mairiporã-SP-Brazil
> Grid Locator: GG66qq
> www.radiodx.qsl.br
>
> ----- Original Message -----
> From: Ken
> To: loopantennas@yahoogroups.com
> Sent: Monday, November 09, 2009 2:46 PM
> Subject: ***SPAM*** [loopantennas] Loops null direction
>
>
> Hi All
>
> I'm looking at a Wellbrook AL-330S. I know they can be mounted on a
> rotor and show some rejection. Do they reject when the loop is facing
> the noise or on the loops "edge"?
>
> So is it the "O" or the "|" side that rejects?
>

> Thanks
> Ken
>
>
>
> ------------------------------------

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6880. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 19:19:41 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 6880

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Nulls loop.doc
Uploaded by : adcasziza <adcas@...>
Description : picture of diagram

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Nulls%20loop.doc

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/general.htmlfiles

Regards,

adcasziza <adcas@...>

6881. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 19:22:30 UTC
From: Jim Dunstan
Topic: 6875 Message: 6881

At 04:46 PM 11/9/2009 +0000, you wrote:
>
>
>Hi All
>
>I'm looking at a Wellbrook AL-330S. I know they can be mounted on a
>rotor and show some rejection. Do they reject when the loop is facing
>the noise or on the loops "edge"?
>
>So is it the "O" or the "|" side that rejects?
>
>Thanks
>Ken

Hi,

The radiation/reception pattern of a large loop is maximum perpendicular to the loop plane with nulls off the sides. Small loops (which includes the Al-330s) are opposite .. e.g. maximum off the sides of the loop and nulls perpendicular to the plane of the loop.

Jim, VE3CI

6882. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 19:24:36 UTC
From: EDUARDO
Topic: 6875 Message: 6882

See in the down link

http://f1.grp.yahoofs.com/v1/sGb4SkLOKRZF7CyqQuNyNs98pzPujuQxGsqSsezNRJSj1UBQ3y9V2CgTqgIrLaADkiiDzj7aNKLmkaROhZwn2yb1-j__J7N1/Nulls%20loop.doc

Respectfully,

Eduardo L. Castaldelli
Mairiporã-SP-Brazil
Grid Locator: GG66qq
www.radiodx.qsl.br

----- Original Message -----
From: EDUARDO
To: loopantennas@yahoogroups.com
Sent: Monday, November 09, 2009 5:16 PM
Subject: ***SPAM*** Re:[loopantennas] Re: Loops null direction

See de picture!

Respectfully,

Eduardo L. Castaldelli
Mairiporã-SP-Brazil
Grid Locator: GG66qq
www.radiodx.qsl.br

----- Original Message -----
From: jaafes
To: loopantennas@yahoogroups.com
Sent: Monday, November 09, 2009 4:00 PM
Subject: ***SPAM*** [loopantennas] Re: Loops null direction

Are you sure,Eduardo?
Jose

--- In loopantennas@yahoogroups.com, "EDUARDO" <adcas@...> wrote:
>
> Hello Ken
>
> The side is rejecting this "|", the other side "O" is what makes the best capture. The band rejection is 80% in the "|".
> Respectfully
>
> Eduardo L. Castaldelli
> Mairiporã-SP-Brazil
> Grid Locator: GG66qq

> www.radiodx.qsl.br
>
> ----- Original Message -----
> From: Ken
> To: loopantennas@yahoogroups.com
> Sent: Monday, November 09, 2009 2:46 PM
> Subject: ***SPAM*** [loopantennas] Loops null direction
>
>
> Hi All
>
> I'm looking at a Wellbrook AL-330S. I know they can be mounted on a
> rotor and show some rejection. Do they reject when the loop is facing
> the noise or on the loops "edge"?
>
> So is it the "O" or the "|" side that rejects?
>
> Thanks
> Ken
>
>
>
> ------------------------------------

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6883. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 19:30:07 UTC
From: Jim Dunstan
Topic: 6875 Message: 6883

At 02:57 PM 11/9/2009 -0200, you wrote:
>
>
>Hello Ken
>
>The side is rejecting this "|", the other side "O" is what makes the best
>capture. The band rejection is 80% in the "|".
>Respectfully
>
>Eduardo L. Castaldelli
>Mairiporã-SP-Brazil
>Grid Locator: GG66qq
>www.radiodx.qsl.br

Eduardo,

What u say is correct for large loops ... eg 1/2 wavelength or
larger. Small loops ... tuned or untuned are the opposite. With a small
loop "0" gives maximum rejection/null ... while "I" gives maximum
reception. Of course the null is sharp and maximum reception is broad.

We are either 100% correct or 100% incorrect hi hi ...

Jim, VE3CI

6884. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 20:08:51 UTC
From: Paul V Birke PEng
Topic: 6875 Message: 6884

reason is that small loops responds to intregal H*dl=N*i responds to current and in fact we have a delta H across the loop on a line of Max H

hitting loop is Hmax and other side of loop is Hmin and delta H = Hmax - Hmin

****

for larger loop we get the voltage relationship e= N *2 *Pi*f* Phi= N*2*Pi*f*B*A= 2*Pi*N*u0*ur*H* A

where ur=1.0 for ail
u0=4*Pi*10^(-7)

and A = loop area in m^2
and Phi in webers
Phi = B*A

best Paul

From: Jim Dunstan <jimdunstan@...>
To: loopantennas@yahoogroups.com
Sent: Mon, November 9, 2009 2:30:07 PM
Subject: Re: [loopantennas] Loops null direction

At 02:57 PM 11/9/2009 -0200, you wrote:
>
>
>Hello Ken
>
>The side is rejecting this "|", the other side "O" is what makes the best
>capture. The band rejection is 80% in the "|".
>Respectfully
>
>Eduardo L. Castaldelli
>Mairiporã-SP- Brazil
>Grid Locator: GG66qq
>www.radiodx. qsl.br

Eduardo,

What u say is correct for large loops ... eg 1/2 wavelength or larger. Small loops ... tuned or untuned are the opposite. With a small loop "0" gives maximum rejection/null ... while "I" gives maximum reception. Of course the null is sharp and maximum reception is broad.

We are either 100% correct or 100% incorrect hi hi ...

Jim, VE3CI

[Non-text portions of this message have been removed]

6885. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 22:07:08 UTC
From: aimo ruoho
Topic: 6875 Message: 6885

Thanks, but when Itry this given URL, I get "DOCUMENT NOT FOUND"

--- On Mon, 11/9/09, EDUARDO <adcas@...> wrote:

From: EDUARDO <adcas@....br>
Subject: Re: [loopantennas] Re: Loops null direction
To: loopantennas@yahoogroups.com
Date: Monday, November 9, 2009, 8:24 PM

See in the down link

http://f1.grp. yahoofs.com/ v1/sGb4SkLOKRZF7 CyqQuNyNs98pzPuj uQxGsqSsezNRJSj1
UBQ3y9V2CgTqgIrL aADkiiDzj7aNKLmk aROhZwn2yb1- j__J7N1/Nulls% 20loop.doc

Respectfully,

Eduardo L. Castaldelli

Mairiporã-SP- Brazil

Grid Locator: GG66qq

www.radiodx. qsl.br

----- Original Message -----

From: EDUARDO

To: loopantennas@ yahoogroups. com

Sent: Monday, November 09, 2009 5:16 PM

Subject: ***SPAM*** Re:[loopantennas] Re: Loops null direction

See de picture!

Respectfully,

Eduardo L. Castaldelli

Mairiporã-SP- Brazil

Grid Locator: GG66qq

www.radiodx. qsl.br

----- Original Message -----

From: jaafes

To: loopantennas@ yahoogroups. com

Sent: Monday, November 09, 2009 4:00 PM

Subject: ***SPAM*** [loopantennas] Re: Loops null direction

Are you sure,Eduardo?

Jose

--- In loopantennas@ yahoogroups. com, "EDUARDO" <adcas@...> wrote:

>

> Hello Ken

>

> The side is rejecting this "|", the other side "O" is what makes the best capture. The band rejection is 80% in the "|".

> Respectfully

>

> Eduardo L. Castaldelli

> Mairiporã-SP- Brazil

> Grid Locator: GG66qq

> www.radiodx. qsl.br

>

> ----- Original Message -----

> From: Ken

> To: loopantennas@ yahoogroups. com

> Sent: Monday, November 09, 2009 2:46 PM

> Subject: ***SPAM*** [loopantennas] Loops null direction

>

>

> Hi All

>

> I'm looking at a Wellbrook AL-330S. I know they can be mounted on a

> rotor and show some rejection. Do they reject when the loop is facing

> the noise or on the loops "edge"?

>

> So is it the "O" or the "|" side that rejects?

>

> Thanks

> Ken

>

>

>

> ------------ --------- --------- ------

------------ --------- --------- ------

If you've got links, post them in the Links section!

http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.

http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

------------ --------- --------- ------

If you've got links, post them in the Links section!

http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.

http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6886. Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-09 22:16:20 UTC
From: AlienRelics
Topic: 6875 Message: 6886

That link doesn't work for me, it looks like a link to a file in your Yahoo mail? Or you linked to a location in Files, those only work for 30 minutes to prevent file leaching.

I found it:
<http://groups.yahoo.com/group/loopantennas/files/Nulls%20loop.doc>

It is better if you don't use spaces in file names. You must replace every space with %20.

I also strongly recommend against posting scanned/raster images inside a DOC file. Just upload it as a JPG or GIF, it is easier to view and the file is a lot smaller.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "EDUARDO" <adcas@...> wrote:
>
> See in the down link
>
> http://f1.grp.yahoofs.com/v1/sGb4SkLOKRZF7CyqQuNyNs98pzPujuQxGsqSsezNRJSj1UBQ3y9V2CgTqgIrLaADkiiDzj7aNKLmkaROhZwn2yb1-j__J7N1/Nulls%20loop.doc
>
> Respectfully,
>
> Eduardo L. Castaldelli
> Mairiporã-SP-Brazil
> Grid Locator: GG66qq
> www.radiodx.qsl.br
>
>

6887. Sprial loop 48 x 48 inch

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-10 10:42:57 UTC
From: Michael in Suffolk
Topic: 6887 Message: 6887

Hi. I have just made a 48 x 48 inch sprial loop { looked at PICS could not see very many} and am having tuning capacitor - or wire problems.
 I also have a 24 x 24 sprial loop with 11 turns and that is giving no problems at all. OK the set up here is I have about 7 variable metal VTC caps and have tired them all in either paraible wire up or just one vain and earth side all these either having 8 x 11 or 13 x 13 vane or a combo of 8 min to 16 max vane.
 I also have some old flat bakerlite types dylictric! from the 1950 or before, and only ONE of those works great with one wire to the main tuning vanes and the other to the other side, full tuning with this useing single stranded pvc covered wire, tuning is from 470-1.800.
 THe 48 x 48 inch sprial - Now when I put on any one of the METAL caps the tuning will not go down the even 1.610 all of them stop at about 1.530 khz, Yes I have put on one turn, taken off a turn, total being either from 6-7-9-13 used one side of a vane set and so on, made the wire spacing wider - made it closer to no avail, could it be the 24 strand wire that is the problem, as on the 24 x 24 sprial loop it is single strand, ...help its driving me crazy. PICS of my loops and VTC are on skywavemw not good at giving a link as not very much up with PCs, but you just might find me I hope. Mike UK Bungay Suffolk.

[Non-text portions of this message have been removed]

6888. Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-10 18:06:53 UTC
From: gmcjetpilot
Topic: 6875 Message: 6888

The sides or the loop (the hole or "O") is the null

The edge "|" is the Aim

http://www.mindspring.com/~loop_antenna/edgewound_reception.gif

" The pickup pattern is shaped like a figure eight. The loop will allow signals on opposite sides to be received, while off the sides of the loop the signal will decrease or be null-ed out. The nulling feature will allow you to remove a local station on a frequency and pick up another on the same frequency by removing the local signal. A loop may have an amplifier or may not."

NOTE: The actual pattern is VERY COMPLEX, three dimensional and affected by its surroundings and ground.

http://www.pa0sim.nl/circular%20polarization.htm
http://www.pa0sim.nl/loops%20in%20real%20life.htm

You can AIM at an offending STATION offending station or noise and detune the loop for that Freq, to NULL that signal, using broad reception (of lower gain) off the side, Or turn a loop null side to block signals. Some times 45 degrees will do both block and gain.

You can use two or more loops (an array) and do all kinds of NULL and AIM to hear a distant weak stations while rejecting noise and stronger local stations.

http://www.pa0sim.nl/dual%20loop%20system.htm

This is what makes loops so interesting and powerful, not to mention they are WAY more compact than equivalent "Long Wire" antennas. Of course loops are best at LF, MW and SW/HF. At the VHF freq and UHF things change. The wave length is so short a 1/2 or full wave length whip or wire antenna is practical. Also because VHF and UHF tends to penetrate the ionosphere (not skip off) you don't get SKIP or sky waves, it becomes LINE OF SIGHT.

Keep in mind depending on the design of the loop the null can be deep or shallow. The Wellbrook has off side reception, just not the same gain. I suspect this is because it is an ACTIVE loop for one.

Also SOME signals come from the SKY, so no matter what way you have it pointed the signal is coming down on the top of the loop or EDGE. Some people will tilt their LOOP (usually big manually manipulated loops) on a gimbal. The TILT or azimuth can block local signals and I assume get a SKY wave better, improve gain, depending on the angle the sky wave is.

Keep in mind there are PASSIVE loops and ACTIVE loops (amplified).

NOTE: On a loop stick, a ferrite bar with wire winding, it is some what opposite. The longitudinal axis of the ferrite bar is the AIM and the side, (edge) of the coil winding is the NULL.

http://www.radio-electronics.com/info/antennas/ferrite_rod_antenna/ferrite_rod_antenna_operation.gif

--- In loopantennas@yahoogroups.com, "Ken" <faxcap@...> wrote:
>
> Hi All
>
> I'm looking at a Wellbrook AL-330S. I know they can be mounted on a
> rotor and show some rejection. Do they reject when the loop is facing
> the noise or on the loops "edge"?
>
> So is it the "O" or the "|" side that rejects?
>
> Thanks
> Ken
>

6889. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-10 19:10:44 UTC
From: brian russell
Topic: 6875 Message: 6889

Paul,
Though way over my head I am impressed by your calculations.
How does a vertical diamond shaped loop compare with a square one ????
72, Brian, G0NSL-QRP.

----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@yahoogroups.com
Sent: Monday, November 09, 2009 8:08 PM
Subject: Re: [loopantennas] Loops null direction

[Non-text portions of this message have been removed]

6890. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-10 21:29:38 UTC
From: Paul V Birke PEng
Topic: 6875 Message: 6890

dear brian

the optimal shape for a loop is a rectangle with rounded corner

the German army used an oval shaped profile

it would be as if you had a circle and compressed at the top so the one ends up with a fully rounded sides and flat at the top and bottom

so likely the above is better than a square for diamond

you need the rounded corners according to the theory

what I cannot remember now is whether the above applies to only small loops yes I think it is small loops

what is also interesting there is an olde swedish patent on having two loops offset by something like 10 or 20 degrees for accurate direction finding and extra gain I think with the extra loop

it is a US patent from like 1933

anyways hope that helps

other likely know much more than above
best wishes
Paul

From: brian russell <brian-nsl@...>
To: loopantennas@yahoogroups.com
Sent: Tue, November 10, 2009 2:10:44 PM
Subject: Re: [loopantennas] Loops null direction

Paul,
Though way over my head I am impressed by your calculations.
How does a vertical diamond shaped loop compare with a square one ????
72, Brian, G0NSL-QRP.

----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@ yahoogroups. com
Sent: Monday, November 09, 2009 8:08 PM
Subject: Re: [loopantennas] Loops null direction

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6891. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-10 21:42:43 UTC
From: Paul V Birke PEng
Topic: 6875 Message: 6891

dear brian

just looking at some pictures here the us marines used to use double diamond loops

the german army field direction finding from wwII used crossed diamond

the us army uses double circular loops as well as some english double loops

again the present german army uses the flattened double loop (n=2 turns) in that flattened top and bottom with full radiused corners (sort of 3' high by 5' wide) rough dimensions

so I guess diamond more than square
Paul

[Non-text portions of this message have been removed]

6892. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-10 21:50:22 UTC
From: Marc Coevoet
Topic: 6875 Message: 6892

Paul V Birke PEng schreef:
>
>
> dear brian
>
> the optimal shape for a loop is a rectangle with rounded corner
>
> the German army used an oval shaped profile
>

Would the most efficient be circular??

It is "shortest path"/ "maximum suface".

Marc

--
What's on Shortwave guide: choose an hour, go!
http://shortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

6893. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-10 22:36:22 UTC
From: Chris Trask
Topic: 6875 Message: 6893

>
> I'm looking at a Wellbrook AL-330S. I know they can be mounted on a
> rotor and show some rejection. Do they reject when the loop is facing
> the noise or on the loops "edge"?
>
> So is it the "O" or the "|" side that rejects?
>

When the loop is fed balanced, the null is ALWAYS perpendicular to the plane of the antenna.

If you feed it unbalanced, the null moves, or rather diminishes. As you approach the first parallel resonance, the resonance the null will disappear entirely. Above the first parallel resonance, the null will return to being perpendicular to the plane of the antenna, but the phase will be reversed. As you approach the first series resonance (between the first and second parallel resonances), the pattern will rotate.

I learned this while doing extensive ELNEC/EZNEC simluations of single-turn loops for my 2-part series on active loop antennas in the March 2007 issue of QEX. I did it to emphasize the point that loop antennas should ALWAYS be fed balanced.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

6894. Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-11 15:44:47 UTC
From: Ken
Topic: 6875 Message: 6894

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...>

> When the loop is fed balanced, the null is ALWAYS perpendicular to the
> plane of the antenna.

So are Wellbrook loops fed balanced?

Ken

6895. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-11 16:00:55 UTC
From: Chris Trask
Topic: 6875 Message: 6895

>
> > When the loop is fed balanced, the null is ALWAYS perpendicular
> > to the plane of the antenna.
>
>
>So are Wellbrook loops fed balanced?
>

I would certainly hope so. The schematic I have for the WL 1030 shows a transformer as the first element. It has a grounded centre-tap on both sides, which is proper design practice for the task. I'm told that the schematic I have is that of a third-party design, but I've never gone to the trouble of verifing that.

Wellbrook loops have a good reputation for performance, so I would assume that they are centre-fed as per the WL 1030 schematic that I have. Myself, I don't care much for wideband loop antenna designs that have high input impedance amplifiers as such a design practice is an open invitation to both noise and interference. But, people seem to have little interest in anything that requires additional tuning effort, such as receiver front ends and antennas.

I put a great deal of effort into my remotely tuned loop antennas, and I'm quite happy with the results, especially those with passive matching and balanced varactor tuning. I'm now working on a companion shielded loop design.

Chris

6896. Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-11 23:56:58 UTC
From: Ken
Topic: 6875 Message: 6896

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:

> I put a great deal of effort into my remotely tuned loop antennas, and > I'm quite happy with the results, especially those with passive
> matching and balanced varactor tuning. I'm now working on a companion
> shielded loop design.
>
> Chris

I am now living in a detached condo...small house with private yard but rules stating I can't have an antenna or any other object visible above the top of the fence line. A loop like a Wellbrook AL-330S seems like my only alternative. I also have very limited areas to build my own loop.

I am a SWL/Utilities DXer first and foremost and was told the 330S would fit my needs the best.

Ken

6897. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-12 09:57:53 UTC
From: M HOLDEN
Topic: 6875 Message: 6897

How big, (length and breadth) is your yard and how high is the fence ?
Perhaps there is an alternative solution. Regards, Mike G4HOL

--- On Wed, 11/11/09, Ken <faxcap@...> wrote:

From: Ken <faxcap@...>
Subject: [loopantennas] Re: Loops null direction
To: loopantennas@yahoogroups.com
Date: Wednesday, 11 November, 2009, 23:56

--- In loopantennas@ yahoogroups. com, Chris Trask <christrask@ ...> wrote:

> I put a great deal of effort into my remotely tuned loop antennas, and > I'm quite happy with the results, especially those with passive

> matching and balanced varactor tuning. I'm now working on a companion

> shielded loop design.

>

> Chris

I am now living in a detached condo...small house with private yard but

rules stating I can't have an antenna or any other object visible above

the top of the fence line. A loop like a Wellbrook AL-330S seems like my

only alternative. I also have very limited areas to build my own loop.

I am a SWL/Utilities DXer first and foremost and was told the 330S

would fit my needs the best.

Ken

[Non-text portions of this message have been removed]

6898. ALA1530: no null anymore

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-12 11:24:53 UTC
From: Dominique Kremp
Topic: 6898 Message: 6898

Hi all,

I'm experiencing something with my Wellbrook ALA1530 which is a puzzle to me.

I can't get any null anymore when it's mounted on its pole. The signal is however strong and it receives fine.

When I put it on the ground, it works, the null effect is OK.

Well, it's evident that there is something wrong with the coaxial cable.

How do you explain this ?

Thanks

Dominique

Normandy, France

[Non-text portions of this message have been removed]

6899. Re: [loopantennas] ALA1530: no null anymore

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-12 12:04:25 UTC
From: Andy Ikin
Topic: 6898 Message: 6899

Dominique Kremp; wrote on the 12th Nov.

"I'm experiencing something with my Wellbrook ALA1530 which is a puzzle to
me. I can't get any null anymore when it's mounted on its pole. The signal is
however strong and it receives fine. When I put it on the ground, it works, the null effect
is OK.
Well, it's evident that there is something wrong with the coaxial cable.
How do you explain this ?"

Dominique,

The likely cause is an intermittent open circuit screen connexion on the feeder i.e. the feeder then acts as an omni-directional antenna. However, if this is the case, then you may have an increase susceptibility to locally radiated E-Field noise when the loop is on the pole. With the feeder on the ground, its signal pick-up would be less. Check you haven't got a bad screen connection on the lead from the Antenna Interface to the receiver.

The loss of null could also be due to re-radiation from conductors near to the loop. I have never experience this in practice with single loops. However, re-radiation from conductors can totally screw up Phased arrays of K9AY and Flag antennas.

Kind regards

Andrew

[Non-text portions of this message have been removed]

6900. Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-12 15:38:23 UTC
From: Ken
Topic: 6875 Message: 6900

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> How big, (length and breadth) is your yard and how high is the fence ?
> Perhaps there is an alternative solution. Regards, Mike G4HOL

The yard is about 15M long and 5M wide down the side of the house.
There is however a small area at the front of the house with a fence
about 2M high. That means the top of the loop will be a maximum of 2M
off the ground. The side yard has a 1.5M fence along the back. The
side yard is easy to see into while the small area out front is
difficult to see into.

Not sure how many of you have lived in a condo/strat type complex but
you always find one idiot who complains about everything and who
"snoop" looking for trouble. So...I would like to avoid any "trouble".

I've thought about a Wellbrook AL100L/M....but it will have to run VERY
close to ground level. A 330S will allow at least 1 metre height above
ground to the bottom of the loop

Ken

6905. Live here, you will not think its so laughtable:

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-13 07:54:32 UTC
From: Michael in Suffolk
Topic: 6905 Message: 6905

The feedback I seem to be getting from the funny people in this group regarding the drunks below me is not so funny if you were to live here and you are welcome to do so, every nite that type of thing happens, just be lucky that you live where you do and think of the less fortunet. mike. in Bungay Suffolk.

[Non-text portions of this message have been removed]

6906. Re: [loopantennas] Live here, you will not think its so laughtable:

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-13 08:39:06 UTC
From: C. Beijersbergen
Topic: 6905 Message: 6906

Hello Michael,

It is not funny, we don't try to be funny, but there is no antenna related content in your message. And we certainly can't help you with the problem you have.

Cor Beijersbergen
----- Original Message -----
From: Michael in Suffolk
To: loopantennas@yahoogroups.com
Sent: Friday, November 13, 2009 8:54 AM
Subject: [loopantennas] Live here, you will not think its so laughtable:

The feedback I seem to be getting from the funny people in this group regarding the drunks below me is not so funny if you were to live here and you are welcome to do so, every nite that type of thing happens, just be lucky that you live where you do and think of the less fortunet. mike. in Bungay Suffolk.

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6907. Re: Live here.

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-14 00:15:28 UTC
From: Michael in Suffolk
Topic: 6905 Message: 6907

Dear Sir. Yes not funny, but the other guy was talking about antenna problums, thats why I said you/he and others should live here, he is lucky, and should be greatfull he only has that problem of the antenna being seem at his front garden, hoping you recall his post. And I am was not asking for help. Mike.

From: C. Beijersbergen <c.beijersbergen@...>
To: loopantennas@yahoogroups.com
Sent: Fri, 13 November, 2009 8:39:06
Subject: Re: [loopantennas] Live here, you will not think its so laughtable:

Hello Michael,

It is not funny, we don't try to be funny, but there is no antenna related content in your message. And we certainly can't help you with the problem you have.

Cor Beijersbergen
----- Original Message -----
From: Michael in Suffolk
To: loopantennas@ yahoogroups. com
Sent: Friday, November 13, 2009 8:54 AM
Subject: [loopantennas] Live here, you will not think its so laughtable:

The feedback I seem to be getting from the funny people in this group regarding the drunks below me is not so funny if you were to live here and you are welcome to do so, every nite that type of thing happens, just be lucky that you live where you do and think of the less fortunet. mike. in Bungay Suffolk.

[Non-text portions of this message have been removed]

------------ --------- --------- ------

If you've got links, post them in the Links section!
http://groups. yahoo.com/ group/loopantenn as/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups. yahoo.com/ group/loopantenn as/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups. yahoo.com/ group/loopantenn as/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6908. Re: NCJ article on loop receiving antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-14 05:19:23 UTC
From: Richard (Rick) Karlquist
Topic: 6774 Message: 6908

Chris Trask wrote:
>
>
> Rick,
> Since you are the author, could you pass along a copy of that article to
> me?
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...
> <mailto:christrask%40earthlink.net>
> | | | | \ '. http://www.home.earthlink.net/~christrask
> <http://www.home.earthlink.net/~christrask>
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>
> ----- Original Message -----
> From: "Richard (Rick) Karlquist" <richard@karlquist.com
> <mailto:richard%40karlquist.com>>
> To: <loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>>
> Sent: Thursday, September 10, 2009 7:41 AM
> Subject: NCJ article on loop receiving antennas (was: [loopantennas] New to
> the Group)
>
> > There is an article on loop receiving antennas in the Sept./Oct. 2009
> > issue of the ARRL National Contest Journal on page 18.
> > (http://www.arrl.org/ncj/2009/09/toc.pdf
> <http://www.arrl.org/ncj/2009/09/toc.pdf>).
> >
> > Rick N6RK
> >
> > Franco ISØVSU wrote:
> > >

> > >
> > > Hi all,
> > >
> > > I' m new to this Group that I joined having a strong interest in
> > > building Loop Antennas.
> > > The QRM is one of the biggest problems of my QTH, so I think I will use
> > > a Loop for receiving and a Vertical for transmitting.... But I have to
> > > read a lot, before that.
> >
> > >
> > > Franco IS0VSU
> > > IS QRP#01
> >
>
>

[Non-text portions of this message have been removed]

6909. Re: [loopantennas] Re: NCJ article on loop receiving antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-14 16:09:24 UTC
From: brian russell
Topic: 6774 Message: 6909

Rick,
Being a confirmed ' loop addict ' I would like to read the article but
suspect ' NCJ ' is a limited issue magazine in the US ????
Regards,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Richard (Rick) Karlquist
To: loopantennas@yahoogroups.com
Sent: Saturday, November 14, 2009 5:19 AM
Subject: [loopantennas] Re: NCJ article on loop receiving antennas

[Non-text portions of this message have been removed]

6910. Re: Small loop antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-15 00:52:56 UTC
From: bm40g
Topic: 6847 Message: 6910

Hi All,

I made my STL out of 1/2 inch heliax. I wish I used 7/8's now, but that is what I would recommend. My loop is 1 1/4 meter in diameter, so its radiation resistance is about 3.4 times that of a 27 inch diameter loop. That is how I thought it would be good, and it is good. I hear dx all over. I usually can hear the station DX station in the pileup if he anywhere in Europe. But hell, it could be even better. It tunes from 6.8 to 15.3 MHz. The match is set for 20 meters with near perfect VSWR, and I need to match it up with a match box down on 40.

If you mount the loop horizontal in the center of a shallow roof it will be hardly noticable. If you have a vent cupola, you might use that to enclose the loop. Horizontal would be OK for sandy soils.

6911. Re: Loop Size

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-15 01:01:30 UTC
From: bm40g
Topic: 6835 Message: 6911

Hi All,

I built my loop to be 1 1/4 meter diameter. So if your build a octagon with the flats at 1 1/4 meters spacing it would work similarly. The antenna is well short of 1/4 wave perimeter on 40 meter, buy on 20 its strating to change to the short folded dipole mode and become more omnidirectional.

The lack of efficiency on 40 is not as serious a problem, practically, due to the smaller propagation loss (per unit distance) and the shorter range contacts (typically). In my limited experience. The good null on 40 is beneficial.

6912. Re: [loopantennas] Re: NCJ article on loop receiving antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-15 04:20:31 UTC
From: Richard (Rick) Karlquist
Topic: 6774 Message: 6912

See attachments

brian russell wrote:
>
>
> Rick,
> Being a confirmed ' loop addict ' I would like to read the article but
> suspect ' NCJ ' is a limited issue magazine in the US ????
> Regards,
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: Richard (Rick) Karlquist
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Sent: Saturday, November 14, 2009 5:19 AM
> Subject: [loopantennas] Re: NCJ article on loop receiving antennas
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

6913. Re: [loopantennas] Re: NCJ article on loop receiving antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-15 09:35:51 UTC
From: brian russell
Topic: 6774 Message: 6913

Rick,
If there was an attachment it got blocked sadly !!!!!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: "Richard (Rick) Karlquist" <richard@...>
To: <loopantennas@yahoogroups.com>
Sent: Sunday, November 15, 2009 4:20 AM
Subject: Re: [loopantennas] Re: NCJ article on loop receiving antennas

> See attachments

6914. Re: [loopantennas] Re: NCJ article on loop receiving antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-15 13:01:36 UTC
From: David Towers
Topic: 6774 Message: 6914

Hi Rick
this group has seemingly blocked attachments so post them into the files section
73
dave G8SZX

Richard (Rick) Karlquist wrote:
> See attachments
>
> brian russell wrote:
>
>>
>>
>> Rick,
>> Being a confirmed ' loop addict ' I would like to read the article but
>> suspect ' NCJ ' is a limited issue magazine in the US ????
>> Regards,
>> 72, Brian, G0NSL-QRP.

6915. NCJ article on loop receiving antennas now in files section

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-15 16:42:54 UTC
From: Richard (Rick) Karlquist
Topic: 6774 Message: 6915

The NCJ article has been scanned and posted to the files section.

Rick N6RK

David Towers wrote:
>
>
>
> Hi Rick
> this group has seemingly blocked attachments so post them into the files
> section
> 73
> dave G8SZX
>
> Richard (Rick) Karlquist wrote:
> > See attachments
> >
> > brian russell wrote:
> >
> >>
> >>
> >> Rick,
> >> Being a confirmed ' loop addict ' I would like to read the article but
> >> suspect ' NCJ ' is a limited issue magazine in the US ????
> >> Regards,
> >> 72, Brian, G0NSL-QRP.
>
>

6917. File Section

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-16 09:39:58 UTC
From: Ken Wright
Topic: 6917 Message: 6917

Hi.
How do I access the file section?

Ken
M0KHW

[Non-text portions of this message have been removed]

6918. Re: File Section

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-16 14:34:01 UTC
From: AlienRelics
Topic: 6917 Message: 6918

Go to the group's page, then look at the left side menu. "Files" are just below the Messages submenus.

Or just go straight to them:
http://groups.yahoo.com/group/loopantennas/files/

You may need to be logged into Yahoo or Yahoogroups.

Steve Greenfield

--- In loopantennas@yahoogroups.com, Ken Wright <lutonman42@...> wrote:
>
> Hi.
> How do I access the file section?
>
> Ken
> M0KHW
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6919. Re: NCJ article on loop receiving antennas now in files section

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-17 00:15:57 UTC
From: AlienRelics
Topic: 6774 Message: 6919

I've got a better idea, leave it up and I'll take down the JPGs.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "bob71741" <bob71741@...> wrote:
>
> I copied the five jpgs that made up the NCJ article and made a PDF document out of them. Its one file and about half the size of the original five files.
>
> It is located in the file section as
> An Improved Feed Network for Loop-Type Receiving Antenae .pdf
>
> I'll take it down in about a week so as not to clutter the file section with redundant stuff.
>
> Bob
>

6920. Re: NCJ article on loop receiving antennas now in files section

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-17 02:15:37 UTC
From: jpopelish
Topic: 6774 Message: 6920

--- In loopantennas@yahoogroups.com, "AlienRelics" <alienrelics@...> wrote:
> --- In loopantennas@yahoogroups.com, "bob71741" <bob71741@> wrote:
> >
> > I copied the five jpgs that made up the NCJ article and made a PDF document out of them. Its one file and about half the size of the original five files.
> >
> > It is located in the file section as
> > An Improved Feed Network for Loop-Type Receiving Antenae .pdf
> >
> > I'll take it down in about a week so as not to clutter the file section with redundant stuff.

> I've got a better idea, leave it up and I'll take down the JPGs.

I enjoy processing stuff to make it store more efficiently. I cleaned up the original 5 pages so the compression would be more efficient and reduced the color levels to 16 shades of gray (4 bits per pixel). I also cut the number of pixels per page in half, since they were beautifully large. Total size as 5 .png files is 561k (less than half the .pdf size). Bob, if you would like to have these to put into a pdf, for size and quality comparison, I would be happy to upload them, here, or email them to you.

--
Regards,

John Popelish

6921. Fotos de minha mais nova antena loop circular para OM de 1m de diâmetro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-19 11:01:11 UTC
From: Silvio
Topic: 6921 Message: 6921

Olá amigos,

Apesar de eu morar no centro de Curitiba, num local com muitos ruídos, eu não perco as minhas esperanças de que a COPEL (Cia Energética do Paraná) possa sanar de uma vez por todas com esses ruídos terríveis que incomodam minhas escutas.

Prova disso foi o último apagão ocorrido neste mes de novembro/2009 durante o qual eu corri para meu rádio Tecsun PL-310 e liguei em OM, conseguindo captar emissoras que antes não conseguia e que durante o curto período do apagão nenhum ruído se apresentou, banda de OM toda limpa, sem ruídos. Isso mostra que do meu apt, 3o andar é um lugar muito bom para escutas desde que esse problema fosse sanado.

Eu já entrei em contato com a COPEL e ela me retornou dizendo que iria resolver o problema em 30 dias, o que, por pessimismo não acredito.

Quero aproveitar e informar meu link para as fotos das minhas antenas para Dxismo, cujo melhor local que já consegui foi na praia de Itapoá, um local magnífico para tal hobby, mas que infelizmente não moro lá, só veraneio.

Aproveito para apresentar minha nova antena loop circular caseira de 1 metro de diâmetro confeccionada com o famoso brinquedo BAMBOLÊ. Levei 1 ano para confeccionar esta antena porque não encontrava um material resistente e ao mesmo tempo maleável e ao mesmo tempo que pudesse ser amarrado/preso ao bambolê e que pudesse acompanhar a circunferência do mesmo. Depois de muita procura consegui encontrar numa loja de couros/revestimentos no centro de Curitiba um papelão com expessura de uns 3 a 4 mm que tinha estas características que eu tanto precisava para poder confeccionar esta valiosa e surpreendente antena loop para OM. Portanto fica aqui a minha dica de antena loop para todos.

Ela tem um rendimento fantástico, mas devido a ruideira presente em meu apt eu estou inclinado a fazer escutas numa pousada no sopé do morro Anhangava aqui na cidade de Quatro Barras a uns 50km de Curitiba. Lá as condições são simplesmente fantásticas.

Eu já estive lá e fiz algumas escutas interessantes que estou para postar em breve quando o tempo me permitir.

O link para as fotos das antenas está em...

www.4shared.com/dir/23830727/f1551468/minhas_antenas_para_Dxismo.html

e a senha para acesso é "antenas" .

73´s a todos,
Milton
Curitiba/PR

6922. Re: [loopantennas] Fotos de minha mais nova antena l oop circular para OM de 1m de diâmetro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-19 18:57:28 UTC
From: Andy
Topic: 6921 Message: 6922

<Automatic translation from Portugese to English follows>

Hello friends,

Although I live in downtown Curitiba, a place with too much noise, I have not lost my hope that COPEL (Cia Energetica do Paraná) can solve once and for all with these dreadful noises that annoy my eavesdropping.

Proof of this was the last blackout in November/2009 of months during which I ran to my radio Tecsun PL-310 and turned in OM, has captured stations that could not before and during the short period of blackout no noise is presented Banda OM all clean, no noise. This shows that my apt, 3rd floor is a very good place to listeners since this problem was resolved.

I'm already in contact with COPEL and she returned saying that would solve the problem within 30 days, which in pessimism do not believe.

I want to take my information and link to the photos of my antennas Dxismo, the best place that I've got the beach was Itapoá, a superb location for this hobby, but unfortunately do not live there, only summer.

Opportunity to present my new home circular loop antenna of 1 meter in diameter made from the famous toy BAMBOLE. It took 1 year to cook this dish because it was a durable, flexible while at the same time that could be tied / attached to the hoop and he could follow the circumference of it. After much searching I managed to find a store leather / roof in downtown Curitiba expessura a cardboard from a 3 to 4 mm that had these features that I either needed to be able to cook this valuable and amazing antenna loop to OM. So here is my tip antenna loop for all.

She has a fantastic income, but due to ruideira this in my apt I am inclined to tapping into an inn at the foot of the hill Anhangava here in the city of Quatro Barras to some 50km from Curitiba. There the conditions are just fantastic.

I've been there and made some interesting that I'm listening to post soon when the weather will let me.

The link to the photos of the antennas is ...

www.4shared.com/dir/23830727/f1551468/minhas_antenas_para_Dxismo.html

and password to access the "antenas".

73'sa all
Milton
Curitiba / PR

6923. Re: Fotos de minha mais nova antena loop circular para OM de 1m de diâmetro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-19 23:58:40 UTC
From: AlienRelics
Topic: 6921 Message: 6923

English, please.

Steve Greenfield
listowner loopantennas

--- In loopantennas@yahoogroups.com, "Silvio" <www-clorofila-up-to@...> wrote:
>
> Olá amigos,
>
> Apesar de eu morar no centro de Curitiba, num local com muitos ruídos, eu não perco as minhas esperanças de que a COPEL (Cia Energética do Paraná) possa sanar de uma vez por todas com esses ruídos terríveis que incomodam minhas escutas.
>
> Prova disso foi o último apagão ocorrido neste mes de novembro/2009 durante o qual eu corri para meu rádio Tecsun PL-310 e liguei em OM, conseguindo captar emissoras que antes não conseguia e que durante o curto período do apagão nenhum ruído se apresentou, banda de OM toda limpa, sem ruídos. Isso mostra que do meu apt, 3o andar é um lugar muito bom para escutas desde que esse problema fosse sanado.
>
> Eu já entrei em contato com a COPEL e ela me retornou dizendo que iria resolver o problema em 30 dias, o que, por pessimismo não acredito.
>
> Quero aproveitar e informar meu link para as fotos das minhas antenas para Dxismo, cujo melhor local que já consegui foi na praia de Itapoá, um local magnífico para tal hobby, mas que infelizmente não moro lá, só veraneio.
>
> Aproveito para apresentar minha nova antena loop circular caseira de 1 metro de diâmetro confeccionada com o famoso brinquedo BAMBOLÊ. Levei 1 ano para confeccionar esta antena porque não encontrava um material resistente e ao mesmo tempo maleável e ao mesmo tempo que pudesse ser amarrado/preso ao bambolê e que pudesse acompanhar a circunferência do mesmo. Depois de muita procura consegui encontrar numa loja de couros/revestimentos no centro de Curitiba um papelão com expessura de uns 3 a 4 mm que tinha estas características que eu tanto precisava para poder confeccionar esta valiosa e surpreendente antena loop para OM. Portanto fica aqui a minha dica de antena loop para todos.
>
> Ela tem um rendimento fantástico, mas devido a ruideira presente em meu apt eu estou inclinado a fazer escutas numa pousada no sopé do morro Anhangava aqui na cidade de Quatro Barras a uns 50km de Curitiba. Lá as condições são simplesmente fantásticas.
>
> Eu já estive lá e fiz algumas escutas interessantes que estou para postar em breve quando o tempo me permitir.
>
> O link para as fotos das antenas está em...
>

> www.4shared.com/dir/23830727/f1551468/minhas_antenas_para_Dxismo.html
>
> e a senha para acesso é "antenas" .
>
> 73´s a todos,
> Milton
> Curitiba/PR
>

6924. Re: Fotos de minha mais nova antena loop circular para OM de 1m de diâmetro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-20 18:04:39 UTC
From: gmcjetpilot
Topic: 6921 Message: 6924

Steve, I agree English Please, but please trim posts, no need to have the whole original post.

This is in portuguese! You can use an online translator. He is just showing off his home brew antennas..... (I went to link, a picture hosting site). Not sure or forgot where he is from, must be Brazil? Portuguese. He could use the translator and post in English, than translate replies back. I think it's interesting. Internet is like SW radio, no telling who you will talk to. Lots of non english radio going on in the World, probably more than the USA, which is most religious broadcast. Europe and the undeveloped parts of the World still use Radio as a prime or important source of info and entertainment. Internet made the world smaller. OK philosophical rant switch off...

Cheers

--- In loopantennas@yahoogroups.com, "AlienRelics" <alienrelics@...> wrote:
>
> English, please.
>
> Steve Greenfield
> listowner loopantennas

6925. Re: Fotos de minha mais nova antena loop circular para OM de 1m de diâmetro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-20 18:19:56 UTC
From: gmcjetpilot
Topic: 6921 Message: 6925

I forgot to mention, if you have Google tool bar, it will translate it for you, if you desire. I am using Windows 8. Other wise ignore.

He is from Curitiba, which is south Brazil, Just south or Rio Janeiro an Sao Paulo (where all the super models come from and thong bikinis).

Hey you never know he might have a super model Sister or Daughter and introduce you..... ha ha. Common on people this is the Home of the thong and Mardi Gras South America style....

Cheers Amigo Milton

PS if you want to look at his antennas you have to use the un-translated message, or the URL and password get messed up.

www.4shared.com/dir/23830727/f1551468/minhas_antenas_para_Dxismo.html

password: antenas

Amigo Milton

Eu gostei de suas fotos. Boa sorte. Eu sou ciumento você começa a desfrutar de belas damas com os biquínis fio dental.

George

6926. Re: [loopantennas] Re: Fotos de minha mais no va antena loop circular para OM de 1m de diâ metro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-20 18:42:03 UTC
From: aimo ruoho
Topic: 6921 Message: 6926

The URL that you wrote did not turn blue! It does not work.

Politely, Aimo

--- On Fri, 11/20/09, gmcjetpilot <gmcjetpilot@...> wrote:

From: gmcjetpilot <gmcjetpilot@...>
Subject: [loopantennas] Re: Fotos de minha mais nova antena loop circular para OM de 1m de diâmetro
To: loopantennas@yahoogroups.com
Date: Friday, November 20, 2009, 7:19 PM

I forgot to mention, if you have Google tool bar, it will translate it for you, if you desire. I am using Windows 8. Other wise ignore.

He is from Curitiba, which is south Brazil, Just south or Rio Janeiro an Sao Paulo (where all the super models come from and thong bikinis).

Hey you never know he might have a super model Sister or Daughter and introduce you..... ha ha. Common on people this is the Home of the thong and Mardi Gras South America style....

Cheers Amigo Milton

PS if you want to look at his antennas you have to use the un-translated message, or the URL and password get messed up.

www.4shared. com/dir/23830727 /f1551468/ minhas_antenas_ para_Dxismo. html

password: antenas

Amigo Milton

Eu gostei de suas fotos. Boa sorte. Eu sou ciumento você começa a desfrutar de belas damas com os biquínis fio dental.

George

[Non-text portions of this message have been removed]

6927. Shortwave Broadcast Cobwebb??

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-21 00:56:23 UTC
From: Lee
Topic: 6927 Message: 6927

Hi.

Has anyone got the layout for a shortwave broadcast Cobwebb, or the formulae for the measurement of the gamma match for each element??
I can work out the halfwaves but not the gamma settings!!

Thanks.

Lee...G6ZSG.

6928. Re: [loopantennas] Re: Fotos de minha mais nova an tena loop circular para OM de 1m de diâmetro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-21 07:19:38 UTC
From: jose alonso
Topic: 6921 Message: 6928

Aimo, remember to delete the spaces (or %20)that Yahoo insert into the URL
Jose

_____
De: aimo ruoho <aimounto@...>
Para: loopantennas@yahoogroups.com
Enviado: vie,20 noviembre, 2009 19:42
Asunto: Re: [loopantennas] Re: Fotos de minha mais nova antena loop circular para OM de 1m de diâmetro

The URL that you wrote did not turn blue! It does not work.

Politely, Aimo

.....
.....

[Non-text portions of this message have been removed]

6929. PHOTO - LINK - IT NO WORK - !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-21 08:25:41 UTC
From: Mike
Topic: 6921 Message: 6929

--- In loopantennas@yahoogroups.com, jose alonso <jaafes@...> wrote:
>
> Aimo, remember to delete the spaces (or %20)that Yahoo insert into the URL
> Jose
>
>
>
> _____
> De: aimo ruoho <aimounto@...>
> Para: loopantennas@yahoogroups.com
> Enviado: vie,20 noviembre, 2009 19:42
> Asunto: Re: [loopantennas] Re: Fotos de minha mais nova antena loop circular para OM de 1m de diâmetro
>
>
> The URL that you wrote did not turn blue! It does not work.
>
> Politely, Aimo
>
> .....
> .....
>
>
>
>
> [Non-text portions of this message have been removed]
>

6930. Re: [loopantennas] Re: Fotos de minha mais nova ante na loop circular para OM de 1m de diâmetro

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-21 18:43:06 UTC
From: Andy
Topic: 6921 Message: 6930

Also, you might need to paste an "http://" at the beginning (before the www). Most web browsers don't care, but maybe some do.

That's probably why you didn't see it highlighted in blue. If so, highlight it, paste it into your web browser's URL bar, add the http:// and remove any spaces.

6931. Re: Fotos de minha mais nova antena loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-22 03:17:31 UTC
From: Don Moore
Topic: 6931 Message: 6931

Some nice pictures. I liked seeing the use of a bamboo pole. I worked in Honduras as a teacher with the Peace Corps in 1982-84. One weekend I helped a civil engineer friend haul some pipe up the mountain for a water project he was building in a village. Somebody had left several long (8 meter or so) pieces of bamboo along the side of the road, so we picked one up on the way back. (I would have paid if someone had been around.) I wrapped wire around the top three meters and it made a very nice vertical antenna.

Don Moore --- donmooredxer@...

Experience is the name so many people give to their mistakes. - Oscar Wilde
Radio & Latin American website: http://www.pateplumaradio.com/

[Non-text portions of this message have been removed]

6932. Attivazione Faro Sant'Elia

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-26 09:00:38 UTC
From: Franco ISØVSU
Topic: 6932 Message: 6932

Capo Sant'Elia Lighthouse Activation

December 12-13, 2009

Long: 9° 8' 52'' E

Lat: 39° 11' 4'' N

Locator: JM49NE

ARLHS
SAR019

WAIL
SA-008

IOTA EU-024

IIA SD-001

Int. E1054

A group of operators from Associazione Radioamatoriale Sardinia
QRP Club will be active as IQ0QP/LH from Sant'Elia Lighthouse (Cagliari-Sardinia-Italy)
By Dec. 12, 18.00 to Dec. 13, 10.00 UTC).

.
A Low Power Beacon will be active
same time on 14.349.5 (CQ CQ de IQ0QP IQ0QP) .

.
Rigs that will be used: Yaesu FT817,
Elecraft KX1, (QRP), Rock Mite 40 (QRPp) ICOM IC706 and Kenwood TS140 (QRO).

.
Vertical quarter wave antennas 40
& 80 M .
Loop Antenna 20 M . EH Antenna @ 40 & 30 M .

.
We will operate on 20, 30, 40 and 80 m , SSB, CW and Dig. Modes
as follows

Bands/Frequencies/Modes

Band Freq. Mode

80 M 3560 +/- 10 kc
CW QRP

80 M   3686
+/- 10 kc   CW
QRP

80 M   3750 +/- 10 kc
   SSB QRP and QRO

40 M   7021 +/- 10 kc
   CW QRO

40 M   7039
+/- 2 kc   CW
QRPp

40 M   7090 +/- 10 kc
   SSB QRP and QRO

30 M   10.116 +/-
10kc   CW QRP

20 M   14.061 +/- 10
kc   CW QRP

20 M   14.070 +/- 10
kc   Digital

20 M   14.090 +/- 10
kc   Digital

20 M   14.290 +/-
10 kc SSB QRP and QRO

Many Thanks to Comando Militare
Marittimo Autonomo In Sardegna (Marisardegna) for allowing us to share this very special
day

72/73 de IQ0QP Team

Email to : iq0qp@hotmail.it

Pse
QSL direct to Associazione Radioamatoriale Sardinia QRP Club, Casella Postale
81, 09047 Selargius-CA-Italy sms:+393473406679

website : www.sardiniaqrp.com (On
Facebook too)

[Non-text portions of this message have been removed]

6933. Litz Wire - ferrite loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-30 01:18:19 UTC
From: sarmento2k
Topic: 6933 Message: 6933

Hi

This is my first post on this group, and I would like to show some pictures of two loop antennas I like most, mainly for MW dxing.

The first one, a square loop made with wood, which is either coupled passive, to portable receivers like Sony ICF-2001 or active, with a preamp buffering low impedance matching to 50 Ohms input of Icom R75.

http://www.sarmento.eng.br/LoopQuadroOM.htm

(it´s in Portuguese, but you may also see the calculations used on it)

The other one, is a loop stick ferrite antenna.

http://www.sarmento.eng.br/LoopFerriteRGP3.htm

Recently, I have found in my messy shack :-) some Litz wire, and I did a new coil based on it, and performance on MW is really a must comparing to the magnetic wire 23 AWG.

The Litz wire used is composed by 60 strands of 40 AWG, in theory, not the right one to MW, but it looks fine comparing to enameled wire 23 AWG.

Just to point that the day of the recently shaming blackout in Brazil, I listened to BSKSA Jedah, Saudi Arabia, 1512 kHz with excellent sound, using this antenna and a Sangean ATS909.

Post at : http://blog.sarmento.eng.br/2009/11/11/blackout-no-brasil-oportunidade-impar-para-a-radioescuta/

My question,is about Litz wire, does anyone have tested and compared the same kind of loop using different wires to measure its gain over "regular" one ?

Best Regards

Sarmento Campos
Rio de Janeiro - Brazil

6934. Re: [loopantennas] Litz Wire - ferrite loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-30 07:50:44 UTC
From: Marc Coevoet
Topic: 6933 Message: 6934

sarmento2k schreef:
>
>
> Hi
>
> This is my first post on this group, and I would like to show some
> pictures of two loop antennas I like most, mainly for MW dxing.
>
> The first one, a square loop made with wood, which is either coupled
> passive, to portable receivers like Sony ICF-2001 or active, with a
> preamp buffering low impedance matching to 50 Ohms input of Icom R75.
>
> http://www.sarmento.eng.br/LoopQuadroOM.htm
> <http://www.sarmento.eng.br/LoopQuadroOM.htm>
>

I see the K parameters for the loops.
http://www.sarmento.eng.br/Figuras/geometria-k.gif

I suppose that does mean a circular loop is more efficient than a square loop??

I've always made circular loops, and yeah, should make some pictures;.
Here:

http://users.fulladsl.be/~spb13810/research/loop/

1 turn is for shortwave, about 6-7 turns for mediumwabve with this 83cm loop.
I never made a LW loop, but added some nF capacity and fell into the LW band with it...

Marc

--
What's on Shortwave guide: choose an hour, go!
http://shortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

6935. Re: [loopantennas] Litz Wire - ferrite loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-30 13:47:14 UTC
From: Chris Trask
Topic: 6933 Message: 6935

>
>
> I see the K parameters for the loops.
> http://www.sarmento.eng.br/Figuras/geometria-k.gif
>

What do these K parameters refer to?

Chris

6936. Re: Litz Wire - ferrite loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-11-30 17:10:41 UTC
From: gmcjetpilot
Topic: 6933 Message: 6936

Great work. Very nice antennas. However what is even better, who are the two beautiful woman?

GRANDE TRABALHO. antenas muito agradáveis. entretanto que é mesmo melhor, que é a mulher dois bonita?

Sorry I can't help with the Litz wire question, but thanks for the post. I read about the power outage in Brazil.

I pesaroso can' ajuda de t com a pergunta do fio de Litz, mas agradecimentos para o borne. Eu li sobre o falho eléctrico em Brasil.

Bom por meu amigo

(PS - I don't know Portuguese, just the translator on the computer. I have been to the Azores many times, which is part of Portugal.)

--- In loopantennas@yahoogroups.com, "sarmento2k" <sarmento.campos@...> wrote:
>
> Hi
>
> This is my first post on this group, and I would like to show some pictures of two loop antennas I like most, mainly for MW dxing.
>
> The first one, a square loop made with wood, which is either coupled passive, to portable receivers like Sony ICF-2001 or active, with a preamp buffering low impedance matching to 50 Ohms input of Icom R75.
>
> http://www.sarmento.eng.br/LoopQuadroOM.htm
>
> (it´s in Portuguese, but you may also see the calculations used on it)
>
> The other one, is a loop stick ferrite antenna.
>
> http://www.sarmento.eng.br/LoopFerriteRGP3.htm
>
> Recently, I have found in my messy shack :-) some Litz wire, and I did a new coil based on it, and performance on MW is really a must comparing to the magnetic wire 23 AWG.
>
> The Litz wire used is composed by 60 strands of 40 AWG, in theory, not the right one to MW, but it looks fine comparing to enameled wire 23 AWG.
>
> Just to point that the day of the recently shaming blackout in Brazil, I listened to BSKSA Jedah, Saudi Arabia, 1512 kHz with excellent sound, using this antenna and a Sangean ATS909.
>

> Post at : http://blog.sarmento.eng.br/2009/11/11/blackout-no-brasil-oportunidade-impar-para-a-radioescuta/
>
> My question,is about Litz wire, does anyone have tested and compared the same kind of loop using different wires to measure its gain over "regular" one ?
>
> Best Regards
>
> Sarmento Campos
> Rio de Janeiro - Brazil
>

6937. Re: Litz Wire - ferrite loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-01 18:21:27 UTC
From: zehelmer
Topic: 6933 Message: 6937

Hi,

Jetpilot, the translator is just funny ;-)

very nice antennas --> antennas quite pleasant

who are the two beautiful woman? --> what is the woman two beautiful?

thanks for the post --> thanks to the connector

We have to use very simple (linear) phrasing ;-)

(what about reverting the translation back to original?)

Congratulations for the nice works presented by Sarmento

Have all a nice season there ;-)

Jose' Silva / CT1AXG / Portugal

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> Great work. Very nice antennas. However what is even better, who are the two beautiful woman?
>
> GRANDE TRABALHO. antenas muito agradáveis. entretanto que é mesmo melhor, que é a mulher dois bonita?
>
>
> Sorry I can't help with the Litz wire question, but thanks for the post. I read about the power outage in Brazil.
>
> I pesaroso can' ajuda de t com a pergunta do fio de Litz, mas agradecimentos para o borne. Eu li sobre o falho eléctrico em Brasil.
>
> Bom por meu amigo
>
> (PS - I don't know Portuguese, just the translator on the computer. I have been to the Azores many times, which is part of Portugal.)
>
>
>
>
> --- In loopantennas@yahoogroups.com, "sarmento2k" <sarmento.campos@> wrote:
> >
> > Hi
> >

> > This is my first post on this group, and I would like to show some pictures of two loop antennas I like most, mainly for MW dxing.
> >
> > The first one, a square loop made with wood, which is either coupled passive, to portable receivers like Sony ICF-2001 or active, with a preamp buffering low impedance matching to 50 Ohms input of Icom R75.
> >
> > http://www.sarmento.eng.br/LoopQuadroOM.htm
> >
> > (it´s in Portuguese, but you may also see the calculations used on it)
> >
> > The other one, is a loop stick ferrite antenna.
> >
> > http://www.sarmento.eng.br/LoopFerriteRGP3.htm
> >
> > Recently, I have found in my messy shack :-) some Litz wire, and I did a new coil based on it, and performance on MW is really a must comparing to the magnetic wire 23 AWG.
> >
> > The Litz wire used is composed by 60 strands of 40 AWG, in theory, not the right one to MW, but it looks fine comparing to enameled wire 23 AWG.
> >
> > Just to point that the day of the recently shaming blackout in Brazil, I listened to BSKSA Jedah, Saudi Arabia, 1512 kHz with excellent sound, using this antenna and a Sangean ATS909.
> >
> > Post at : http://blog.sarmento.eng.br/2009/11/11/blackout-no-brasil-oportunidade-impar-para-a-radioescuta/
> >
> > My question,is about Litz wire, does anyone have tested and compared the same kind of loop using different wires to measure its gain over "regular" one ?
> >
> > Best Regards
> >
> > Sarmento Campos
> > Rio de Janeiro - Brazil
> >
>

6938. Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-01 20:29:53 UTC
From: sarmento2k
Topic: 6938 Message: 6938

Hi,

Considering the windinds process for air coil loop, I have being using enameled copper wire.

I have seen lots of loop projects basically using standard stranded wire, instead of the magnetic wire used mainly in transformers.

My initial post is about litz wire in ferrite loops, but both subjects are interconnected.

I haven´t found yet a source proving in practical terms what´s the best material to achieve higher performance on MW (abstracting Litz wire for RF).

Does anyone has observed any practical differences in such approaches ?

Thks
Sarmento - Rio de Janeiro - Brazil

6939. Re: Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-01 21:17:17 UTC
From: rbrucecarter
Topic: 6938 Message: 6939

The lower the resistance in the wire, the better. Stranding vs. unstranded only makes a difference if the resistance is lower. Litz wire should be excellent. A loop made of monster speaker wire is probably better for the same size. Copper plumbing pipe - the 1/4 inch type, would probably be even better. Low resistance = high Q = good loop. But bigger loops are always better, they can eclipse the choice of wire.

Two types of discussion I always bow out of: shielded and coax loops, and un-tuned loops.

--- In loopantennas@yahoogroups.com, "sarmento2k" <sarmento.campos@...> wrote:
>
> Hi,
>
> Considering the windinds process for air coil loop, I have being using enameled copper wire.
>
> I have seen lots of loop projects basically using standard stranded wire, instead of the magnetic wire used mainly in transformers.
>
> My initial post is about litz wire in ferrite loops, but both subjects are interconnected.
>
> I haven´t found yet a source proving in practical terms what´s the best material to achieve higher performance on MW (abstracting Litz wire for RF).
>
> Does anyone has observed any practical differences in such approaches ?
>
> Thks
> Sarmento - Rio de Janeiro - Brazil
>

6940. Re: Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 13:09:28 UTC
From: jrtow3rd@bellsouth.net
Topic: 6938 Message: 6940

--- In loopantennas@yahoogroups.com, "rbrucecarter" <rbrucecarter@...> wrote:
>
> The lower the resistance in the wire, the better. Stranding vs. unstranded only makes a difference if the resistance is lower. Litz wire should be excellent. A loop made of monster speaker wire is probably better for the same size. Copper plumbing pipe - the 1/4 inch type, would probably be even better. Low resistance = high Q = good loop. But bigger loops are always better, they can eclipse the choice of wire.

Years ago, I found a huge spool of #16 stranded at a hamfest. Stranded trumps solid any day of the week - construction-wise. My MW 1m square loop of ten turns @ .5" spacing and tuned with a dual 365/409 pF variable cap and a single coupling turn 6" in from the tuned turns - and fed via zipcord to a 1:1 balun then the RG-58 to my receivers. I used it for my TTFD, too. Still a bunch left... great for construction - Litz wouls be better.

I am toying with the idea of recycling my 'Monster' speaker cables - twin large Litz-looking wires - as single/dual turn Tropical Band tuned loops - maybe 1 or 2 turns on a .7 - 1 meter form - tuned with a 3 gang variable cap. The problem is making a coax impedance tap on the turn(s) - how can I do that with the 'Monster' cable... isn't it a Litz-like wire?

John

PS The multi-turns of #16 stranded on the MW loop - and a newer smaller version - have wooden 'spreaders' weaved through them to take up the inevitable 'droop' stranded wire gets... a common malady with advancing age! The TTFD just worked better at lower frequencies...

6941. Re: Litz Wire - ferrite loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 16:54:07 UTC
From: gmcjetpilot
Topic: 6933 Message: 6941

--- In loopantennas@yahoogroups.com, "zehelmer" <zehelmer@...> wrote:
> Hi,
>
> Jetpilot, the translator is just funny ;-)

Going from Portuguese to English is even funnier!
We have simple phrases to say it in English. ;-)

>> who are the two beautiful woman?
> what is the woman two beautiful?

Woman, Ladies, Girls, Females.... Chicas
In your post, you gave a link to pictures.
In one of those pictures were two woman.
The two woman were standing, arms out pointing.
They were pointing to a poster display on the wall, for an antenna.
You don't know what I am talking about?

Cheers

6942. Re: [loopantennas] Re: Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 19:32:22 UTC
From: Jim Dunstan
Topic: 6938 Message: 6942

At 09:17 PM 12/1/2009 +0000, you wrote:
>
>
>The lower the resistance in the wire, the better. Stranding vs. unstranded
>only makes a difference if the resistance is lower. Litz wire should be
>excellent. A loop made of monster speaker wire is probably better for the
>same size. Copper plumbing pipe - the 1/4 inch type, would probably be
>even better. Low resistance = high Q = good loop. But bigger loops are
>always better, they can eclipse the choice of wire.

I suppose Litz wire could be called stranded wire ... but a very special kind. The 'skin effect' controls the RF conductivity of materials. Simply stranding un insulated strands of copper wire ... as is usual in normal stranded wire does not improve conductivity to the same degree as individually insulated strands ... as is the case with Litz type wire. it is possible to make your own Litz-like wire by stranding light gauge enameled wire. The enamel insulation is quite durable.

The main purpose of stranding un insulated copper is to provide strength and flexibility .... whereas the purpose of stranding insulated copper wire (as in Litz) is to improve the RF conductivity for a given wire guage. monster speaker wire may provide great flexibility and conductivity for DC & AF purposes ... but is nothing special when dealing with RF.

73

Jim, VE3CI

6943. 20 meter transmitting loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 20:26:18 UTC
From: vaclav sal
Topic: 6943 Message: 6943

I have recently found and lost a construction article on 20 meter TX small loop made from hard line coax. The author did not use tuning capacitor. The loop was tuned to frequency using old fashioned gimmick capacitor made from twisting wires together. Does anybody in this group knows what article I am talking about? Google is no help!
Thanks for reading 73 Vaclav AA7EJ

[Non-text portions of this message have been removed]

6944. Re: [loopantennas] Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 20:47:52 UTC
From: Jim Dunstan
Topic: 6938 Message: 6944

At 08:29 PM 12/1/2009 +0000, you wrote:
>
>
>Hi,
>
>Considering the windinds process for air coil loop, I have being using
>enameled copper wire.
>
>I have seen lots of loop projects basically using standard stranded wire,
>instead of the magnetic wire used mainly in transformers.
>
>My initial post is about litz wire in ferrite loops, but both subjects are
>interconnected.
>
>I haven´t found yet a source proving in practical terms what´s the best
>material to achieve higher performance on MW (abstracting Litz wire for RF).
>
>Does anyone has observed any practical differences in such approaches ?
>
>Thks
>Sarmento - Rio de Janeiro - Brazil

Hi Sarmento,

Generally speaking when one wants to construct a tuned loop - or any other tuned circuit - with highest possible Q one wants to use the best design and material that will present the least amount of resistance to RF currents in the inductor. The two factors that inhibit RF conductivity are 'skin effect' and 'proximity effect'.

Skin effect (RF conducts on the surface area) is overcome by using wire with the largest diameter possible .... or using multiple strands ... each insulated from the other. Ordinary stranded wire is not an improvement ... in fact it may be a poorer RF conductor than the equivalent diameter solid wire.

The other factor 'proximity effect' is the result of induced eddy current as one conductor is brought within the electrical field of another conductor that is carrying current. The resultant eddy currents inhibit RF current flow. Ideally it is a good idea to keep each turn out of the electrical field of the other.

1. strategy would be to use large conductors ... such as copper tubing in order to limit 'skin effect'... and to allow wide spacing between turns to limit the 'proximity' effect. This strategy is possible when space and

maneuverability is not an issue.

2. strategy is to use High Quality Litz wire .... which uses multiple insulated strands to limit 'skin effect' arranged in a special 'weave' (not all Litz wire are equal) to limit 'proximity effect'. This is best used effectively in projects with space limitations. By the way, special 'weaving' techniques can be used when actually winding your loop or coil. If you are going to construct a large loop with wide spacing then Litz wire will bring minimal returns. However if your inductor is small with tight winding on an iron core then Litz wire can be worth it's weight in gold .... good thing Litz wire is light hi hi.

The first strategy is limited to scenarios where there is no limit on size and weight. The second strategy is used where there are great limits on size and weight.

If you want to see dramatic examples of these two techniques do a search on crystal radio construction. Crystal Radio aficionados strive for tuned circuits with maximum Q .... essential since the rule is that all power comes from the received signal only .... no electronic amplification allowed !! I have seen crystal radio coils the size of 45 gallon drums !!

When trying to eke out the nth degree of efficiency the quality of the tuning capacitor can be a considerable factor ... but that is another story.

I have built any number of crystal radio receivers and found the same techniques for winding receiver coils are directly transferable to winding tuned loop antennas.

Jim, VE3CI

6945. Re: 20 meter transmitting loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 21:52:17 UTC
From: capntripps2000
Topic: 6943 Message: 6945

The only difference making a 20M magnetic transmitting loop with a gimmick capacitor is no different than using a regular capacitor, I have done both. Only use the gimmick capacitor if you intend to use low power (QRP).

Here is a link you will find interesting that uses both a gimmick capacitor and hardline for a compact loop:

http://www.antennex.com/hws/ws0902/hardline.html

I have built the above using 7/8" aluminum hardline and it does work with powers up to about 20watts.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, vaclav sal <vaclav_sal@...> wrote:
>
> I have recently found and lost a construction article on 20 meter TX small loop made from hard line coax. The author did not use tuning capacitor. The loop was tuned to frequency using old fashioned gimmick capacitor made from twisting wires together. Does anybody in this group knows what article I am talking about? Google is no help!
> Thanks for reading 73 Vaclav AA7EJ
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

6946. Re: [loopantennas] Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 22:16:45 UTC
From: John Popelish
Topic: 6938 Message: 6946

Jim Dunstan wrote:
(snip)
> The other factor 'proximity effect' is the result of induced eddy current
> as one conductor is brought within the electrical field of another
> conductor that is carrying current. The resultant eddy currents inhibit RF
> current flow. Ideally it is a good idea to keep each turn out of the
> electrical field of the other.
(snip)

All good stuff, except that I think proximity effect
involves the magnetic field of nearby conductors, not the
electric field.

Here is the most useful tutorial I have found on winding and
wiring eddy current losses, including proximity effect losses.
http://focus.ti.com/lit/ml/slup197/slup197.pdf

I'll put a link to this document on the link section for
this group.

--
Regards,

John Popelish

6947. Re: [loopantennas] Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 22:58:52 UTC
From: Jim Dunstan
Topic: 6938 Message: 6947

At 05:16 PM 12/2/2009 -0500, you wrote:
>
>
>Jim Dunstan wrote:
>(snip)
> > The other factor 'proximity effect' is the result of induced eddy current
> > as one conductor is brought within the electrical field of another
> > conductor that is carrying current. The resultant eddy currents inhibit RF
> > current flow. Ideally it is a good idea to keep each turn out of the
> > electrical field of the other.
>(snip)
>
>All good stuff, except that I think proximity effect
>involves the magnetic field of nearby conductors, not the
>electric field.
>
>Here is the most useful tutorial I have found on winding and
>wiring eddy current losses, including proximity effect losses.
><http://focus.ti.com/lit/ml/slup197/slup197.pdf>http://focus.ti.com/lit/ml/slup197/slup19
7.pdf
>
>I'll put a link to this document on the link section for
>this group.
>
>--
>Regards,
>
>John Popelish

Hi,

You are correct ... a slip of the grey matter ... the magnetic fields are
the fields of concern in this scenario.

Jim, VE3CI

[Non-text portions of this message have been removed]

6948. Re: [loopantennas] Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-02 23:59:06 UTC
From: Jim Dunstan
Topic: 6938 Message: 6948

At 04:10 PM 12/2/2009 -0500, you wrote:
>Hi Jim, What would be the ideal antenna tuned for560 Am. I live 70 Mi.
>from station and get a lot of noise, At night its impossible to hear. I
>have built 4 ft square shielded and unshielded, also wrapped a 1 foot
>ferrite in 600 strand litz wire and shielded it with slitted tube gaining
>limited success. I have purchased a Sangean hdt-1 hd radio but can't get
>enough signal to it. Thank You, Alexis.

Hi Alexis,

Are the loops you describe (the 4' and the ferrite rod version) tuned ? I am not familiar with the HDT-1 other than it is a HI-FI component generally installed in close proximity to your sound system. I believe it has a rear connection for an external AM antenna. As consequence you will have to provide some system of coupling from the tuned loop to the antenna input connection on the radio.

You have the problem that the signal from the 560khz station is not strong enough in relation the local noise. If I am correct the HDT-1 is not very portable. You mention shielding the loop. Shielding the loop (in my opinion) will not lower the noise .... let alone raise the 560 signal strength.

Increasing the listen ability of the setup will require the loop be tuneable, and be coupled to the radio by a lengthy feed line. The higher the loop Q ... the sharper it tunes and the better the quality the more it will increase the signal in relation to received background noise. The reason for the lengthy feed line is that it will allow you to locate the loop within the room to a spot with the least RF noise and best reception. If you were using a portable radio ... your best strategy would be to take both the radio and loop to a quiet location ... e.g. like out on the patio deck hi hi.

you need a quality tuned loop (shielding is irrelevant) .... it has to be designed with a coupling loop and feed line. You tune and locate the loop for best reception. You will be surprised how much difference there is in RF noise from one location a few feet from another. Of course orienting the loop for minimal noise will be part of the process.

Just a side light ... I have a component receiver which came with a small (8" 4 turn untuned loop) as the AM antenna. I made a small tuned loop (approx 1 ft square) tuned with a 365 pfd capacitor. I then used the small 4 turn loop as a coupling loop (just mounted it on the same frame as the tuned loop). The feed line from the coupling loop was simply a twisted pair of wire.... which i lengthened to about 10 ft. I would then locate the tuned loop for best reception. The untuned loop provided by the radio

manufacturer was only effective for strong local AM stations. the arrangement dramatically improved reception .... but still not as good as a portable out on the deck hihi.

Jim

6949. Re: [loopantennas] Re: Stranded copper wire versus magnetic wire (enameled)

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-03 08:00:59 UTC
From: brian russell
Topic: 6938 Message: 6949

Hi,
An interesting posting on loop antennas.
I came across some speaker wire advertised in the UK at £35 / metre ($63)
when I saw a sample it was like the wire you see on welding sets, 15mm dia jacket
and hundreds of fine strands, would this do a one turn loop ?????
72, Brian, G0NSL-QRP.

----- Original Message -----
From: jrtow3rd@...
To: loopantennas@yahoogroups.com
Sent: Wednesday, December 02, 2009 1:09 PM
Subject: [loopantennas] Re: Stranded copper wire versus magnetic wire (enameled)

[Non-text portions of this message have been removed]

6950. For Sale- Tecsun AN-200 Loop + Grundig YB300PE Radio

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-06 15:29:53 UTC
From: VectorC
Topic: 6950 Message: 6950

Grundig YB-300PE AM/FM/SW Receiver + Tecsun AN-200 MW Loop Antenna Package.

Both the radio and loop antenna are LNIB and come with all original accessories, packaging and manuals. Items are in mint condition, both operationally and physically, and were well-cared for and in a smoke-free environment. Shipped double-boxed and well-packed.

$60 + actual shipping (your choice). Paypal preferred.

Honor and integrity mean everything to me- check out my feedback on ebay (ID= vectorczar).

Email me: KI4NEJ@...

Thanks,

Lee

6951. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-09 22:19:20 UTC
From: aimo ruoho
Topic: 6875 Message: 6951

How do you feed a loop balanced?

With what kind of a coaxial can it be possible, with two separate coaxial cables or with one with 2 inner wires? I happen to possess the latter type.

If I would use normal speaker-double-wire, would it not give me all kinds of electric disturbance?

With the special coaxial with 2 inner wires, would they not disturb each other?

Best Regards from Aimo

--- On Tue, 11/10/09, Chris Trask <christrask@...t> wrote:

From: Chris Trask <christrask@...>
Subject: Re: [loopantennas] Loops null direction
To: loopantennas@yahoogroups.com
Date: Tuesday, November 10, 2009, 11:36 PM

When the loop is fed balanced, the null is ALWAYS perpendicular to the

plane of the antenna.

If you feed it unbalanced, the null moves, or rather diminishes. As you

approach the first parallel resonance, the resonance the null will disappear

entirely. Above the first parallel resonance, the null will return to being

perpendicular to the plane of the antenna, but the phase will be reversed.

As you approach the first series resonance (between the first and second

parallel resonances), the pattern will rotate.

I learned this while doing extensive ELNEC/EZNEC simluations of

single-turn loops for my 2-part series on active loop antennas in the March

2007 issue of QEX. I did it to emphasize the point that loop antennas

should ALWAYS be fed balanced.

Chris

[Non-text portions of this message have been removed]

6952. Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-10 16:58:19 UTC
From: kendalg
Topic: 6875 Message: 6952

Chris,

I think Aimo may be asking about feeding with Twinaxial cable. I'm kind of curious about that myself. I have tons of twinax laying around from an as/400 de-installation.

Regards,
Kenn
KA5KXW

--- In loopantennas@yahoogroups.com, aimo ruoho <aimounto@...> wrote:
>
> How do you feed a loop balanced?
>
> With what kind of a coaxial can it be possible, with two separate coaxial cables or with one with 2 inner wires? I happen to possess the latter type.
>
> If I would use normal speaker-double-wire, would it not give me all kinds of electric disturbance?
>
> With the special coaxial with 2 inner wires, would they not disturb each other?
>
> Best Regards from Aimo
>
> --- On Tue, 11/10/09, Chris Trask <christrask@...> wrote:
>
> From: Chris Trask <christrask@...>
> Subject: Re: [loopantennas] Loops null direction
> To: loopantennas@yahoogroups.com
> Date: Tuesday, November 10, 2009, 11:36 PM
>
> should ALWAYS be fed balanced.
>
>
>
>
> Chris
>

6953. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-10 19:32:25 UTC
From: Chris Trask
Topic: 6875 Message: 6953

```
>
> I think Aimo may be asking about feeding with Twinaxial cable. I'm kind
> of curious about that myself. I have tons of twinax laying around from
> an as/400 de-installation.
>
```

You won't ba able to use Twinax by itself as you'll have a tremendous impedance mismatch. Somewhere, you will need a matching section (single frequency) and, if using coax, a BalUn transformer.

Chris


```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```


Graphics by Loek Frederiks

6954. Re: [loopantennas] Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-10 22:41:01 UTC
From: Jim Dunstan
Topic: 6875 Message: 6954

At 10:19 PM 12/9/2009 +0000, you wrote:
>
>
>How do you feed a loop balanced?
>
>With what kind of a coaxial can it be possible, with two separate coaxial
>cables or with one with 2 inner wires? I happen to possess the latter type.
>
>If I would use normal speaker-double-wire, would it not give me all kinds
>of electric disturbance?
>
>With the special coaxial with 2 inner wires, would they not disturb each
>other?
>
>Best Regards from Aimo

Hi Aimo,

by definition, a balanced antenna is symmetrical ... physically and electrically and does not require ground/earth as a counter-poise. The feed point is in the middle as far as the dipole/doublet is concerned and anywhere in the circumference of a loop. the radiation pattern of balanced antennas depends on the maintenance of electrical symmetry in addition to its mechanical symmetry. The electrical symmetry can be affected by objects (usually metal) in the vicinity of the antenna's magnetic field and/or the structure of the feed system.

Your question relates to the feed system of a balanced antenna and the maintenance of antenna balance. There are 2 connections at the feed point which should always be equal but opposite at any point in time - electrically speaking. A 2 wire feed line is ideal in this respect ... such as speaker cable, TV twinlead, twisted pair, etc.

You mention 'disturbance' .... I am not quite sure what you are referring to. If you mean that the feed line is picking up signals in addition to the antenna ... then you should not be concerned. A 2 wire symmetrical feed line such as 75 or 300 ohm twin lead if connected to a balanced antenna and a balanced input at the receiver will not add any signals picked up by the feed line to the signals picked up by the antenna. The reason is that the conductors pickup antenna currents as if they were 1 wire and the currents cancel at the antenna and at the receiver input ... leaving only the antenna currents fed to the line by the antenna.

As soon as you use coaxial cable you introduce a balance problem. The problem being that the advertised cable ratings are those between the center conductor and the inside of the shield. However, if precautions are

not taken to isolate the inside of the cable shield from the outside then antenna currents will flow on the outside of the feed line and mix with the currents from the antenna. The irony of this is that the coax feed line will pickup more 'disturbance' than a simple unshielded pair !!

The second major concern when designing an antenna feed line system is matching and feed line efficiency. That is getting as much of the antenna signal to the radio via the feed line/and or amplifier .... which is quite a different matter to the concern for balance.

Jim

6955. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-12 22:02:56 UTC
From: aimo ruoho
Topic: 6875 Message: 6955

Thanks, Chris!
I do not know the impedance of my Twinaxial cable.
What kind of a matching section would you suggest?

I have used Twinaxial as a loop on my inner wall, and it gives a rather good signal when an A.T.U is used between it and my Ten-Tec RX340.
I also use it between my 75 Ohm Loop and A:T.U. with much equal results.
Both systems give me very good signals with the same stations as my other antennas on the roof, an 8-wire, 3-wire, Broom Stick, DX 1 Prof. MK 2 and Wellbrook 100M!!!!!! All of the mentioned are downloaded with coaxial cables, either 50 Ohm or 75 Ohm.

What might be wrong here in Spain to me not being able to listen to real DX?
I mean the low powered broadcasting stations of the world, which are very well heard in Finland. I will not move to the cold northern countries any more! But I really would like to continue this best hobby of the world....

Best Regards from a frustrated Dxista.
Aimo

--- On Thu, 12/10/09, Chris Trask <christrask@earthlink.net> wrote:

From: Chris Trask <christrask@...>

    .

[Non-text portions of this message have been removed]

6956. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-14 05:28:18 UTC
From: kevin asato
Topic: 6875 Message: 6956

Interesting - I found 3 different impedance references for twinas - 78, 95, 100 Ohms.

http://www.amphenolrf.com/products/twinax.asp?N=0&sid=4B258000A4B617F&

http://www.connectworld.net/tms/0-CAB-TWINAX-PL.html

Probably will have to research impedance by working off of cable part number before deciding on proper impedance transformation. Then again, if you are connecting the conductors in parallel (tying together at each end) or in series creating a continuous coil of 2 turns, you should not have to worry about characteristic impedance for connecting to a feedline to your radio. I would think that the capacitance between conductors in series would go more towards frequency resonance calculations.

73,
kevin
kc6pob

--- On Sat, 12/12/09, aimo ruoho <aimounto@...> wrote:

From: aimo ruoho <aimounto@yahoo.com>
Subject: Re: [loopantennas] Re: Loops null direction
To: loopantennas@yahoogroups.com
Date: Saturday, December 12, 2009, 2:02 PM

Thanks, Chris!

I do not know the impedance of my Twinaxial cable.

What kind of a matching section would you suggest?

I have used Twinaxial as a loop on my inner wall, and it gives a rather good signal when an A.T.U is used between it and my Ten-Tec RX340.

I also use it between my 75 Ohm Loop and A:T.U. with much equal results.

Both systems give me very good signals with the same stations as my other antennas on the roof, an 8-wire, 3-wire, Broom Stick, DX 1 Prof. MK 2 and Wellbrook 100M!!!!!! All of the mentioned are downloaded with coaxial cables, either 50 Ohm or 75 Ohm.

What might be wrong here in Spain to me not being able to listen to real DX?

I mean the low powered broadcasting stations of the world, which are very well heard in Finland. I will not move to the cold northern countries any more! But I really would like to continue this best hobby of the world....

Best Regards from a frustrated Dxista.

Aimo

--- On Thu, 12/10/09, Chris Trask <christrask@earthlin k.net> wrote:

From: Chris Trask <christrask@earthlin k.net>

    .

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6957. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-14 23:00:50 UTC
From: aimo ruoho
Topic: 6875 Message: 6957

Thank you ever so much for the information, Kevin.
I wonder, when I will be able to use the Wikipedia Free Dictionary more(?).
I always forget it and make public questions in the groups instead...
Best Regards!
Aimo

--- On Mon, 12/14/09, kevin asato <kc6pob@...> wrote:

From: kevin asato <kc6pob@...>
Subject: Re: [loopantennas] Re: Loops null direction
To: loopantennas@yahoogroups.com
Date: Monday, December 14, 2009, 6:28 AM

Interesting - I found 3 different impedance references for twinas - 78, 95, 100 Ohms.

http://www.amphenol rf.com/products/ twinax.asp? N=0&sid=4B258000 A4B617F&

http://www.connectw orld.net/ tms/0-CAB- TWINAX-PL. html

Probably will have to research impedance by working off of cable part number before deciding on proper impedance transformation. Then again, if you are connecting the conductors in parallel (tying together at each end) or in series creating a continuous coil of 2 turns, you should not have to worry about characteristic impedance for connecting to a feedline to your radio. I would think that the capacitance between conductors in series would go more towards frequency resonance calculations.

73,

kevin

kc6pob

--- On Sat, 12/12/09, aimo ruoho <aimounto@yahoo. com> wrote:

From: aimo ruoho <aimounto@yahoo. com>

Subject: Re: [loopantennas] Re: Loops null direction

To: loopantennas@ yahoogroups. com

Date: Saturday, December 12, 2009, 2:02 PM

Thanks, Chris!

I do not know the impedance of my Twinaxial cable.

What kind of a matching section would you suggest?

I have used Twinaxial as a loop on my inner wall, and it gives a rather good signal when an A.T.U is used between it and my Ten-Tec RX340.

I also use it between my 75 Ohm Loop and A:T.U. with much equal results.

Both systems give me very good signals with the same stations as my other antennas on the roof, an 8-wire, 3-wire, Broom Stick, DX 1 Prof. MK 2 and Wellbrook 100M!!!!!! All of the mentioned are downloaded with coaxial cables, either 50 Ohm or 75 Ohm.

What might be wrong here in Spain to me not being able to listen to real DX?

I mean the low powered broadcasting stations of the world, which are very well heard in Finland. I will not move to the cold northern countries any more! But I really would like to continue this best hobby of the world....

Best Regards from a frustrated Dxista.

Aimo

--- On Thu, 12/10/09, Chris Trask <christrask@ earthlin k.net> wrote:

From: Chris Trask <christrask@ earthlin k.net>

    .

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6958. Storwise Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-15 11:31:38 UTC
From: march181959
Topic: 6938 Message: 6958

Has anyone had any experience with the large ferrite rods and loops offered at stormwise.com? They look like they have some nice toys to play around with?

Frank in Boston

6959. Re: Storwise Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-15 12:15:44 UTC
From: jrtow3rd@bellsouth.net
Topic: 6938 Message: 6959

They do have some neat stuff.

They have single gang air variable caps for $18 - duals for $40. Times have changed - I haven't seen them anywhere in a while. I remember driving down to to Chicago to EDI discount electronic stores in the summer/autumn of '69. I was in a USN ET A3/A4 school - shipboard indoctrination - actually schooled on the R390A. Anyhow, they had boxes of those single gang air variables - rated 365-384-409 pF max - $.19! Looked identical, of course. I think the dual gangs were $1. I knew I should have bought more!

Seriously high prices... but where can you find ferrite rods now? Does Amidon still sell them?

John

6960. RE: [loopantennas] Re: Storwise Loops; VARIABLE CAPACITORS AVAILABLE !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-15 13:25:23 UTC
From: Notareal
Topic: 6938 Message: 6960

Hi !

Some time ago I bought variable capacitors from Bebek ltd, Finland.

10 euros/piece.

http://www.bebek.fi/kauppa/index2.php

You can make web orders also, reliable shop.

Unfortunately web pages are in Finnish, but finnish word "s??t?kondensaattorit" = variable condensators.

BR

> To: loopantennas@yahoogroups.com
> From: JRTOW3RD@...
> Date: Tue, 15 Dec 2009 12:15:44 +0000
> Subject: [loopantennas] Re: Storwise Loops
>
> They do have some neat stuff.
>
> They have single gang air variable caps for $18 - duals for $40. Times have changed - I haven't seen them anywhere in a while. I remember driving down to to Chicago to EDI discount electronic stores in the summer/autumn of '69. I was in a USN ET A3/A4 school - shipboard indoctrination - actually schooled on the R390A. Anyhow, they had boxes of those single gang air variables - rated 365-384-409 pF max - $.19! Looked identical, of course. I think the dual gangs were $1. I knew I should have bought more!
>
> Seriously high prices... but where can you find ferrite rods now? Does Amidon still sell them?
>
> John
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>

> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

_____
Windows Live: Make it easier for your friends to see what you?re up to on Facebook.
http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-basics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_2:092009

[Non-text portions of this message have been removed]

6961. RE: [loopantennas] Re: Storwise Loops; VARIABLE CAPACITORS AVAILABLE !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-15 14:07:45 UTC
From: M HOLDEN
Topic: 6938 Message: 6961

Rapid Xmas delivery if ordered through Lapland agent.......

--- On Tue, 15/12/09, Notareal <not_a_real@...> wrote:

From: Notareal <not_a_real@...>
Subject: RE: [loopantennas] Re: Storwise Loops; VARIABLE CAPACITORS AVAILABLE !
To: loopantennas@yahoogroups.com
Date: Tuesday, 15 December, 2009, 13:25

Hi !

Some time ago I bought variable capacitors from Bebek ltd, Finland.

10 euros/piece.

http://www.bebek.fi/kauppa/index2.php

You can make web orders also, reliable shop.

Unfortunately web pages are in Finnish, but finnish word "säätökondensaattorit" = variable condensators.

BR

> To: loopantennas@yahoogroups.com
> From: JRTOW3RD@...
> Date: Tue, 15 Dec 2009 12:15:44 +0000
> Subject: [loopantennas] Re: Storwise Loops
>
> They do have some neat stuff.
>
> They have single gang air variable caps for $18 - duals for $40. Times have changed - I haven't seen them anywhere in a while. I remember driving down to to Chicago to EDI discount electronic stores in the summer/autumn of '69. I was in a USN ET A3/A4 school - shipboard indoctrination - actually schooled on the R390A. Anyhow, they had boxes of those single gang air variables - rated 365-384-409 pF max - $.19! Looked identical, of course. I think the dual gangs were $1. I knew I should have bought more!
>
> Seriously high prices... but where can you find ferrite rods now? Does Amidon still sell them?
>
> John
>
>
>
> ------------------------------------

>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

_____
Windows Live: Make it easier for your friends to see what you’re up to on Facebook.
http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-basics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_2:092009

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

6962. Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-16 00:08:15 UTC
From: Darren Hennig
Topic: 6875 Message: 6962

I've ordered a couple of 13.5" 125u rods, and made a really nice tuned ferrite rod antenna for MW dxing. works very well. I used Litz wire to do the windings. Very sharp tuning, and when inductively coupled to the ferrite on several radios, truly enhances the signals. I'm thinking of doing up a nice LW antenna for NDB Dxing with my R75, using a coupling section to input into the high Z in the radio...

THese rods are fantastic.

Darren
VE6IZ

[Non-text portions of this message have been removed]

6963. Re: [loopantennas] Re: Loops null direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-16 00:53:16 UTC
From: Chris Trask
Topic: 6875 Message: 6963

>
> I've ordered a couple of 13.5" 125u rods, and made a really nice tuned
> ferrite rod antenna for MW dxing. works very well. I used Litz wire to
> do the windings. Very sharp tuning, and when inductively coupled to the
> ferrite on several radios, truly enhances the signals. I'm thinking of
> doing up a nice LW antenna for NDB Dxing with my R75, using a coupling
> section to input into the high Z in the radio...
>
> THese rods are fantastic.
>

I used a similar rod for my active ferrite rod antenna, using a somewhat novel approach to the remote tuning which provides a much higher signal voltage to the amplifier:

http://www.home.earthlink.net/~christrask/Paper006.html

Chris

6964. Finnish typed word! VARIABLE CAPACITORS AVAILABLE !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-17 10:32:01 UTC
From: Mike
Topic: 6938 Message: 6964

My Dear Friend, my keyboard will not let me put in those letter as is in your lang, so maybe you could do a better link to there caps page. Thank You. Mike UK. --- In loopantennas@yahoogroups.com, Notareal <not_a_real@...> wrote:
>
>
> Hi !
>
> Some time ago I bought variable capacitors from Bebek ltd, Finland.
>
> 10 euros/piece.
>
> http://www.bebek.fi/kauppa/index2.php
>
> You can make web orders also, reliable shop.
>
> Unfortunately web pages are in Finnish, but finnish word "säätökondensaattorit" = variable condensators.
>
> BR
>
>
>
>
>
> > To: loopantennas@yahoogroups.com
> > From: JRTOW3RD@...
> > Date: Tue, 15 Dec 2009 12:15:44 +0000
> > Subject: [loopantennas] Re: Storwise Loops
> >
> > They do have some neat stuff.
> >
> > They have single gang air variable caps for $18 - duals for $40. Times have changed - I haven't seen them anywhere in a while. I remember driving down to to Chicago to EDI discount electronic stores in the summer/autumn of '69. I was in a USN ET A3/A4 school - shipboard indoctrination - actually schooled on the R390A. Anyhow, they had boxes of those single gang air variables - rated 365-384-409 pF max - $.19! Looked identical, of course. I think the dual gangs were $1. I knew I should have bought more!
> >
> > Seriously high prices... but where can you find ferrite rods now? Does Amidon still sell them?
> >
> > John
> >
> >
> >

> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
>
> --
> Windows Live: Make it easier for your friends to see what you're up to on Facebook.
> http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-basics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_2:092009
>
> [Non-text portions of this message have been removed]
>

6965. Re: Finnish typed word! VARIABLE CAPACITORS AVAILABLE !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-17 15:39:02 UTC
From: Walter
Topic: 6938 Message: 6965

> My Dear Friend,

copy and paste?

6966. Re: Finnish typed word! VARIABLE CAPACITORS AVAILABLE !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-17 18:09:32 UTC
From: aimounto
Topic: 6938 Message: 6966

Hello!

What kind of variable capacitors do you want?
Let me know exactly, and I will try to contact Bebek for you.
Please, give a perfect list, so I will be able to ask Bebek,
if they still have those variable capacitors.

Another rather inexpencive source is in Lithuania:

Gintaras Sakenas, P.O.Box 1367, Vilnius, LT-2056, Lithuania

I have purchased many different parts from this Radio Amateur,
who is a very reliable and fast source, who packs the parts really well. His prices are very low...

Aimo

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
>
>
> My Dear Friend, my keyboard will not let me put in those letter as is in your lang, so maybe you could do a better link to there caps page. Thank You. Mike UK. --- In loopantennas@yahoogroups.com, Notareal <not_a_real@> wrote:
> >
> >
> > Hi !
> >
> > Some time ago I bought variable capacitors from Bebek ltd, Finland.
> >
> > 10 euros/piece.
> >
> > http://www.bebek.fi/kauppa/index2.php
> >
> > You can make web orders also, reliable shop.
> >
> > Unfortunately web pages are in Finnish, but finnish word "säätökondensaattorit" = variable condensators.
> >
> > BR
> >
> >
> >
> >
> >
> > > To: loopantennas@yahoogroups.com

> > > From: JRTOW3RD@
> > > Date: Tue, 15 Dec 2009 12:15:44 +0000
> > > Subject: [loopantennas] Re: Storwise Loops
> > >
> > > They do have some neat stuff.
> > >
> > > They have single gang air variable caps for $18 - duals for $40. Times have changed - I haven't seen them anywhere in a while. I remember driving down to to Chicago to EDI discount electronic stores in the summer/autumn of '69. I was in a USN ET A3/A4 school - shipboard indoctrination - actually schooled on the R390A. Anyhow, they had boxes of those single gang air variables - rated 365-384-409 pF max - $.19! Looked identical, of course. I think the dual gangs were $1. I knew I should have bought more!
> > >
> > > Seriously high prices... but where can you find ferrite rods now? Does Amidon still sell them?
> > >
> > > John
> > >
> > >
> > >
> > > ------------------------------------
> > >
> > > If you've got links, post them in the Links section!
> > > http://groups.yahoo.com/group/loopantennas/links
> > >
> > > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > > http://groups.yahoo.com/group/loopantennas/files
> > >
> > > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > >
> > > And please trim all this when replying!Yahoo! Groups Links
> > >
> > >
> > >
> > >
> > > ____
> > Windows Live: Make it easier for your friends to see what you're up to on Facebook.
> > http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-basics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_2:092009
> >
> > [Non-text portions of this message have been removed]
> >
>

6967. RE: [loopantennas] Re: Finnish typed word! VARIABLE CAPACITORS AVAILABLE !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-17 21:28:52 UTC
From: Kjell W. Strom
Topic: 6938 Message: 6967

Or, with a US type keyboard, use AltGr + Q and AltGr + P...

73,
Kjell, PB3SM - SM6CPI

From: loopantennas@yahoogroups.com
[mailto:loopantennas@yahoogroups.com] On Behalf Of Walter
Sent: 17 December 2009 16:39
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: Finnish typed word! VARIABLE
CAPACITORS AVAILABLE !

> My Dear Friend,

copy and paste?

[Non-text portions of this message have been removed]

6968. Re: Finnish typed word! VARIABLE CAPACITORS AVAILABLE !

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-18 15:08:01 UTC
From: airchecklover
Topic: 6938 Message: 6968

I have also purchased parts from Gintaras Sakenas off eBay. Good vendor - good parts - good prices.

Mark

==========

--- In loopantennas@yahoogroups.com, "aimounto" <aimounto@...> wrote:
>
> Hello!
>
> What kind of variable capacitors do you want?
> Let me know exactly, and I will try to contact Bebek for you.
> Please, give a perfect list, so I will be able to ask Bebek,
> if they still have those variable capacitors.
>
> Another rather inexpencive source is in Lithuania:
>
> Gintaras Sakenas, P.O.Box 1367, Vilnius, LT-2056, Lithuania
>
> I have purchased many different parts from this Radio Amateur,
> who is a very reliable and fast source, who packs the parts really well. His prices are very low...
>
> Aimo
>
> --- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@> wrote:
> >
> >
> >
> > My Dear Friend, my keyboard will not let me put in those letter as is in your lang, so maybe you could do a better link to there caps page. Thank You. Mike UK. --- In loopantennas@yahoogroups.com, Notareal <not_a_real@> wrote:
> > >
> > >
> > > Hi !
> > >
> > > Some time ago I bought variable capacitors from Bebek ltd, Finland.
> > >
> > > 10 euros/piece.
> > >
> > > http://www.bebek.fi/kauppa/index2.php
> > >
> > > You can make web orders also, reliable shop.
> > >
> > > Unfortunately web pages are in Finnish, but finnish word "säätökondensaattorit" =

variable condensators.
> > >
> > > BR
> > >
> > >
> > >
> > >
> > >
> > > > To: loopantennas@yahoogroups.com
> > > > From: JRTOW3RD@
> > > > Date: Tue, 15 Dec 2009 12:15:44 +0000
> > > > Subject: [loopantennas] Re: Storwise Loops
> > > >
> > > > They do have some neat stuff.
> > > >
> > > > They have single gang air variable caps for $18 - duals for $40. Times have changed - I haven't seen them anywhere in a while. I remember driving down to to Chicago to EDI discount electronic stores in the summer/autumn of '69. I was in a USN ET A3/A4 school - shipboard indoctrination - actually schooled on the R390A. Anyhow, they had boxes of those single gang air variables - rated 365-384-409 pF max - $.19! Looked identical, of course. I think the dual gangs were $1. I knew I should have bought more!
> > > >
> > > > Seriously high prices... but where can you find ferrite rods now? Does Amidon still sell them?
> > > >
> > > > John
> > > >
> > > >
> > > >
> > > > ------------------------------------
> > > >
> > > > If you've got links, post them in the Links section!
> > > > http://groups.yahoo.com/group/loopantennas/links
> > > >
> > > > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > > > http://groups.yahoo.com/group/loopantennas/files
> > > >
> > > > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > > >
> > > > And please trim all this when replying!Yahoo! Groups Links
> > > >
> > > >
> > > >
> > > >
> > > _____
> > > Windows Live: Make it easier for your friends to see what you're up to on Facebook.
> > > http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-basics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_2:092009

> > >
> > > [Non-text portions of this message have been removed]
> > >
> >
>

6969. Re: [loopantennas] Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-18 16:54:56 UTC
From: Richard (Rick) Karlquist
Topic: 6737 Message: 6969

Arrow Antennas makes an ultra light weight 2 meter/440 MHz
portable Yagi with a handle for satellite work. It is
also great for direction finding. It breaks down and fits
in a carrying case. Highly recommended.

Rick N6RK

Stanley Reynolds wrote:
>
>
> Either a Moxon Rectangle antenna, or a Yagi would work better as you
> would have a null or peek in one direction.
>
> http://www.ac6la.com/moxgen.html <http://www.ac6la.com/moxgen.html>
>
> Stanley
>
>

6970. Re: [loopantennas] Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-18 17:12:56 UTC
From: Tracey Gardner
Topic: 6737 Message: 6970

I can't see it on their web site Rick

Regards

Tracey

> Arrow Antennas makes an ultra light weight 2 meter/440 MHz
> portable Yagi with a handle for satellite work. It is
> also great for direction finding. It breaks down and fits
> in a carrying case. Highly recommended.
>
> Rick N6RK
>
> Stanley Reynolds wrote:
>>
>>

6971. Re: [loopantennas] Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-18 17:18:14 UTC
From: Tracey Gardner
Topic: 6737 Message: 6971

Sorry Rick, I've now put my glasses on and found it :-)

Regards

Tracey

> Arrow Antennas makes an ultra light weight 2 meter/440 MHz
> portable Yagi with a handle for satellite work. It is
> also great for direction finding. It breaks down and fits
> in a carrying case. Highly recommended.
>
> Rick N6RK
>
>

6972. Re: Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-20 03:35:05 UTC
From: aajham
Topic: 6737 Message: 6972

A great 440 antenna is 4 ele quad antenna on 440 using copper clad steel and a single spreader. Make them round and its pretty easy and small.

Good luck, Art.

--- In loopantennas@yahoogroups.com, "Tracey Gardner" <tracey.gardner@...> wrote:
>
> Sorry Rick, I've now put my glasses on and found it :-)
>
> Regards
>
> Tracey
>
>
>
> > Arrow Antennas makes an ultra light weight 2 meter/440 MHz
> > portable Yagi with a handle for satellite work. It is
> > also great for direction finding. It breaks down and fits
> > in a carrying case. Highly recommended.
> >
> > Rick N6RK
> >
> >
>

6973. Re: Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-20 16:53:32 UTC
From: bm40g
Topic: 6737 Message: 6973

--- In loopantennas@yahoogroups.com, "Frits PE2G" <pe2g@...> wrote:
>
> Thanks, Stanley and Andy, for your suggestions. The small loop from Arrow
> Antennas looks most promising to me. I usually know in which general
> direction I have to search, the problem is the final stage of the search,
> when the radiosonde is somewhere on the terrain at a range of <100 meters.
> When the transmitter is at close range, but still invisible in the
> vegetation, I need a sharp null.
>
> 73,
> Frits PE2G
>

Hello Frits,

The final phase of a search can be done with attenuators. Once your close, throw in 20 dB of attenuation, then 40, and so on. A 100 dB switched atenuator, and very good shielding between the attenuator and the radio, and of the radio itself (aluminum foil?) are required for transmitters that are more than about 1 watt.

One technique is to do the spiral search. Which was taught to me by a pilot. Proceed on a bearing from far out as best as you can tell directly towards the target. Stay on the same bearing without turning, until your antenna indicates a 90 degree variation from the original bearing. Then turn in that direction 90 degrees. Proceed on the new bearing again, until the antenna indicates 90 degree deviation from the bearing. Duplicate this over and over, with more and more attenuation, and even with a yagi you cannot help but walk right into the target.

6974. Re: Advice on Direction Finding Loop for UHF

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-21 14:29:14 UTC
From: ab2nj
Topic: 6737 Message: 6974

The "spiral" search pattern is a good technique to keep in mind. It can be an effective tool in your bag-O-trick for RDFing.

While the importance of shielding everything behind the attenuator cannot be over emphasized for "close-in" work, a much better approach (and a another handy tool) is the use of an "Offset Attenuator." Arrow makes one that works well and there are simple kits for low cost. Do a Google Search for "Offset Attenuator" and you'll see how they work.

Briggs Lonbothum, ab2nj
Gloucester, Ma. FN42pp

6975. 160 mtr loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-22 14:11:20 UTC
From: g8jvm
Topic: 6975 Message: 6975

Hi all

I'm primarily a VHF to microwave person, but the activity up there is awful now
I've been looking at 160 mtrs.
here's the question:-

If I used the vhf/shf antennas on the tower as a frame, the circumference after I've extender the boom s with insulating material will be about 21mtrs, sorta oval shape, I'd prefer not to capacitively shorten if possible. I can reduce the circumference by 1 mtr so that 8 turns would give a full wavelength, or use 4 turns and make it resonate on 80mtrs and use a switchable fixed capacitor to resonate it on 160 mtrs.
Although I can insulate the turns of the loop from the other antennas and the vhf/shf antennas wont see the loop as it will be far less than the width of the booms, does anyone know what effect having all that metal inside of a loop will have on it.
Anyone tried this approach ??

thanks

Richard G8JVM

6976. Re: 160 mtr loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-22 18:42:29 UTC
From: capntripps2000
Topic: 6975 Message: 6976

Richard,

Take a look at Ben G0CWT's loop website. I use his designs exclusively for 160M to 40M with outstanding results.

http://g0cwt.co.uk/magloops/

Very simple to build and tune. I had the 80/160 version up and tuned in less than 2 hours.

Andrew
N3LCW

--- In loopantennas@...m, "g8jvm" <richard.bown@...> wrote:
>
> Hi all
>
> I'm primarily a VHF to microwave person, but the activity up there is awful now
> I've been looking at 160 mtrs.
> here's the question:-
>
> If I used the vhf/shf antennas on the tower as a frame, the circumference after I've extender the boom s with insulating material will be about 21mtrs, sorta oval shape, I'd prefer not to capacitively shorten if possible. I can reduce the circumference by 1 mtr so that 8 turns would give a full wavelength, or use 4 turns and make it resonate on 80mtrs and use a switchable fixed capacitor to resonate it on 160 mtrs.
> Although I can insulate the turns of the loop from the other antennas and the vhf/shf antennas wont see the loop as it will be far less than the width of the booms, does anyone know what effect having all that metal inside of a loop will have on it.
> Anyone tried this approach ??
>
> thanks
>
> Richard G8JVM
>

6977. 160 mtr loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-22 18:50:58 UTC
From: M HOLDEN
Topic: 6975 Message: 6977

Top band is quite forgiving and over the years I have heard of loaded spring bedframes, capacitively coupled telephone lines, trackside wire fences on the railway, and 1kW bar fire elements all making good account of themselves on the air. I think the suck it and see approach is a good idea. Please share your results with us all ! Regards, Mike, G4HOL

[Non-text portions of this message have been removed]

6978. Re: 160 mtr loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-28 02:18:04 UTC
From: shibukiau
Topic: 6975 Message: 6978

Have a look at Michaels excellent site on loops --

http://www.vk4amz.com/

Cheers!
Lloyd
VK4ERQ/VE3ERQ

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> Top band is quite forgiving and over the years I have heard of loaded spring bedframes, capacitively coupled telephone lines, trackside wire fences on the railway, and 1kW bar fire elements all making good account of themselves on the air. I think the suck it and see approach is a good idea. Please share your results with us all ! Regards, Mike, G4HOL
>
>
> [Non-text portions of this message have been removed]
>

6979. Whatsa "Bar Fire Element?"

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-28 17:11:43 UTC
From: Briggs Longbothum
Topic: 6979 Message: 6979

Ok Mike, you win and curiosity's got me!
What the & @$$ would be a "1kw bar fire element?"

73,
Briggs Longbothum, ab2 nj
Gloucester, Ma. FN42pp

[Non-text portions of this message have been removed]

6980. Re: [loopantennas] Whatsa "Bar Fire Element?"

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-28 17:29:22 UTC
From: M HOLDEN
Topic: 6979 Message: 6980

Go back in time to the 40's and 50's. It was a coil of resistance wire, usually wound on a ceramic former about 3/4" diam and 10" long, which was the element for an electric room heater. With Brit 240 v a.c. across the ends it sucked around 4 Amps out of the wall socket. It was an inefficient and rather inductive dummy load which was capable of sending a few watts of top-band a good couple of miles, especially if used in upper storeys of buildings.
Sometimes our versions of "English" and terminologies will clash.
Sorry Briggs, Regards, Mike.

--- On Mon, 28/12/09, Briggs Longbothum <bruggo@verizon.net> wrote:

From: Briggs Longbothum <bruggo@...>
Subject: [loopantennas] Whatsa "Bar Fire Element?"
To: loopantennas@yahoogroups.com
Date: Monday, 28 December, 2009, 17:11

Ok Mike, you win and curiosity's got me!

What the & @$$ would be a "1kw bar fire element?"

73,

Briggs Longbothum, ab2 nj

Gloucester, Ma. FN42pp

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6981. Reduced: Grundig YB300PE + Tecsun Loop Package

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-28 19:49:13 UTC
From: VectorC
Topic: 6981 Message: 6981

Grundig YB-300PE AM/FM/SW Receiver + Tecsun AN-200 MW Loop Antenna Package.

Both the radio and loop antenna are LNIB and come with all original accessories, packaging and manuals. Items are in mint condition, both operationally and physically, and were well-cared for and in a smoke-free environment. Shipped double-boxed and well-packed.

$50 shipped. Paypal only.

Honor and integrity mean everything to me- check out my feedback on ebay (ID=vectorczar).

See my listing on eham: http://www.eham.net/classifieds/detail/306220

Thanks,

Lee

6982. pickup loop for AM 1 metre square loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-28 19:59:22 UTC
From: johnnyvenus42
Topic: 6982 Message: 6982

I have built a 1 metre square loop for the 550 to 1700 khz bnd and I am not sure on the size and placement of the pickup loop. My intention is to eventually put the loop in the attic and use RG58U to bring the signal to my radio (grungig S350). Have been experimenting with pickup loop but not sure I am doing it the best way. Results don't seem to be as good as I had hoped for. I am kind of new to this so my expertise is limited. Would appreciate any and all suggestions. Thanks in advance.

6983. Re: [loopantennas] pickup loop for AM 1 metre square loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-29 00:17:07 UTC
From: aimo ruoho
Topic: 6982 Message: 6983

Hi!
If I remember right, the smaller loop will be 1/5 of the big one.
Aimo

--- On Mon, 12/28/09, johnnyvenus42 <johnnyvenus42@...> wrote:

From: johnnyvenus42 <johnnyvenus42@...>
Subject: [loopantennas] pickup loop for AM 1 metre square loop
To: loopantennas@yahoogroups.com
Date: Monday, December 28, 2009, 8:59 PM

I have built a 1 metre square loop for the 550 to 1700 khz bnd and I am not sure on the size and placement of the pickup loop. My intention is to eventually put the loop in the attic and use RG58U to bring the signal to my radio (grungig S350). Have been experimenting with pickup loop but not sure I am doing it the best way. Results don't seem to be as good as I had hoped for. I am kind of new to this so my expertise is limited. Would appreciate any and all suggestions. Thanks in advance.

[Non-text portions of this message have been removed]

6984. Bar Fire Element I may NO!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-29 20:47:02 UTC
From: Michael in Suffolk
Topic: 6984 Message: 6984

Hi. A bar fire element, kept you warm in my Grans house, wire THE ELEMENT wound wire was on a ceramic 12" former with a LIVE terminal each end - 240 volts into made it got hot at 1-3 Kw, a few shillings {now 5 pence} made it glow hot for about an hour, hope this helps, the good old days, I do not think so. Mike UK.

[Non-text portions of this message have been removed]

6985. Re: [loopantennas] Bar Fire Element I may NO!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-29 20:51:02 UTC
From: M HOLDEN
Topic: 6984 Message: 6985

Was she on top band too?

--- On Tue, 29/12/09, Michael in Suffolk <michaelrae65@...> wrote:

From: Michael in Suffolk <michaelrae65@....uk>
Subject: [loopantennas] Bar Fire Element I may NO!
To: loopantennas@yahoogroups.com
Date: Tuesday, 29 December, 2009, 20:47

Hi. A bar fire element, kept you warm in my Grans house, wire THE ELEMENT wound wire was on a ceramic 12" former with a LIVE terminal each end - 240 volts into made it got hot at 1-3 Kw, a few shillings {now 5 pence} made it glow hot for about an hour, hope this helps, the good old days, I do not think so. Mike UK.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

6986. Re: [loopantennas] pickup loop for AM 1 metre square loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-29 20:53:47 UTC
From: Jim Dunstan
Topic: 6982 Message: 6986

At 07:59 PM 12/28/2009 +0000, you wrote:
>
>
>I have built a 1 metre square loop for the 550 to 1700 khz bnd and I am
>not sure on the size and placement of the pickup loop. My intention is to
>eventually put the loop in the attic and use RG58U to bring the signal to
>my radio (grungig S350). Have been experimenting with pickup loop but not
>sure I am doing it the best way. Results don't seem to be as good as I had
>hoped for. I am kind of new to this so my expertise is limited. Would
>appreciate any and all suggestions. Thanks in advance.

HI,

The 1 meter loop for MW broadcast reception works best when tuned ....
making a remote attic location a problem (remote tuning is possible of
course). The loop works best when inductively coupled to radios like the
S350 which uses a tuned ferrite loop front end. If you imagine the tuned
front end of the S350 to be the pickup loop you can see that the best
'placement' is not a fixed relationship .... the amount of coupling that
works best varies.

I find that a tuned loop with a coupling/pickup loop works best with radios
that are shielded and do not have a built in ferrite tuned front end/
antenna. they also have a balanced input. As a consequence coax feed line
is not the best solution unless used in conjunction with some kind of balun
arrangement. It is just as easy to use parallel feed line such as a
twisted pair, zip cord, or speaker cable. There is really no need for coax
if you couple the balanced pickup loop to balanced cable to a balanced
radio input.

I have an excellent AM radio in my HI-FI setup which has a balanced
input. I moved my box loop around the living room to the best (quietest)
location and run a feed line made of parallel speaker cable to the radio
(25 ft). I put the radio on the frequency of choice (digital tuning) and
just touch up the loop tuning. Great listening !!

Now if I were to put the loop in the attic I would have to devise some
means of remotely adjusting the loop tuning. there are only about 3 DX
stations I regularly listen to ... so I suppose the easiest method would be
to use 3 capacitors .... each tuned to the station of choice and switched
in with relays.

PS my pickup loop is adjustable .... it is about 8" in diameter and
consists of 4 turns of hook-up wire on a plastic loop. It's position can
be changed by slightly rotating it on its axis which changes in relation to
the loop axis (about 2' in diameter). Adjust the loop for the 'just right'

spot ... between amount of pickup and maximum loop Q. The 'just right' coupling is only critical with the weakest dx stations.

Jim

6987. Loft Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-29 20:51:13 UTC
From: Michael in Suffolk
Topic: 6987 Message: 6987

Hi. How would you tune it, have it fixed on one station or what! Mike {UK} mbe

[Non-text portions of this message have been removed]

6988. Re: pickup loop for AM 1 metre square loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-29 22:28:48 UTC
From: EDUARDO
Topic: 6982 Message: 6988

Hello, good night and Merry Christmas to you and all your family. Well in the case of this receptor is not necessary that you do the "loop" procedure, simply bring the receiver antenna, below the wires and fine-tune your radio and antenna. Ready this is the best result, but if you prefer to connect the coaxial cable, make a loop of 50 cm in diameter and place the center of the antenna (the table) and connect a coaxial cable with good quality in your receiver, also is a good option, but rather only the approach to this case, as in the medium wave receiver has a ferrite antenna inside.
The cable for connecting the antenna to the radio, not necessarily a thick cable, you can even use a thinner cable and even a wireless connection to speakers, the result is satisfactory, what you can do is to use cable between the antenna and radio too large, it creates a signal and also changes the characteristics of the antenna, which can vary the frequency pre determined. I have a dish of medium wave and to use only the antenna by induction.
Good luck and I hope I have helped you, sorry for my English.

Respectfully

Eduardo L. Castaldelli
Mairiporã- SP- Brasil
Grid Locator: GG66qq
PU2-YYP
www.radiodx.qsl.br

----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Tuesday, December 29, 2009 6:53 PM
Subject: ***SPAM*** Re: [loopantennas] pickup loop for AM 1 metre square loop

At 07:59 PM 12/28/2009 +0000, you wrote:
>
>
>I have built a 1 metre square loop for the 550 to 1700 khz bnd and I am
>not sure on the size and placement of the pickup loop. My intention is to
>eventually put the loop in the attic and use RG58U to bring the signal to
>my radio (grungig S350). Have been experimenting with pickup loop but not
>sure I am doing it the best way. Results don't seem to be as good as I had
>hoped for. I am kind of new to this so my expertise is limited. Would
>appreciate any and all suggestions. Thanks in advance.

HI,

The 1 meter loop for MW broadcast reception works best when tuned ....
making a remote attic location a problem (remote tuning is possible of
course). The loop works best when inductively coupled to radios like the
S350 which uses a tuned ferrite loop front end. If you imagine the tuned

front end of the S350 to be the pickup loop you can see that the best 'placement' is not a fixed relationship .... the amount of coupling that works best varies.

I find that a tuned loop with a coupling/pickup loop works best with radios that are shielded and do not have a built in ferrite tuned front end/ antenna. they also have a balanced input. As a consequence coax feed line is not the best solution unless used in conjunction with some kind of balun arrangement. It is just as easy to use parallel feed line such as a twisted pair, zip cord, or speaker cable. There is really no need for coax if you couple the balanced pickup loop to balanced cable to a balanced radio input.

I have an excellent AM radio in my HI-FI setup which has a balanced input. I moved my box loop around the living room to the best (quietest) location and run a feed line made of parallel speaker cable to the radio (25 ft). I put the radio on the frequency of choice (digital tuning) and just touch up the loop tuning. Great listening !!

Now if I were to put the loop in the attic I would have to devise some means of remotely adjusting the loop tuning. there are only about 3 DX stations I regularly listen to ... so I suppose the easiest method would be to use 3 capacitors .... each tuned to the station of choice and switched in with relays.

PS my pickup loop is adjustable .... it is about 8" in diameter and consists of 4 turns of hook-up wire on a plastic loop. It's position can be changed by slightly rotating it on its axis which changes in relation to the loop axis (about 2' in diameter). Adjust the loop for the 'just right' spot ... between amount of pickup and maximum loop Q. The 'just right' coupling is only critical with the weakest dx stations.

Jim

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Nenhum virus encontrado nessa mensagem recebida.
Verificado por AVG - www.avgbrasil.com.br

Versao: 9.0.722 / Banco de dados de virus: 270.14.123/2592 - Data de Lancamento: 12/29/09 05:47:00

[Non-text portions of this message have been removed]

6989. Two wellbrook antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-29 16:12:29 UTC
From: Marc
Topic: 6989 Message: 6989

Hello,

I suppose this loop is better for am/lw than the "original" ala1530:
http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&path=35&product_id=41

orig 1530
http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&path=35&product_id=28

I see a 40db against 30db for noise rejection.

Anybody any experience??

Marc

--
What's on Shortwave guide: choose an hour, go!
http://shortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

6990. Res: [loopantennas] pickup loop for AM 1 metre square loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-29 18:46:14 UTC
From: Tom Garden
Topic: 6982 Message: 6990

The small loop´s diameter is around 1/5 of the tuned loop diameter. Usually it is positioned at the oposite side of place where the tuning capacitor is fixed.

De: johnnyvenus42 <johnnyvenus42@...>
Para: loopantennas@yahoogroups.com
Enviadas: Segunda-feira, 28 de Dezembro de 2009 17:59:22
Assunto: [loopantennas] pickup loop for AM 1 metre square loop

I have built a 1 metre square loop for the 550 to 1700 khz bnd and I am not sure on the size and placement of the pickup loop. My intention is to eventually put the loop in the attic and use RG58U to bring the signal to my radio (grungig S350). Have been experimenting with pickup loop but not sure I am doing it the best way. Results don't seem to be as good as I had hoped for. I am kind of new to this so my expertise is limited. Would appreciate any and all suggestions. Thanks in advance.

Veja quais são os assuntos do momento no Yahoo! +Buscados
http://br.maisbuscados.yahoo.com

[Non-text portions of this message have been removed]

6991. Re: [loopantennas] Re: pickup loop for AM 1 metre square loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 02:47:15 UTC
From: jim
Topic: 6982 Message: 6991

Eduardo,
That was a good post about loop antennas, it helps me because my long-wire antenna fell down in high winds last night, after 7 years.
Do not be sorry for your English! You know it well, and type it well.
Thank you Eduardo in Brasil.

--Jim in USA

----- Original Message -----
From: EDUARDO
To: loopantennas@yahoogroups.com
Sent: Tuesday, December 29, 2009 5:28 PM
Subject: [loopantennas] Re: pickup loop for AM 1 metre square loop

Hello, good night and Merry Christmas to you and all your family. Well in the case of this receptor is not necessary that you do the "loop" procedure, simply bring the receiver antenna, below the wires and fine-tune your radio and antenna. Ready this is the best result, but if you prefer to connect the coaxial cable, make a loop of 50 cm in diameter and place the center of the antenna (the table) and connect a coaxial cable with good quality in your receiver, also is a good option, but rather only the approach to this case, as in the medium wave receiver has a ferrite antenna inside.
The cable for connecting the antenna to the radio, not necessarily a thick cable, you can even use a thinner cable and even a wireless connection to speakers, the result is satisfactory, what you can do is to use cable between the antenna and radio too large, it creates a signal and also changes the characteristics of the antenna, which can vary the frequency pre determined. I have a dish of medium wave and to use only the antenna by induction.
Good luck and I hope I have helped you, sorry for my English.

Respectfully

Eduardo L. Castaldelli
Mairiporã- SP- Brasil
Grid Locator: GG66qq
PU2-YYP
www.radiodx.qsl.br

----- Original Message -----
From: Jim Dunstan
To: loopantennas@yahoogroups.com
Sent: Tuesday, December 29, 2009 6:53 PM
Subject: ***SPAM*** Re: [loopantennas] pickup loop for AM 1 metre square loop

At 07:59 PM 12/28/2009 +0000, you wrote:
>
>
>I have built a 1 metre square loop for the 550 to 1700 khz bnd and I am

>not sure on the size and placement of the pickup loop. My intention is to
>eventually put the loop in the attic and use RG58U to bring the signal to
>my radio (grungig S350). Have been experimenting with pickup loop but not
>sure I am doing it the best way. Results don't seem to be as good as I had
>hoped for. I am kind of new to this so my expertise is limited. Would
>appreciate any and all suggestions. Thanks in advance.

HI,

The 1 meter loop for MW broadcast reception works best when tuned .... making a remote attic location a problem (remote tuning is possible of course). The loop works best when inductively coupled to radios like the S350 which uses a tuned ferrite loop front end. If you imagine the tuned front end of the S350 to be the pickup loop you can see that the best 'placement' is not a fixed relationship .... the amount of coupling that works best varies.

I find that a tuned loop with a coupling/pickup loop works best with radios that are shielded and do not have a built in ferrite tuned front end/ antenna. they also have a balanced input. As a consequence coax feed line is not the best solution unless used in conjunction with some kind of balun arrangement. It is just as easy to use parallel feed line such as a twisted pair, zip cord, or speaker cable. There is really no need for coax if you couple the balanced pickup loop to balanced cable to a balanced radio input.

I have an excellent AM radio in my HI-FI setup which has a balanced input. I moved my box loop around the living room to the best (quietest) location and run a feed line made of parallel speaker cable to the radio (25 ft). I put the radio on the frequency of choice (digital tuning) and just touch up the loop tuning. Great listening !!

Now if I were to put the loop in the attic I would have to devise some means of remotely adjusting the loop tuning. there are only about 3 DX stations I regularly listen to ... so I suppose the easiest method would be to use 3 capacitors .... each tuned to the station of choice and switched in with relays.

PS my pickup loop is adjustable .... it is about 8" in diameter and consists of 4 turns of hook-up wire on a plastic loop. It's position can be changed by slightly rotating it on its axis which changes in relation to the loop axis (about 2' in diameter). Adjust the loop for the 'just right' spot ... between amount of pickup and maximum loop Q. The 'just right' coupling is only critical with the weakest dx stations.

Jim

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Nenhum virus encontrado nessa mensagem recebida.
Verificado por AVG - www.avgbrasil.com.br
Versao: 9.0.722 / Banco de dados de virus: 270.14.123/2592 - Data de Lancamento: 12/29/09 05:47:00

[Non-text portions of this message have been removed]

--
I am using the free version of SPAMfighter.
We are a community of 6 million users fighting spam.
SPAMfighter has removed 2006 of my spam emails to date.
Get the free SPAMfighter here: http://www.spamfighter.com/len

The Professional version does not have this message

[Non-text portions of this message have been removed]

6992. Well, It's Not Exactly A Loop....

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 14:10:09 UTC
From: march181959
Topic: 6992 Message: 6992

Ok, so I dug up this old idea when my longwire went down in the last snowstorm. I needed something strong to withstand the New England winter. I picked up a metal Slinky while Xmas shopping. The Slink is hanging from a hook at the corner of the house where the roof meets the wall, and then it stretches vertically to the ground where I attached it to a metal rod buried in the ground. A wire runs from the top of the Slink into a coax which has an inline balun, and then downstream of the balun the coax plugs into the radio. The dB signal has tripled and is at least as good as the longwire, and of course, I can pick up stations that I can't detect without the Slink.

Do you think that a one loop tuned coil wire inside the Slink would act like a real coil? Anybody know of any 12 ft long ferrite rods..he heee?

Frank in Boston

6993. Sourcing 1" dia ferrite rod?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 14:39:59 UTC
From: david feldman
Topic: 6993 Message: 6993

Looking for a source for 1" dia ferrite rod (length TBD) to build giant loopstick antenna - CWS Bytemark does not show as a stocking size - any other source?

73 Dave WB0GAZ wb0gaz@...

_____
Hotmail: Trusted email with Microsoft’s powerful SPAM protection.
http://clk.atdmt.com/GBL/go/177141664/direct/01/

6994. Re: Sourcing 1" dia ferrite rod?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 15:28:29 UTC
From: Walter
Topic: 6993 Message: 6994

> to build giant loopstick antenna

Hi Dave

just curious: what is a giant loopstick :-) What frequencies are you interested in? Me interests natural radio. Need a giant for that.

Walter

6995. Re: [loopantennas] Sourcing 1

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 15:50:07 UTC
From: Chris Trask
Topic: 6995 Message: 6995

```
>
> Looking for a source for 1" dia ferrite rod (length TBD) to build
> giant loopstick antenna - CWS Bytemark does not show as a stocking
> size - any other source?
>
```

Some time ago, John Popelish came up with the idea of using a string of toroids instead of a solid rod. You might want to join the Yahoo! group that he runs:

http://groups.yahoo.com/group/ferriterodantennaexperimenters/

He built them by using a piece of insulated material, such as a plastic rod or wood dowel, and then simply stacking the toroids. There were a number of variations, such as epoxying the toroids together or using a piece of heat-shrink tubing to hold them together. This is much cheaper and certainly more readily obtainable than those large rods.

Using toroids is every bit as good as a solid rod, perhaps better at low frequencies as the gap between the toroids decreases the hysteresis and eddy current losses. In magnetic materials, the bulk of the flux is in a thin layer at the surface, known as "magnetic skin effect", which is the same concept as the skin effect in electrical conductors.

You can buy large ferrite and powdered iron toroids by the truckload from Amidon.

Chris

```
,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-| )__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__
```

Graphics by Loek Frederiks

6996. Re: Sourcing 1" dia ferrite rod?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 17:44:57 UTC
From: 12sa7@att.net
Topic: 6993 Message: 6996

Try stormwise.com and select "Monster Ferrite Rods" on the home page.

6997. Re: [loopantennas] Bar Fire Element I may NO!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 19:11:30 UTC
From: brian russell
Topic: 6984 Message: 6997

Mike,
During WW2 when electric fires were unobtainable we were given a 1930's model.
This had a copper dish reflector appx 15 in dia and the element coil was wound on a ceramic former about the size of a 150 watt light bulb that plugged in.
Anyone know what type of wire elements are made of ????
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Michael in Suffolk
To: loopantennas@yahoogroups.com
Sent: Tuesday, December 29, 2009 8:47 PM
Subject: [loopantennas] Bar Fire Element I may NO!

[Non-text portions of this message have been removed]

6998. Re: [loopantennas] Bar Fire Element I may NO!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 19:48:49 UTC
From: John Popelish
Topic: 6984 Message: 6998

brian russell wrote:
> Mike, During WW2 when electric fires were unobtainable
> we were given a 1930's model. This had a copper dish
> reflector appx 15 in dia and the element coil was wound
> on a ceramic former about the size of a 150 watt light
> bulb that plugged in. Anyone know what type of wire
> elements are made of ????

Nichrome (sometimes called nichrome V) is a common alloy for
such heating elements. Kanthal is another trade name for
one of these high melting point alloys made of nickel,
chrome, and sometimes iron and aluminum.

http://en.wikipedia.org/wiki/Nichrome
--
Regards,

John Popelish

6999. Re: [loopantennas] Sourcing 1" dia ferrite rod?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 20:05:47 UTC
From: John Popelish
Topic: 6993 Message: 6999

david feldman wrote:
> Looking for a source for 1" dia ferrite rod (length TBD)
> to build giant loopstick antenna - CWS Bytemark does not
> show as a stocking size - any other source?

I have experimented with many large rods made up of stacks
of large ferrite shield beads. Digikey sells these in
several grades that are optimal in different frequency ranges.
for example:
http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&name=240-2138-ND
http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&name=240-2081-ND
http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&name=240-2154-ND
These have peak Q around 500kHz, 1MHz and 2MHz, respectively.
I found the Q was higher with thin spacers (a mil to a few
mils) between the beads in the stack.

Note that the material these are made of is not quite as
good as the stuff intended for antennas, because these are
meant to be used to absorb energy traveling through cables
passed through them. Their BH loops are fatter than antenna
material. But they work pretty well considering the price
and availability.

I also purchased some impeder rods (intended to be used in
pipe seam welding, made of high permeability (low frequency)
power ferrite material. They are about 3/4 inch in diameter
but with a petal pattern in cross section and about 8 inches
long. I sold most of them to members of several Yahoo!
antenna groups but still have a few left. I haven't had the
time to experiment with mine, and have not heard much from
others who bought them. I can part with a pair of what I
have left. If you might want them, email me for details.

jpopelish @ rica . net (remove spaces)

--
Regards,

John Popelish

7000. Re: [loopantennas] Sourcing 1" dia ferrite rod?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 18:01:24 UTC
From: Missouri Guy
Topic: 6993 Message: 7000

http://www.stormwise.com de from a recent post.
Tab down on the right a bit for monster rods.
73, Charlie, N0TT

On Wed, 30 Dec 2009 07:39:59 -0700 david feldman <wb0gaz@...>
writes:
>
> Looking for a source for 1" dia ferrite rod (length TBD) to build
> giant loopstick antenna - CWS Bytemark does not show as a stocking
> size - any other source?
>
> 73 Dave WB0GAZ wb0gaz@...
>
>
> ____
> Hotmail: Trusted email with Microsoft?s powerful SPAM protection.
> http://clk.atdmt.com/GBL/go/177141664/direct/01/
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in
> the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG
> and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
> uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>

7001. Re Top Band!!!!!!!!!! Re: Bar Fire Element I may NO!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 22:47:51 UTC
From: Mike
Topic: 6984 Message: 7001

Was it on a 78 rpm record.

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> Was she on top band too?
>
> --- On Tue, 29/12/09, Michael in Suffolk <michaelrae65@...> wrote:
>
> From: Michael in Suffolk <michaelrae65@...>
> Subject: [loopantennas] Bar Fire Element I may NO!
> To: loopantennas@yahoogroups.com
> Date: Tuesday, 29 December, 2009, 20:47
>
>
>
>
>
>
>
> Â
>
>
>
>
>
>
>
>
>
> Hi. A bar fire element, kept you warm in my Grans house, wire THE ELEMENT wound wireÂ was on a ceramic 12" former with a LIVE terminal each end - 240 volts into made it got hot at 1-3 Kw, a few shillings {now 5 pence} made it glow hot for about an hour, hope this helps, the good old days, I do not think so. Mike UK.
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
>

>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7002. Copper Round Fire

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 22:46:00 UTC
From: Mike
Topic: 6984 Message: 7002

Hi John. My Gran had a round dish copper heaterthe element was in round layer form wonder if this is the heater you was talkinbg about, I had to get the shilling coins from the newspaper man in those days. mike.
--- In loopantennas@yahoogroups.com, John Popelish <jpopelish@...> wrote:
>
> brian russell wrote:
> > Mike, During WW2 when electric fires were unobtainable
> > we were given a 1930's model. This had a copper dish
> > reflector appx 15 in dia and the element coil was wound
> > on a ceramic former about the size of a 150 watt light
> > bulb that plugged in. Anyone know what type of wire
> > elements are made of ????
>
> Nichrome (sometimes called nichrome V) is a common alloy for
> such heating elements. Kanthal is another trade name for
> one of these high melting point alloys made of nickel,
> chrome, and sometimes iron and aluminum.
>
> http://en.wikipedia.org/wiki/Nichrome
> --
> Regards,
>
> John Popelish
>

7003. Re: [loopantennas] Copper Round Fire

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 23:11:09 UTC
From: John Popelish
Topic: 6984 Message: 7003

Mike wrote:
> Hi John. My Gran had a round dish copper heaterthe
> element was in round layer form wonder if this is the
> heater you was talkinbg about, I had to get the shilling
> coins from the newspaper man in those days. mike.

Lots of those radiant heaters had the heating element made
on a conical ceramic form with a lamp base so it could be
replaced by just screwing in a new one.

http://www.hudsonscustommachining.com/heater.elements.replacement.jpg

--
Regards,

John Popelish

7005. Re: [loopantennas] Copper Round Fire

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-30 23:47:39 UTC
From: Dexter McIntyre W4DEX
Topic: 6984 Message: 7005

>> brian russell wrote:
>>> Mike, During WW2 when electric fires were unobtainable
>>> we were given a 1930's model. This had a copper dish
>>> reflector appx 15 in dia and the element coil was wound
>>> on a ceramic former about the size of a 150 watt light
>>> bulb that plugged in. Anyone know what type of wire
>>> elements are made of ????

I've seen old heaters use this type element:

http://www.w4dex.com/temp/heating_coil.jpg

I have two sizes, the smaller I think is 600w and the one in the picture is 1000 watt. Some years ago I had a load bank of these elements for testing a 400 cps inverter system.

Dex

7006. Re: [loopantennas] for your files

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-31 14:08:26 UTC
From: Chris Trask
Topic: 7006 Message: 7006

>
>Rich,
>Check this one out. It has a winding set that should do the trick.
>http://www.ad5x.com/images/Articles/MultitapRevA.pdf
>

That is a very interesting variable ratio transformer, worthy of adding to the file on sneaky transformer tricks.

Chris

7007. Re: Well, It's Not Exactly A Loop....

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-31 15:40:40 UTC
From: ronelltom
Topic: 6992 Message: 7007

Hi,
An excellent idea in an emergency. If you Google Slinky Antennas, ther are lots of ideas. Most Radio Hamms decry the use of slinky's, probably because it does not cost loads of money. lol. i always say if it works, use it, and don't bother whether its trendy and expensive. Please keep us informed as you experiment.
Best 73s.
Ron GW1HIN UK

--- In loopantennas@yahoogroups.com, "march181959" <march181959@...> wrote:
>
> Ok, so I dug up this old idea when my longwire went down in the last snowstorm. I needed something strong to withstand the New England winter. I picked up a metal Slinky while Xmas shopping. The Slink is hanging from a hook at the corner of the house where the roof meets the wall, and then it stretches vertically to the ground where I attached it to a metal rod buried in the ground. A wire runs from the top of the Slink into a coax which has an inline balun, and then downstream of the balun the coax plugs into the radio. The dB signal has tripled and is at least as good as the longwire, and of course, I can pick up stations that I can't detect without the Slink.
>
> Do you think that a one loop tuned coil wire inside the Slink would act like a real coil? Anybody know of any 12 ft long ferrite rods..he heee?
>
> Frank in Boston
>

7008. Re: Sourcing 1

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-31 17:23:34 UTC
From: AlienRelics
Topic: 6995 Message: 7008

Actually Adam E. runs that group. And I don't understand why we'd want to fragment the knowledge, this group covers all kinds of loop antennas and it isn't going away.

Steve Greenfield

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > Looking for a source for 1" dia ferrite rod (length TBD) to build
> > giant loopstick antenna - CWS Bytemark does not show as a stocking
> > size - any other source?
> >
>
> Some time ago, John Popelish came up with the idea of using a string of toroids instead of a solid rod. You might want to join the Yahoo! group that he runs:
>
> http://groups.yahoo.com/group/ferriterodantennaexperimenters/
>
> He built them by using a piece of insulated material, such as a plastic rod or wood dowel, and then simply stacking the toroids. There were a number of variations, such as epoxying the toroids together or using a piece of heat-shrink tubing to hold them together. This is much cheaper and certainly more readily obtainable than those large rods.
>
> Using toroids is every bit as good as a solid rod, perhaps better at low frequencies as the gap between the toroids decreases the hysteresis and eddy current losses. In magnetic materials, the bulk of the flux is in a thin layer at the surface, known as "magnetic skin effect", which is the same concept as the skin effect in electrical conductors.
>
> You can buy large ferrite and powdered iron toroids by the truckload from Amidon.
>
>
> Chris
>
> ,----------------------. High Performance Mixers and
> / What's all this \ Amplifiers for RF Communications
> / extinct stuff, anyhow? /
> \ _______,--------------' Chris Trask / N7ZWY
> _ |/ Principal Engineer
> oo\ Sonoran Radio Research
> (__)\ _ P.O. Box 25240
> \ \ .' `. Tempe, Arizona 85285-5240
> \ \ / \
> \ '" \ IEEE Senior Member #40274515
> . ( ) \
> '-|)__| :. \ Email: christrask@...

> | | | | \ '. http://www.home.earthlink.net/~christrask
> c__; c__; '-..'>.__
>
> Graphics by Loek Frederiks
>

7009. Re Slinky

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-31 17:45:38 UTC
From: Michael in Suffolk
Topic: 7009 Message: 7009

Hi. If using a slinky PAINT IN as it will rust, just drop the whole slinky into some paint and let it hang dry, or use varnish. I understand there are coated types for sale AT A PRICE but I think there all in the US, done here in the UK as yet, 3 in a line will get you on 160 metres - I read in Practical Wireless, use a cord to hold it up, the good thing is the birds willnot crash into it due to the coil size, there are BTW 3 size type, all for now. mbe Mike UK.

[Non-text portions of this message have been removed]

7010. Re: [loopantennas] Re Slinky

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-31 18:16:05 UTC
From: david
Topic: 7009 Message: 7010

hi i use slinkys on a indoor mw flag antenna and it works great check out the rest of my videos on how it performs .. i have had peru west coast usa etc on mw and a couple of so call uk firsts on mw and also several alaskans on mw here in scotland and the antenna is indoors so they do work.

the only difference now is the feed and the resistor are fed on the middle of the vertical legs ... happy new year all cheers david ... ayrshire scotland
slinky video http://www.youtube.com/user/tvdxrools#p/u/151/WVP9jUAuhOc

----- Original Message -----
From: Michael in Suffolk
To: loopantennas@yahoogroups.com
Sent: Thursday, December 31, 2009 5:45 PM
Subject: [loopantennas] Re Slinky

Hi. If using a slinky PAINT IN as it will rust, just drop the whole slinky into some paint and let it hang dry, or use varnish. I understand there are coated types for sale AT A PRICE but I think there all in the US, done here in the UK as yet, 3 in a line will get you on 160 metres - I read in Practical Wireless, use a cord to hold it up, the good thing is the birds willnot crash into it due to the coil size, there are BTW 3 size type, all for now. mbe Mike UK.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7011. Re: [loopantennas] Copper Round Fire

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-31 16:50:35 UTC
From: brian russell
Topic: 6984 Message: 7011

John,
Thanks for the rundown on element wire, it is
possibly too brittle for antennas hi!
The resistance must be quite high to do that job.
Regards,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: John Popelish
To: loopantennas@yahoogroups.com
Sent: Wednesday, December 30, 2009 11:11 PM
Subject: Re: [loopantennas] Copper Round Fire

[Non-text portions of this message have been removed]

7012. Re: Re Slinky In Loft !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-31 20:30:29 UTC
From: Mike
Topic: 7009 Message: 7012

Hi David. Just seen your video fantastic it came over very well, I am thinking of putting a FLAG ANTENNA in my loft it would be facing South as is the flat can't move that LOL, but would need help, no its not a visit but you would be more than welcome.
Thing is getting the BALum and resistor made, so may come to you for help.
My loft has no water tanks and is about 29/30 feet long.
I have about 6 Slinky's which I was going to run down the garden that may come about in the summer once I get the idea as to its workings and layout.
I but have two drunks living under me that have given problems in the past Ofcom visits and all I won BTW, I think that should stop now aftewr 11.5 years of hell from them, its a long story and do not wish to do my washing here, could we talk via my email address which is michael.evans380@...
or wendy-michael@...

7013. RE: Sourcing 1" dia ferrite rod?

Yahoo group: loopantennas (2008 — 2012)
Date: 2009-12-31 21:02:50 UTC
From: david feldman
Topic: 6993 Message: 7013

Hello, and thanks for the several very helpful replies.

Thanks for the pointer to stormwise; I was not aware of them.

I want to build an electronically tunable, receive-only mobile HF antenna mainly for 160/80/40 meter bands, tuned with a varactor diode as part of a feedpoint matching network.

After learning of a very interesting paper written by Chris Trask (thanks, Chris!!!) a couple of months ago, I successfully reproduced his varactor matcher for a small receiving loop (now lives in the back yard and is a great 80-40-30M antenna), so I'm inspired now (with parts on order, and anxiously awaiting the long-backordered miniVNA) to make something along these lines (ferrite transformers and a varactor biased with a bias-tee) with a ferrite loopstick antenna that would be attached (maybe horizontally) to the roof rack of my car (yes, the car roof is steel, so this may be a distraction, but I'm looking forward to the learning as much as anything...) I appreciate the pointer to the idea of making a loopstick-style ferrite element from toroid cores or presumably some kind of giant ferrite beads (now I wish I had bought some when I saw them for sale a while back!)... I have just submitted a join-request to join John's ferriterodantennaexperimenters yahoo group, so this should be very helpful too.

Thanks, everyone - all of the messages were much appreciated and perhaps my new commute can be made interesting with such an antenna (using a Kenwood TH-F6AT as the receiver; it's a good receiver for HF provided the antenna is selective!)

73 Dave WB0GAZ wb0gaz@...

###

> Looking for a source for 1" dia ferrite rod (length TBD) to build giant loopstick antenna
> - CWS Bytemark does not show as a stocking size - any other source?
>
> 73 Dave WB0GAZ wb0gaz@...

> 2b. Re: Sourcing 1" dia ferrite rod?
> Posted by: "Walter" fedderwi@uni-bremen.de karula4711
>
> Hi Dave
>
> just curious: what is a giant loopstick :-) What frequencies are you
> interested in? Me interests natural radio. Need a giant for that.
>
> Walter
>
> 2c. Re: Sourcing 1" dia ferrite rod?
> Posted by: "12sa7@..." 12sa7@... 12sa7@...
>
> Try stormwise.com and select "Monster Ferrite Rods" on the home page.

>
>
>
> I have experimented with many large rods made up of stacks
> of large ferrite shield beads. Digikey sells these in
> several grades that are optimal in different frequency ranges.
>.....
> jpopelish @ rica . net (remove spaces)
>
> --
> Regards,
>
> John Popelish
>
> 3a. Re: Sourcing 1
> Posted by: "Chris Trask" christrask@... chris3trask
>
> Some time ago, John Popelish came up with the idea of using a string of toroids instead of a solid rod. You might want to join the Yahoo! group that he runs:
>
> http://groups.yahoo.com/group/ferriterodantennaexperimenters/
>
>

_____
Hotmail: Trusted email with Microsoft?s powerful SPAM protection.
http://clk.atdmt.com/GBL/go/177141664/direct/01/

[Non-text portions of this message have been removed]

7014. slinky versus straight wire question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-01 01:14:01 UTC
From: Dean Wayman
Topic: 7014 Message: 7014

I have been trying to figure out a way to get some wire up in my crawl-space on the second level of my house .

I am only interested in MW at the moment and the lower part of SW , I want the antenna that i make to be very quiet ,I found the plans for the T2FD antennas last night and think it would be very good ariel for me but in order to make one for 500-1700 Khz it looks like it should be on the order of 300 feet long? i don't have that much room. Iv'e read these are very broadband so maybe it would'nt need to be that long .

Then your setup with the slinkys got me thinking? does the extra wire in a slinky (being in a coil)act like a longer antenna ?

In other words ,because of the coils in the slinky is there more wire up than just the physical length of the slinky?

Another question i had ,is there a null with the flag antenna?

Anyway i would be very interested in how you made your antenna if you would like to post a diagram and specs?

Thanks

Dean_0

7015. Re: [loopantennas] slinky versus straight wire question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-01 04:45:56 UTC
From: Jim Dunstan
Topic: 7014 Message: 7015

At 01:14 AM 1/1/2010 +0000, you wrote:
>
>
>I have been trying to figure out a way to get some wire up in my
>crawl-space on the second level of my house .
>
>I am only interested in MW at the moment and the lower part of SW , I want
>the antenna that i make to be very quiet ,I found the plans for the T2FD
>antennas last night and think it would be very good ariel for me but in
>order to make one for 500-1700 Khz it looks like it should be on the order
>of 300 feet long? i don't have that much room. Iv'e read these are very
>broadband so maybe it would'nt need to be that long .

loop type balanced antennas tend to be quieter than dipole type balanced antennas .... and much quieter than antennas end fed against ground. Since you are interested in MW and lower HF reception you will by definition be using a "small" loop with very low signal strength to the receiver (assuming an untuned loop) with broadband coupling. Putting such an antenna some distance from the receiver will require coupling to a feed line .... in such a way as to maintain loop and feed line balance .... so as to reduce or eliminate common mode currents (a good source of noise). A receiver with good sensitivity is required ... or an axillary broadband amplifier could be used (best located at the antenna feed point).

>Then your setup with the slinkys got me thinking? does the extra wire in a
>slinky (being in a coil)act like a longer antenna ?
>
>In other words ,because of the coils in the slinky is there more wire up
>than just the physical length of the slinky?

The only thing a length of slinky adds to an antenna X feet long over a straight wire X feet long is additional inductance. The added inductance could be used strategically in certain antenna configurations to achieve resonance .... or to achieve certain phase shifting. In either case the resonance or phase shift is frequency dependant .... antithetical to the concept of a broadband function.

>Another question i had ,is there a null with the flag antenna?

The Flag antenna and other similar type antennas are technically broadband loops with the low noise characteristics, desirable in achieving a good S/N ratio .... however they are special loops that by virtue of shape, resistive terminations, and strategic feed points achieve a directional radiation pattern .... usually a cardiod shape. It is possible to cause antenna currents within the loop to be maximum in certain portions and minimum in others .... causing those portions with current to act in a

similar fashion to a yagi antenna. To answer your question ... yes, it is possible to rotate the whole affair such that minimum reception in the pattern can point in different directions.

Jim

7016. Re: [loopantennas] slinky versus straight wire question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-01 09:11:23 UTC
From: david
Topic: 7014 Message: 7016

have a look here hope this helps cheers david
http://www.youtube.com/user/tvdxrools#p/u/147/rgZ4y0Gql6k

----- Original Message -----
From: Dean Wayman
To: loopantennas@yahoogroups.com
Sent: Friday, January 01, 2010 1:14 AM
Subject: [loopantennas] slinky versus straight wire question

I have been trying to figure out a way to get some wire up in my crawl-space on the second level of my house .

I am only interested in MW at the moment and the lower part of SW , I want the antenna that i make to be very quiet ,I found the plans for the T2FD antennas last night and think it would be very good ariel for me but in order to make one for 500-1700 Khz it looks like it should be on the order of 300 feet long? i don't have that much room. Iv'e read these are very broadband so maybe it would'nt need to be that long .

Then your setup with the slinkys got me thinking? does the extra wire in a slinky (being in a coil)act like a longer antenna ?

In other words ,because of the coils in the slinky is there more wire up than just the physical length of the slinky?

Another question i had ,is there a null with the flag antenna?

Anyway i would be very interested in how you made your antenna if you would like to post a diagram and specs?

Thanks

Dean_0

[Non-text portions of this message have been removed]

7017. Re: [loopantennas] RE: Sourcing 1

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-01 15:51:11 UTC
From: Chris Trask
Topic: 6995 Message: 7017

>
> I want to build an electronically tunable, receive-only mobile HF
> antenna mainly for 160/80/40 meter bands, tuned with a varactor
> diode as part of a feedpoint matching network.
>
> After learning of a very interesting paper written by Chris Trask
> (thanks, Chris!!!) a couple of months ago, I successfully reproduced
> his varactor matcher for a small receiving loop (now lives in the
> back yard and is a great 80-40-30M antenna),
>

I'm hearing from a number of people lately who have made this antenna. It was the result of a more ambitious project to make a remotely tuned transmitting loop antenna that did away with the Faraday matching loop or the Delta matching, which many people did not care for. The result was similar to the varactor-tuned receiving loop, but with a motor-driven variable capacitor in place of the varactors:

http://www.home.earthlink.net/~christrask/Paper012.html

>
> so I'm inspired now (with parts on order, and anxiously awaiting
> the long-backordered miniVNA) to make something along these lines
> (ferrite transformers and a varactor biased with a bias-tee) with a
> ferrite loopstick antenna that would be attached (maybe horizontally)
> to the roof rack of my car (yes, the car roof is steel, so this may
> be a distraction, but I'm looking forward to the learning as much as
> anything...)

Ferrite loopsticks are a bit tricky due to the high impedance when parallel tuned as well as the terribly low voltage or current when the number of turns is reduced to accomodate the varactor capacitance. I designed an active ferrite loop with remote varactor tuning that you may be interested in:

http://www.home.earthlink.net/~christrask/Paper006.html

This approach uses a small toroidal inductor in parallel with the loopstick, so a large number of turns can be used on the loopstick to get a higher signal voltage when the smaller inductor is parallel tuned with the varactors. Painfully simple, but very effective.

Chris

7018. Re: slinky versus T2FD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-02 10:44:48 UTC
From: Mike
Topic: 7014 Message: 7018

Hi Dean.
I am a great fan of the T2FD, never put one in a loft mind but its an idea I have been thinking of.
I am in no way tech in these things so a lot of suck it and see.

My garden is 40 ft long and the T2FD just about fitted in I inverted "Ved" it as well, the spacing was 3ft, the tuning was 7-30 MHz I understand a spacing of 5 ft may have got me to 5 MHz must try that this summer, as to using a slinky the extra wire may do the trick over a distance of 40 ft and bigger spacing, bringing the freq down to 3/4 megs who knows.

It was as I said a great antenna I got to Diego Garsear in the Indian Ocean on 10 watts beating a pile up on 20 Mt's.

Your need a non terminating 680 ohm resistor hope you can get that OK or make one up from a pile of mixed resistors.

You can buy ready made T2FD but the price is megger bucks.

HERES A GOOD TIP, use overhead telephone line wire that the guys no longer want, its steel/copper I think! very strong.

Hope this helps
--- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@...> wrote:
>
> I have been trying to figure out a way to get some wire up in my crawl-space on the second level of my house .
>
> I am only interested in MW at the moment and the lower part of SW , I want the antenna that i make to be very quiet ,I found the plans for the T2FD antennas last night and think it would be very good ariel for me but in order to make one for 500-1700 Khz it looks like it should be on the order of 300 feet long? i don't have that much room. Iv'e read these are very broadband so maybe it would'nt need to be that long .
>
> Then your setup with the slinkys got me thinking? does the extra wire in a slinky (being in a coil)act like a longer antenna ?
>
> In other words ,because of the coils in the slinky is there more wire up than just the physical length of the slinky?
>
> Another question i had ,is there a null with the flag antenna?
>
> Anyway i would be very interested in how you made your antenna if you would like to post a diagram and specs?
>
> Thanks
>

> Dean_0
>

7019. FLAG ANTENNA VIDS - lets TALK.!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-02 15:12:14 UTC
From: Mike
Topic: 7009 Message: 7019

Hi David. WE never did talk!!!!!!!!!!
Once again then. Just seen your video fantastic it came over very well, I am thinking of putting a FLAG ANTENNA in my loft it would be facing South so WEst off the side! but need help,thing is getting the BALum and resistor made, so may come to you for help, as you said in that vid "Making this Balum to send to a friend and I hope you can knock up one for me AT COST.
My loft has no water tanks and is about 29/30 feet long.

I have about 6 Slinky's which I was going to run down the garden that may come about in the summer once I get the idea as to its workings and layout.
> I but have two drunks living under me that have given problems in the past Ofcom visits and all I won BTW, I think that should stop now after 11.5 years of hell from them, its a long story and do not wish to do my washing here, could we talk I ordered a 2.2 K ohm variable today so just need trhe BALum, no good sending me to a site as I have no idea as to what I will see there. my TWO email address's are michael.evans380@googlemail.com OR wendy-michael@....

7020. Re: [loopantennas] FLAG ANTENNA VIDS - lets TALK.!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-02 15:27:20 UTC
From: david
Topic: 7009 Message: 7020

i have just replied to this at your personal email. flag baluns are easy just get a ferrite ring put 48 turns of insulated wire at one side this goes to the flag and take 11 turns of insulated wire at the other side of the ring this goes to the coax surley you can make this on your own and again its not a balum its a balun ... cheers david
----- Original Message -----
From: Mike
To: loopantennas@yahoogroups.com
Sent: Saturday, January 02, 2010 3:12 PM
Subject: [loopantennas] FLAG ANTENNA VIDS - lets TALK.!

Hi David. WE never did talk!!!!!!!!!!
Once again then. Just seen your video fantastic it came over very well, I am thinking of putting a FLAG ANTENNA in my loft it would be facing South so WEst off the side! but need help,thing is getting the BALum and resistor made, so may come to you for help, as you said in that vid "Making this Balum to send to a friend and I hope you can knock up one for me AT COST.
My loft has no water tanks and is about 29/30 feet long.

I have about 6 Slinky's which I was going to run down the garden that may come about in the summer once I get the idea as to its workings and layout.
> I but have two drunks living under me that have given problems in the past Ofcom visits and all I won BTW, I think that should stop now after 11.5 years of hell from them, its a long story and do not wish to do my washing here, could we talk I ordered a 2.2 K ohm variable today so just need trhe BALum, no good sending me to a site as I have no idea as to what I will see there. my TWO email address's are michael.evans380@... OR wendy-michael@....

[Non-text portions of this message have been removed]

7021. Re: slinky versus T2FD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-02 15:50:43 UTC
From: tenorman1952
Topic: 7014 Message: 7021

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
>
> Hi Dean.
> I am a great fan of the T2FD, never put one in a loft mind but its an idea I have been thinking of.
> I am in no way tech in these things so a lot of suck it and see.

Our club has the similar B&W folded loop that we attempted to use on Field Day. It just did not put out. SWR was excellent on all bands tested, but it radiated like a dummy load. The club president drove home a few miles away and could not hear it at all.

In the end, we had only one antenna, mine, a homebrew Buddipole variant, and all contacts made that day were on my antenna.

The T2FD gets very mixed reviews.

Paul
AE5JU

7022. Re: slinky versus T2FD something was very wrong

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-02 16:58:39 UTC
From: Mike
Topic: 7014 Message: 7022

Something was very wrong with that T2FD mine is ex US war dept type all green, put in a google search, I think the Danish club DXSWG or something like that has detail, was the T2FD not made by a guy named Countryman in about 1940!!! it was use by the japs during the war as well I understand, so has a long history, so how did my T2FD get a signal to the Indian ocean! if its c&*p. Mike Uk.

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@> wrote:
> >
> >
> > Hi Dean.
> > I am a great fan of the T2FD, never put one in a loft mind but its an idea I have been thinking of.
> > I am in no way tech in these things so a lot of suck it and see.
>
> Our club has the similar B&W folded loop that we attempted to use on Field Day. It just did not put out. SWR was excellent on all bands tested, but it radiated like a dummy load. The club president drove home a few miles away and could not hear it at all.
>
> In the end, we had only one antenna, mine, a homebrew Buddipole variant, and all contacts made that day were on my antenna.
>
> The T2FD gets very mixed reviews.
>
> Paul
> AE5JU
>

7023. 48/11 balun what ferrite

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-02 17:07:55 UTC
From: Mike
Topic: 7009 Message: 7023

Hi David. Now that things have calmed down, between us!!!!!!!!!! tell me that type number ferrite ring and what gauge wire. You have not seen my hands as to making such things, its not a head thing but a fingers thing. Mike Cheers.

7024. On FILE!!! 48/11 balun

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-02 21:44:31 UTC
From: Mike
Topic: 7024 Message: 7024

Is this balun on file as I cannot see it, and to my mind it should be - What gauge wire - What type of round ferrite ring. Mike

7025. RE: Sourcing 1

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-02 23:48:33 UTC
From: david feldman
Topic: 6995 Message: 7025

Here's a question -

I looked at stormwise.com as a possible source for large ferrite rod to use in such a project, but they're not cheap, so I'm doing some research. I suspect (but haven't tried to confirm) that stormwise rods are internally a string of large ferrite beads like those put over coax to build a RF choke (or otherwise control EMC on a round cable), packed into a piece of PVC tubing readily found at local hardware store.

I found a source for EMC control beads at mouser (I'm sure there are many other varieties and distributors, but I have an order at mouser going out soon so I'm interested if these might be suitable). The catalog page I'm looking at is at the bottom part of the page below.

http://www.mouser.com/catalog/catalogUSD/640/956.pdf

These particular beads are made by steward (acquired by Laird Technologies). On Laird's website, the "28" prefix corresponds to a bead suited to tens of MHz frequencies (they have a lower- and higher-frequency material).

So my question is this - if indeed stormwise large ferrite rods are indeed a bunch of big beads packaged in PVC tubing (and there are no convenient sources for monolithic ferrite rods in the 1" diameter range), then I'd like to experiment with making my own such ferrite rod so I can try variations.

Any comment or suggestion on taking this approach to build a loopstick's ferrite rod core (or other suggestion to source such beads, etc.?)

Thanks,

Dave

> > so I'm inspired now (with parts on order, and anxiously awaiting
> > the long-backordered miniVNA) to make something along these lines
> > (ferrite transformers and a varactor biased with a bias-tee) with a
> > ferrite loopstick antenna that would be attached (maybe horizontally)
> > to the roof rack of my car (yes, the car roof is steel, so this may
> > be a distraction, but I'm looking forward to the learning as much as
> > anything...)
>
> Ferrite loopsticks are a bit tricky due to the high impedance when parallel tuned as well as the terribly low voltage or current when the number of turns is reduced to accomodate the varactor capacitance. I designed an active ferrite loop with remote varactor tuning that you may be interested in:
>
> http://www.home.earthlink.net/~christrask/Paper006.html
>
> This approach uses a small toroidal inductor in parallel with the loopstick, so a large

number of turns can be used on the loopstick to get a higher signal voltage when the smaller inductor is parallel tuned with the varactors. Painfully simple, but very effective.
>
> Chris

_____
Your E-mail and More On-the-Go. Get Windows Live Hotmail Free.
http://clk.atdmt.com/GBL/go/171222985/direct/01/

[Non-text portions of this message have been removed]

7026. Re: Sourcing 1

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-03 00:57:40 UTC
From: xtemporize
Topic: 6995 Message: 7026

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
> http://www.home.earthlink.net/~christrask/Paper006.html
>
> This approach uses a small toroidal inductor in parallel with the loopstick, so a large number of turns can be used on the loopstick to get a higher signal voltage when the smaller inductor is parallel tuned with the varactors. Painfully simple, but very effective.
> Chris

Chris, a question about the circuit. I am accustomed to seeing the "opposite" kind of loop to tuned circuit coupling, I mean, a low inductance small turns winding either in series with the main tuned L or tapped onto it. I wonder, how does the self-inductance and shunt capacitance effect of the large antenna winding affect the L1 tuned circuit. I would expect the shunt capacitance to limit the tuning range of L1. Also, you say the turns on the antenna winding can be adjusted for other tuning ranges. So what criteria do we apply when doing this, for the number of turns = self resonance of the antenna winding? Also, if more turns on the antenna winding => higher voltage developed, what defines the upper limit of turns here?
Also, one post mentioned buiiding this for a mobile loop. That reminded me of an article I saw in Wireless World (UK) that had such an antenna for vehicle MW reception - but it used two loops, at 90 degrees, and a simple phase shift circuit, to offset the signals by (if i recall) something like 30 degrees so that there was never a null signal point. That was to eliminate loss of the signal while driving. Of course the magnetic antenna benefit of disfavoring electric field noise still applied. -Hue Miller

7027. Re: [loopantennas] RE: Sourcing 1

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-03 01:24:03 UTC
From: John Popelish
Topic: 6995 Message: 7027

david feldman wrote:
(snip)
> I found a source for EMC control beads at mouser (I'm
> sure there are many other varieties and distributors, but
> I have an order at mouser going out soon so I'm
> interested if these might be suitable). The catalog page
> I'm looking at is at the bottom part of the page below.
>
> http://www.mouser.com/catalog/catalogUSD/640/956.pdf
>
> These particular beads are made by steward (acquired by
> Laird Technologies). On Laird's website, the "28" prefix
> corresponds to a bead suited to tens of MHz frequencies
> (they have a lower- and higher-frequency material).

They are suited to absorb energy over a wide range of
frequency, but make good, high Q rods only at the lower end
of that range. Type 28 can be pushed (with thin shims
between beads to work pretty well through the AM band, but
their permeability is falling and their losses are rising
fast above 1 MHz.

> So my question is this - if indeed stormwise large
> ferrite rods are indeed a bunch of big beads packaged in
> PVC tubing (and there are no convenient sources for
> monolithic ferrite rods in the 1" diameter range), then
> I'd like to experiment with making my own such ferrite
> rod so I can try variations.

> Any comment or suggestion on taking this approach to
> build a loopstick's ferrite rod core (or other suggestion
> to source such beads, etc.?)

I have built many test rods with this brand of bead with
pretty good results. For frequencies below 500kHz, I had
better results with the LFB (low frequency bead) material
cores. I like the ones that fit inside 1/2 or 3/4 inch thin
walled PVC pipe. LFB174095-000 is 17.4mm diameter by
28.58mm long and cost about $2 each (out of stock at the
moment at Digikey, unfortunately). Though they do not
appear on the page you listed, Mouser appears to have some
in stock.

Going all the way up to 1 inch diameter beads showed no
improvement over these smaller ones in my tests (up to 1
foot long rods). Perhaps at two feet length and below

100kHz, there might be an advantage of the larger diameter.

--
Regards,

John Popelish

7028. new loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-03 02:13:07 UTC
From: Dean Wayman
Topic: 7028 Message: 7028

Thanks for the info everyone!

After much studying on the net i finnaly decided on a loop antenna ...sorta?

This is for recieve only

It was my intention to build a T2FD but i noticed it would have to be much bigger than the space i had available. And the reviews don't seem that great .

I also found plans for the Flag and pennant antennas but they also needed more space than i had ,so i decided to run a wire in the space i had and see what would happen, it's just a simple rectangle loop 45 feet long and 4 feet or so high ,center fed ,I may put a resistor and a balun on it later ,but for now i'm going to test for a few day's.

So far it seems quiet , on the upper part of AM .
I did a little SW too and it seems to work ok .

Dean_0

7029. Re: [loopantennas] RE: Sourcing 1

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-03 03:33:53 UTC
From: Paul V Birke PEng
Topic: 6995 Message: 7029

for one I thought IPEX tubing was better for RF than plain PVC

best Paul VE3PVB

From: david feldman <wb0gaz@hotmail.com>
To: loopantennas@yahoogroups.com
Sent: Sat, January 2, 2010 6:48:33 PM
Subject: [loopantennas] RE: Sourcing 1

Here's a question -

I looked at stormwise.com as a possible source for large ferrite rod to use in such a project, but they're not cheap, so I'm doing some research. I suspect (but haven't tried to confirm) that stormwise rods are internally a string of large ferrite beads like those put over coax to build a RF choke (or otherwise control EMC on a round cable), packed into a piece of PVC tubing readily found at local hardware store.

I found a source for EMC control beads at mouser (I'm sure there are many other varieties and distributors, but I have an order at mouser going out soon so I'm interested if these might be suitable). The catalog page I'm looking at is at the bottom part of the page below.

http://www.mouser. com/catalog/ catalogUSD/ 640/956.pdf

These particular beads are made by steward (acquired by Laird Technologies) . On Laird's website, the "28" prefix corresponds to a bead suited to tens of MHz frequencies (they have a lower- and higher-frequency material).

So my question is this - if indeed stormwise large ferrite rods are indeed a bunch of big beads packaged in PVC tubing (and there are no convenient sources for monolithic ferrite rods in the 1" diameter range), then I'd like to experiment with making my own such ferrite rod so I can try variations.

Any comment or suggestion on taking this approach to build a loopstick's ferrite rod core (or other suggestion to source such beads, etc.?)

Thanks,

Dave

> > so I'm inspired now (with parts on order, and anxiously awaiting
> > the long-backordered miniVNA) to make something along these lines
> > (ferrite transformers and a varactor biased with a bias-tee) with a
> > ferrite loopstick antenna that would be attached (maybe horizontally)
> > to the roof rack of my car (yes, the car roof is steel, so this may
> > be a distraction, but I'm looking forward to the learning as much as
> > anything...)

>
> Ferrite loopsticks are a bit tricky due to the high impedance when parallel tuned as well as the terribly low voltage or current when the number of turns is reduced to accomodate the varactor capacitance. I designed an active ferrite loop with remote varactor tuning that you may be interested in:
>
> http://www.home. earthlink. net/~christrask/ Paper006. html
>
> This approach uses a small toroidal inductor in parallel with the loopstick, so a large number of turns can be used on the loopstick to get a higher signal voltage when the smaller inductor is parallel tuned with the varactors. Painfully simple, but very effective.
>
> Chris

_____ _____ _____ _____ _____ _____ _
Your E-mail and More On-the-Go. Get Windows Live Hotmail Free.
http://clk.atdmt. com/GBL/go/ 171222985/ direct/01/

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7030. Re: new loop in LOFT

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-03 06:29:44 UTC
From: Mike
Topic: 7028 Message: 7030

Hi Dean. Glad you were happy with all the advice given re T2FD and Slinky - even mine LOL, I too am going to put as a test a FLAG in the loft, my loft is smaller tan yours being 30ft long but 5ft high, hope we can report both our results. UK mike.

7031. 160 /80 mtr loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-03 11:02:48 UTC
From: richard
Topic: 7031 Message: 7031

```
Hi all
re earlier postings, of intending to use the VHF/SHF array as a frame for a 4 turn loop.

Has anyone used 1mm 3 + E cable , its the flat cable with 4 cores with about 1.5 mm spacing
between
each wire, PVC coated. ?

Do you need to tune the loop with a capacitor ?
The circumference of this loop is going to be 20 mtrs, I was thinking maybe
for 20 mtr use short all four wires together.
for 40 mtrs use the 4 core as two pairs.
for 80 mtrs connect the 4 cores in series
and for 160 mtrs a gurt big capacitor across the 4 cores in series.
I could use relays at masthead to switch the elements.

I had a look at the links already suggested..
As this loop is rotatable would I see any directivity on the lower bands ?

and direction of maximum radiation , is it end on or side on.

As soon as the weather warms up a bit I'll get outside and play, but until then its ask
questions.

Thanks
--
Best wishes

Richard Bown

##########################################################################################
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##########################################################################################
```

7032. Re: 160 /80 mtr loop - flat cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-03 13:26:56 UTC
From: Mike
Topic: 7031 Message: 7032

Hi. Would not flat cable or could you be saying ribbon cable make the turns far too close.
uk Mike.

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> Hi all
> re earlier postings, of intending to use the VHF/SHF array as a frame for a 4 turn loop.
>
> Has anyone used 1mm 3 + E cable , its the flat cable with 4 cores with about 1.5 mm
spacing between
> each wire, PVC coated. ?
>
> Do you need to tune the loop with a capacitor ?
> The circumference of this loop is going to be 20 mtrs, I was thinking maybe
> for 20 mtr use short all four wires together.
> for 40 mtrs use the 4 core as two pairs.
> for 80 mtrs connect the 4 cores in series
> and for 160 mtrs a gurt big capacitor across the 4 cores in series.
> I could use relays at masthead to switch the elements.
>
> I had a look at the links already suggested..
> As this loop is rotatable would I see any directivity on the lower bands ?
>
> and direction of maximum radiation , is it end on or side on.
>
> As soon as the weather warms up a bit I'll get outside and play, but until then its ask
questions.
>
> Thanks
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7033. Re: [loopantennas] Re: 160 /80 mtr loop - flat cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-03 14:11:41 UTC
From: richard
Topic: 7031 Message: 7033

On Sun, 03 Jan 2010 13:26:56 -0000
"Mike" <michaelrae65@...> wrote:

> Hi. Would not flat cable or could you be saying ribbon cable make the turns far too close. uk
> Mike.

I'm not sure Mike, its going to have to be a bit of a compromise as the top antenna on the array is
a 67 element for 23 cms (1296 MHz). With the total cable width of about 1 cm., I should be able to
get away with passing the cable over the end of the boom on that antenna. The boom is 15 mm square
section. If I space out the turns it may have an effect on the 23 cms antenna, ie loss of gain or
skew the main lobe.

People with large arrays on VHF upwards dont normally have much interest in the LF bands and vice
versa.

>
> --- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
> >
> > Hi all
> > re earlier postings, of intending to use the VHF/SHF array as a frame for a 4 turn loop.
> >
> > Has anyone used 1mm 3 + E cable , its the flat cable with 4 cores with about 1.5 mm spacing
> > between each wire, PVC coated. ?
> >
> > Do you need to tune the loop with a capacitor ?
> > The circumference of this loop is going to be 20 mtrs, I was thinking maybe
> > for 20 mtr use short all four wires together.
> > for 40 mtrs use the 4 core as two pairs.
> > for 80 mtrs connect the 4 cores in series
> > and for 160 mtrs a gurt big capacitor across the 4 cores in series.
> > I could use relays at masthead to switch the elements.
> >
> > I had a look at the links already suggested..
> > As this loop is rotatable would I see any directivity on the lower bands ?
> >
> > and direction of maximum radiation , is it end on or side on.
> >
> > As soon as the weather warms up a bit I'll get outside and play, but until then its ask

> > questions.
> >
> > Thanks
> > --
> > Best wishes
> >
> > Richard Bown
> >
> > ##
> > Registered Linux User 36561
> > OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> > Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> > ##
> >
>
>

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7034. re:160/80 flat cable loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-05 19:58:55 UTC
From: richard
Topic: 7034 Message: 7034

Hi all I've done a bit more trawling and found a very useful loop antenna calculator

http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm

look at the OH7SV Magnetic Loop Calculator (Excel file).

Putting in the dimensions it looks as if my idea will work, with one hickup, due to the diameter of
the wire the efficiency drops to about 1%

Anyone got a source of low cost variable vacuum caps 100pF, I cant see any under about £60

TIA
--
Best wishes

Richard Bown

Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz

7035. Re: [loopantennas] re:160/80 flat cable loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-05 20:20:03 UTC
From: Marc
Topic: 7034 Message: 7035

richard schreef:
>
>
>
> Hi all I've done a bit more trawling and found a very useful loop
> antenna calculator
>
> http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm
> <http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm>
>
> look at the OH7SV Magnetic Loop Calculator (Excel file).
>

I have another view on the data:

scroll down:
http://users.fulladsl.be/~spb13810/

--
What's on Shortwave guide: choose an hour, go!
http://shortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

7036. Re: [loopantennas] re:160/80 flat cable loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-05 21:32:38 UTC
From: jacob_twotwo@q.com
Topic: 7034 Message: 7036

I haven't been following this thread and alittle confused but could you
please tell me what this loop antenna is all about and for what type of
radio listening is it used for after viewing the photos from the link
you provided, thanks.

On 1/5/2010 12:58 PM, richard wrote:
> Hi all I've done a bit more trawling and found a very useful loop antenna calculator
>
> http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm
>
> look at the OH7SV Magnetic Loop Calculator (Excel file).
>
> Putting in the dimensions it looks as if my idea will work, with one hickup, due to the
diameter of
> the wire the efficiency drops to about 1%
>
> Anyone got a source of low cost variable vacuum caps 100pF, I cant see any under about
£60
>
> TIA
>

7037. Re: [loopantennas] re:160/80 flat cable loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-06 05:16:38 UTC
From: Marc
Topic: 7034 Message: 7037

Marc schreef:
>
>
> richard schreef:
> >
> >
> >
> > Hi all I've done a bit more trawling and found a very useful loop
> > antenna calculator
> >
> >
> http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm
> <http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm>
>
> >
> <http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm
> <http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm>>
> >
> > look at the OH7SV Magnetic Loop Calculator (Excel file).
> >
>
> I have another view on the data:
>
> scroll down:
> http://users.fulladsl.be/~spb13810/
> <http://users.fulladsl.be/%7Espb13810/>
>

must have made an error while replacing it ...

old version
http://users.fulladsl.be/~spb13810/amloop.htm

Marc

--
What's on Shortwave guide: choose an hour, go!
http://shortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

7038. Re: [loopantennas] re:160/80 flat cable loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-06 09:16:39 UTC
From: richard
Topic: 7034 Message: 7038

On Wed, 06 Jan 2010 06:16:38 +0100
Marc <marcsje@...> wrote:

> Marc schreef:
> >
> >
> > richard schreef:
> > >
> > >
> > >
> > > Hi all I've done a bit more trawling and found a very useful loop
> > > antenna calculator
> > >
> > >
> > > http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm
> > > <http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm>
> > >
> > >
> > > <http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm
> > >
<http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm>>
> > >
> > > look at the OH7SV Magnetic Loop Calculator (Excel file).
> > >
> > >
> > > I have another view on the data:
> > >
> > > scroll down:
> > > http://users.fulladsl.be/~spb13810/
> > > <http://users.fulladsl.be/%7Espb13810/>
> > >
> >
> > must have made an error while replacing it ...
> >
> > old version
> > http://users.fulladsl.be/~spb13810/amloop.htm
> >
> > Marc
> >

Hi Marc

yes the old version works OK
Could you please explain the term edge length please.
I assuming that loop width is the diameter of the loop, is edge length the circumference ?

Thanks
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7039. Re: [loopantennas] re:160/80 flat cable loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-06 09:23:02 UTC
From: richard
Topic: 7034 Message: 7039

```
On Tue, 05 Jan 2010 14:32:38 -0700
jacob_twotwo@... wrote:

> I haven't been following this thread and alittle confused but could you
> please tell me what this loop antenna is all about and for what type of
> radio listening is it used for after viewing the photos from the link
> you provided, thanks.
>
>
>

see thread 160m loops about a week ago
Its for transmitting and receive on the Amateur radio bands at 1.8 MHz, 3.5-3.8 MHz &
7.0-7.2 MHz.
HTH

--
Best wishes

Richard Bown

##########################################################################################
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##########################################################################################
```

7040. loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-07 11:18:12 UTC
From: richard
Topic: 7040 Message: 7040

Hi all

Now I've got this 12' dia loop nearly constructed, how critical are loop to nearby objects
?
ie could I mount it on the side of the tower with say a 4' standoff between the tower and
the
loop ?.

Or could I mount it on a 2" dia Aluminium pole fixed at the top and bottom with just 1"
separation
between the loop and pole ?
TIA
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7041. Re: [loopantennas] loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-08 04:16:05 UTC
From: Richard (Rick) Karlquist
Topic: 7040 Message: 7041

I have done a lot of experimenting with a 160 meter loop (20 ft
perimeter) and found that nearby objects are quite detrimental
if you want to get a sharp null. Certainly, 4 ft from a tower
is a non starter. BTW, I have found that 12 ft diameter is
too large to get a good null even on 160 meters, let alone
higher bands.

Rick N6RK

richard wrote:
>
>
> Hi all
>
> Now I've got this 12' dia loop nearly constructed, how critical are loop
> to nearby objects ?
> ie could I mount it on the side of the tower with say a 4' standoff
> between the tower and the
> loop ?.
>
> Or could I mount it on a 2" dia Aluminium pole fixed at the top and
> bottom with just 1" separation
> between the loop and pole ?
> TIA
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz &
> 5.7GHz & 10 GHz
> ##
>
>

7042. Re: [loopantennas] loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-08 14:56:05 UTC
From: richard
Topic: 7040 Message: 7042

On Thu, 07 Jan 2010 20:16:05 -0800
"Richard (Rick) Karlquist" <richard@...> wrote:

> I have done a lot of experimenting with a 160 meter loop (20 ft
> perimeter) and found that nearby objects are quite detrimental
> if you want to get a sharp null. Certainly, 4 ft from a tower
> is a non starter. BTW, I have found that 12 ft diameter is
> too large to get a good null even on 160 meters, let alone
> higher bands.
>
> Rick N6RK
>
Thanks for the reply Rick, I'm not too worried about the null., but the radiation efficiency is
important . So As you susggest forget the tower and I'll mount it on a pole away from the house.
I've used OH7SV's spreadsheet and the gain/efficiency makes huge improvements when conductor
diameter is increased, Hence the reason that designs for 80 mtr loops use 22mm / 3/4" conductors.

The price or Cu is still high and 22mm tube is about $8 /mtr, hence the reason for constructing out
of LDF4-50 .

However when it comes to a 160mtr loop, using Matti's spreadsheet would suggest that a very large
diameter conductor would yield the best results.
Also at 160 mtrs is the RF still being conducted on the surface of the conductor , or is it starting to behave as at lower frequencies by using the whole conductor ?, At the next band down
that's usable 136KHz its very questionable.
I suspect that for LF transmitting loops it may possible to get high efficiencies and gain from
using long strips of aluminium 500mm wide riveted together to form a large loop.

Enter Results
Inductance (uH) 10.440
Frequency (MHz) 1.8 Capacitance (pF) 748.8
Loop conductor length (m)20 XL = XC (ohms) 118.1
Conductor diameter (mm) 500 Distributed C (pF) 53.8
RF power (W) 30 Tuning capacitance (pF) 695.0
Main loop diameter (m) 6.366
Feeding loop diameter(m)1.273
Radiation resistance (ohms) 0.042
Loss resistance (ohms) 0.004

Parallel resistance (kohms) 151
Efficiency (%) 90.3
Compared to ideal loop (dB) -0.44
Loaded Q 1281
Bandwidth -3dB (kHz) 1.4
Capcitor rms voltage (V) 2130

With this loop the tuning cao would be 618pF to resonate at
1.9 MHz , so roughly 1pF/1kHz

I haven't make the correction for the surface area of the conductor , the circumference of a 500 mm
diameter conductor is about 1.5 mtrs whereas a sheet of 500 mm X 1mm is 1.002 mtrs.
This surely begs the question that if the RF current is still 100% flowing on the surface of the
conductor, the thickness of the conductor if sheet is used can be reduced substantially, maybe to
the point of aluminium cooking foil being used.
The extra wide stuff found in supermarkets at Christmas and in the US around Thanksgiving would
take the circumference back up to 1.5 mtrs.
Making a very low cost antenna after the problem of supporting the foil is solved .

Food for thought ?

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7043. Re: [loopantennas] loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-08 16:36:28 UTC
From: Richard (Rick) Karlquist
Topic: 7040 Message: 7043

richard wrote:

> Thanks for the reply Rick, I'm not too worried about the null., but the
> radiation efficiency is
> important . So As you susggest forget the tower and I'll mount it on a

You didn't say you wanted to use the loop for transmitting. Why would
you want to do that instead of shunt loading your tower?

> This surely begs the question that if the RF current is still 100%
> flowing on the surface of the
> conductor, the thickness of the conductor if sheet is used can be
> reduced substantially, maybe to
> the point of aluminium cooking foil being used.
> The extra wide stuff found in supermarkets at Christmas and in the US
> around Thanksgiving would
> take the circumference back up to 1.5 mtrs.
> Making a very low cost antenna after the problem of supporting the foil
> is solved .
>
> Food for thought ?
>
> --
> Best wishes
>
> Richard Bown

I had thought of the same idea using adhesive backed aluminum
tape that is sold for stove pipe joints. The problem is that the
Q is already in the 100's even if you make the loop out of RG6
coax as described in my National Contest Journal article
(pdf at: http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf).

If I made one out of 4 inch plastic pipe covered with foil, the
Q would easily be over 1000. That gives a bandwidth of only a few
kHz on 160 meters. The voltage across the tuning capacitor at
any significant power would be astronomical.

And that's why loops are only for receiving IMHO.

Rick N6RK

7044. Variables for sale.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-08 17:16:03 UTC
From: Mike
Topic: 7044 Message: 7044

I have put up a for sale a post in Skywaves MW loop group, and I am posting here.
I have about 10+ metal types and 8+ dialectic types.
Pics of these will be sent by reply so you can tell me which one or ones you want.
The two connect emails are,
michael.evans380@...
OR
wendy-michael@...
I will send at postage cost and item cost World Wide.
ANYONE STILL MAKING MEDIUM WAVE LOOPS!!!!!!!!!!
Mike uk Suffolk.

7045. Re: loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-08 17:20:41 UTC
From: capntripps2000
Topic: 7040 Message: 7045

There are alternatives. If maximum transmitting efficiency is the goal then a 1/4w circumference loop made of wire would work very well if you feed the antenna next to the tuning capacitor where the impedance is much higher and the resistive losses are minimized.

See Ben G0CWT's web site: http://g0cwt.co.uk/magloops/
Review all the above thoroughly.

I built an 80M wire magnetic loop using Ben's feed method and use it with great success on both 80M and 160M. Mind you stealth is what I had in mind and this fit the bill.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@...> wrote:

> If I made one out of 4 inch plastic pipe covered with foil, the
> Q would easily be over 1000. That gives a bandwidth of only a few
> kHz on 160 meters. The voltage across the tuning capacitor at
> any significant power would be astronomical.
>
> And that's why loops are only for receiving IMHO.
>
> Rick N6RK
>

7046. Re: [loopantennas] loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-08 18:15:24 UTC
From: richard
Topic: 7040 Message: 7046

On Thu, 07 Jan 2010 20:16:05 -0800
"Richard (Rick) Karlquist" <richard@...> wrote:
Sorry Rick I managed to delete your last message , so cant quote from it.

Shunt loading the tower~ maybe, but there are a lot of expensive electronics up there, there are
microwave transverters for 13 cms and 6 cms as well as masthead pre-amps for 23 cms, 70 cms & 2mtrs.
The base of the tower is well earthed so finding the fed point could be difficult, but if you have
info of an idiot proof way of loading the tower , I'd be very interested.
I'm not so sure that loops are for Rx only, any thing that can be made to resonate is fair game for
putting RF in to it.

AS for the high Q and high voltages, in the UK the most used part of top band has a limit of 30W,
with a Q of 1100 , that a peak voltage across the cap of 2KV with a bandwidth of 1.5 KHz, but If
you listen on top band in the UK you find most QSO s are centered around 1.933 MHz only offset by a
K or so.
At the full limit on topband there is a section which allows 400W , but thats still only 7.5 KV,
easily handled by some of the vacuum caps available.

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7047. Re: [loopantennas] loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-08 18:37:19 UTC
From: Rick Karlquist
Topic: 7040 Message: 7047

richard wrote:
> On Thu, 07 Jan 2010 20:16:05 -0800
> "Richard (Rick) Karlquist" <richard@...> wrote:
> Sorry Rick I managed to delete your last message , so cant quote from it.
>
> Shunt loading the tower~ maybe, but there are a lot of expensive
> electronics up there, there are
> microwave transverters for 13 cms and 6 cms as well as masthead pre-amps
> for 23 cms, 70 cms & 2mtrs.
> The base of the tower is well earthed so finding the fed point could be
> difficult, but if you have
> info of an idiot proof way of loading the tower , I'd be very interested.
> I'm not so sure that loops are for Rx only, any thing that can be made to
> resonate is fair game for
> putting RF in to it.

I don't think shunt feeding the tower on 80 or 160 meters would
bother VHF equipment. I don't know that there is an idiot proof
way of shunt feeding a tower. However, you can model the tower
with EZNEC and do your experimenting on the computer. Then you
should be able to build the actual feed and have a good chance
of it working.

>
> AS for the high Q and high voltages, in the UK the most used part of top
> band has a limit of 30W,
> with a Q of 1100 , that a peak voltage across the cap of 2KV with a
> bandwidth of 1.5 KHz, but If
> you listen on top band in the UK you find most QSO s are centered around
> 1.933 MHz only offset by a
> K or so.
> At the full limit on topband there is a section which allows 400W , but
> thats still only 7.5 KV,
> easily handled by some of the vacuum caps available.
>
> Richard Bown

Very interesting. I had no idea how it worked in the UK. In
the US, we can run 1500W from 1.8 to 2, but I rarely go above 1.9.
I recently worked G3MMT around 1830 kHz and he was over S9 here on
the west coast. I guess a loop could work OK for your purposes.

Rick N6RK

7048. Re: [loopantennas] Re: loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-08 19:53:47 UTC
From: richard
Topic: 7040 Message: 7048

On Fri, 08 Jan 2010 17:20:41 -0000
"capntripps2000" <capntripps2000@...> wrote:

> There are alternatives. If maximum transmitting efficiency is the goal then a 1/4w circumference
> loop made of wire would work very well if you feed the antenna next to the tuning capacitor where
> the impedance is much higher and the resistive losses are minimized.
>
> See Ben G0CWT's web site: http://g0cwt.co.uk/magloops/
> Review all the above thoroughly.
>
> I built an 80M wire magnetic loop using Ben's feed method and use it with great success on both
> 80M and 160M. Mind you stealth is what I had in mind and this fit the bill.
>
> Andrew
> N3LCW
>
>
> --- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@...> wrote:
>
> > If I made one out of 4 inch plastic pipe covered with foil, the
> > Q would easily be over 1000. That gives a bandwidth of only a few
> > kHz on 160 meters. The voltage across the tuning capacitor at
> > any significant power would be astronomical.
> >
> > And that's why loops are only for receiving IMHO.
> >
> > Rick N6RK
> >
>
>
Hi Andrew
I've had a look at Ben's site and I maybe able to get 128' in but I cant get the height

shame

--
Best wishes

Richard Bown

###
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2

Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7049. Re: loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-09 17:27:44 UTC
From: capntripps2000
Topic: 7040 Message: 7049

Richard,

Don't worry about the height, make it fit however you can. Unless you can get the bottom of the 160M loop high above the ground the pattern will have a large NVIS component and will be quite broad also, more oval shape. It will work very well. I've had reports from other's who've tried a short squat 160M wire magnetic loop with excellent results.

Andrew

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Fri, 08 Jan 2010 17:20:41 -0000
> "capntripps2000" <capntripps2000@...> wrote:
>
> > There are alternatives. If maximum transmitting efficiency is the goal then a 1/4w circumference
> > loop made of wire would work very well if you feed the antenna next to the tuning capacitor where
> > the impedance is much higher and the resistive losses are minimized.
> >
> > See Ben G0CWT's web site: http://g0cwt.co.uk/magloops/
> > Review all the above thoroughly.
> >
> > I built an 80M wire magnetic loop using Ben's feed method and use it with great success on both
> > 80M and 160M. Mind you stealth is what I had in mind and this fit the bill.
> >
> > Andrew
> > N3LCW
> >
> >
> > --- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@> wrote:
> >
> > > If I made one out of 4 inch plastic pipe covered with foil, the
> > > Q would easily be over 1000. That gives a bandwidth of only a few
> > > kHz on 160 meters. The voltage across the tuning capacitor at
> > > any significant power would be astronomical.
> > >
> > > And that's why loops are only for receiving IMHO.
> > >
> > > Rick N6RK
> > >
> >
> >
> > Hi Andrew
> > I've had a look at Ben's site and I maybe able to get 128' in but I cant get the height

>
> shame
>
> --
> Best wishes
>
> Richard Bown
>
>

7050. Re: loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-14 13:49:46 UTC
From: Pronto. (Military)
Topic: 7040 Message: 7050

I've built some Magnetic loops and in particular The DCTL Loop for 40 Meters . The loop is only 48 inches square and when tuned is oblivious to surrounding nearby structures. It is actually a rendition of the DDRR military loop (Direct Discontinuity Ring Radiator.) I have operated this antenna within my house and it outperformed an external dipole.
I have design ideas for a broadband version of this square loop as well.
I have posted pictures under VE3DDY.
Jim VE3DDY

--- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@...> wrote:
>
> I have done a lot of experimenting with a 160 meter loop (20 ft
> perimeter) and found that nearby objects are quite detrimental
> if you want to get a sharp null. Certainly, 4 ft from a tower
> is a non starter. BTW, I have found that 12 ft diameter is
> too large to get a good null even on 160 meters, let alone
> higher bands.
>
> Rick N6RK
>
> richard wrote:
> >
> >
> > Hi all
> >
> > Now I've got this 12' dia loop nearly constructed, how critical are loop
> > to nearby objects ?
> > ie could I mount it on the side of the tower with say a 4' standoff
> > between the tower and the
> > loop ?.
> >
> > Or could I mount it on a 2" dia Aluminium pole fixed at the top and
> > bottom with just 1" separation
> > between the loop and pole ?
> > TIA
> > --
> > Best wishes
> >
> > Richard Bown
> >
> > ##
> > Registered Linux User 36561
> > OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> > Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz &
> > 5.7GHz & 10 GHz
> > ##

> >
> >
>

7051. High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-14 16:23:06 UTC
From: Lee- KI4NEJ
Topic: 7051 Message: 7051

Greetings to the list,

As I was driving down the interstate a few afternoons ago, I started tuning the AM dial for the chance of DX.

Much to my surprise, as I crossed under some high-tension powerlines that crossed the highway on the diagonal, instead of RFI, a station from Atlanta came booming-in like I was local. (My QTH is Tampa.)

Was this an example of inductance as I passed under them? I always was under the impression the H/T powerlines were our enemy, due to RFI; now I may have to rethink that.

73,

Lee
KI4NEJ
Tampa, FL USA

_____ Information from ESET Smart Security, version of virus signature database 4771 (20100114) _____

The message was checked by ESET Smart Security.

http://www.eset.com

7052. Re: High-Tension Inductance? Oh YES.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-14 19:32:14 UTC
From: Mike
Topic: 7051 Message: 7052

Quick story that may relate to this, as a pirate on MW/BC we ran 250mW from a 19Th floor tower bloke and the long wave antenna went across a 270 foot gap to another tower block, we got heard 35 miles away one summer, close buy was a metal fence and railway lines and we think our 250mW TX was getting into those lines, when we got DFed the guys, other pirates came to the flat but could not see the TX, the car auto battery could be seen but was the TX really in that match box - yes it was, and so yes lines of wire from anywhere can induce RF, BTW we lived at the back of Euston Station for UK ref.We once used street lamp post how bad can those be with wire going from one to the next. Mike Bungay {UK}

7053. Re: High-Tension Inductance? Oh YES.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-15 14:58:18 UTC
From: wild_bill_yonder
Topic: 7051 Message: 7053

Something I've wondered when experiencing something like this is if the powerlines were blocking out the stronger station in that direction and allowing reception of the weaker staion not being blocked. The AGC might make it seem like it suddenly 'booms in'.

Just wondering..

Bill

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
>
> Quick story that may relate to this, as a pirate on MW/BC we ran 250mW from a 19Th floor tower bloke and the long wave antenna went across a 270 foot gap to another tower block, we got heard 35 miles away one summer, close buy was a metal fence and railway lines and we think our 250mW TX was getting into those lines, when we got DFed the guys, other pirates came to the flat but could not see the TX, the car auto battery could be seen but was the TX really in that match box - yes it was, and so yes lines of wire from anywhere can induce RF, BTW we lived at the back of Euston Station for UK ref.We once used street lamp post how bad can those be with wire going from one to the next. Mike Bungay {UK}
>

7054. Re: High-Tension Inductance? Oh YES.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-15 15:18:04 UTC
From: Lee- KI4NEJ
Topic: 7051 Message: 7054

LOL. Good story, Mike! Thanks for confirming this for me.

Best,

Lee
Tampa

_____ Information from ESET Smart Security, version of virus signature database 4774 (20100115) _____

The message was checked by ESET Smart Security.

http://www.eset.com

7055. Re: [loopantennas] Re: High-Tension Inductance? Oh YES.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-15 17:29:41 UTC
From: Richard (Rick) Karlquist
Topic: 7051 Message: 7055

wild_bill_yonder wrote:
>
>
> Something I've wondered when experiencing something like this is if the
> powerlines were blocking out the stronger station in that direction and
> allowing reception of the weaker staion not being blocked. The AGC might
> make it seem like it suddenly 'booms in'.
>
> Just wondering..
>
> Bill

I've seen this many times going under bridges, on both AM and FM bands.
For example, in the San Francisco Bay Area, many stations from 100 miles
away would be Q5 copy from hilltops if not for the many local stations.
You can often copy these "DX" stations under bridges or if you get
the correct shielding from hills. For example, there is a station on
93.1 MHz in at 3000 ft ASL in Pollock Pines, CA that is often heard all
the way to the Pacific Ocean, at least 100 miles away, because there is
no San Francisco station on this frequency.

High tension lines are inconsistent. Some are big RFI sources, others
are quiet as a church mouse.

Rick N6RK

7056. Re: loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-15 18:03:23 UTC
From: g3squ
Topic: 7040 Message: 7056

Hi Jim

Had a look at the pics and am very interested in this antenna. Is there a technical description anywhere? A Google of "DCTL" reveals that it is a much-used acronym: what does yours stand for?

Chris
G3SQU

--- In loopantennas@yahoogroups.com, "Pronto. (Military)" <portdoverbells@...> wrote:
>
> I've built some Magnetic loops and in particular The DCTL Loop for 40 Meters . The loop is only 48 inches square and when tuned is oblivious to surrounding nearby structures. It is actually a rendition of the DDRR military loop (Direct Discontinuity Ring Radiator.) I have operated this antenna within my house and it outperformed an external dipole.
> I have design ideas for a broadband version of this square loop as well.
> I have posted pictures under VE3DDY.
> Jim VE3DDY
>
> --- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@> wrote:
> >
> > I have done a lot of experimenting with a 160 meter loop (20 ft
> > perimeter) and found that nearby objects are quite detrimental
> > if you want to get a sharp null. Certainly, 4 ft from a tower
> > is a non starter. BTW, I have found that 12 ft diameter is
> > too large to get a good null even on 160 meters, let alone
> > higher bands.
> >
> > Rick N6RK
> >
> > richard wrote:
> > > >
> > > >
> > > > Hi all
> > > >
> > > > Now I've got this 12' dia loop nearly constructed, how critical are loop
> > > > to nearby objects ?
> > > > ie could I mount it on the side of the tower with say a 4' standoff
> > > > between the tower and the
> > > > loop ?.
> > > >
> > > > Or could I mount it on a 2" dia Aluminium pole fixed at the top and
> > > > bottom with just 1" separation
> > > > between the loop and pole ?
> > > > TIA
> > > > --

> > > Best wishes
> > >
> > > Richard Bown
> > >
> > > ##
> > > Registered Linux User 36561
> > > OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> > > Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz &
> > > 5.7GHz & 10 GHz
> > > ##
> > >
> > >
> >
>

7057. Re: High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-15 19:46:25 UTC
From: dannibou
Topic: 7051 Message: 7057

> As I was driving down the interstate a few afternoons ago, I started
> tuning the AM dial for the chance of DX.
>
> Much to my surprise, as I crossed under some high-tension powerlines
> that crossed the highway on the diagonal, instead of RFI, a station from
> Atlanta came booming-in like I was local. (My QTH is Tampa.)
>
> Was this an example of inductance as I passed under them? I always was
> under the impression the H/T powerlines were our enemy, due to RFI; now
> I may have to rethink that.
>
> 73,
>
> Lee
> KI4NEJ
> Tampa, FL USA

Lee, Do you experience this phenomena each time you pass at this location (with the same car radio) or what was an exception?

Danny

7058. Re: [loopantennas] High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-15 20:05:40 UTC
From: Jim Dunstan
Topic: 7051 Message: 7058

At 11:23 AM 1/14/2010 -0500, you wrote:
>
>
>Greetings to the list,
>
>As I was driving down the interstate a few afternoons ago, I started
>tuning the AM dial for the chance of DX.
>
>Much to my surprise, as I crossed under some high-tension powerlines
>that crossed the highway on the diagonal, instead of RFI, a station from
>Atlanta came booming-in like I was local. (My QTH is Tampa.)
>
>Was this an example of inductance as I passed under them? I always was
>under the impression the H/T powerlines were our enemy, due to RFI; now
>I may have to rethink that.
>
>73,
>
>Lee
>KI4NEJ
>Tampa, FL USA

Hi Lee,

It is never clear how an inductive source will react to a receiver .... on one hand the secondary inductive source may add to the signal being received while at another time it may detract from the signal being received .... it all depends on the "phase" of the secondary signal received from the inductive source.

For example ... if you use 2 external tuned loops to assist in receiving MW broadcast stations and you locate them close to themselves and the receiver ... which also has a built in ferrite antenna .... they can be carefully tuned .... not only to achieve resonance ... but to adjust the phase of the signals ....whereby they can either add or detract from any particular signal. Even if there are 2 stations on the same frequency ... one loop can be adjusted to increase the signals of one of the 2 stations while the other loop is adjusted to decrease the strength of the undesired stations ... as I said ...both are on exactly the same frequency ..... the 'phase of the induced signal' is the critical function.

the separate antennas don't necessarily have to be loops .... but you need to be able to adjust the phase of the signals as they combine. The experience of the induced signal from the overhead power cables is a situation in which the induced signal was in an additive phase to the directly received signal ... it could have been the reverse.

Jim

7059. Re: [loopantennas] High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-15 20:18:48 UTC
From: Dexter McIntyre W4DEX
Topic: 7051 Message: 7059

Lee,

I believe what you experienced is re-radiation of the AM BC signal under the power line instead of inductive coupling. I say this because car radios typically have high impedance antennas instead of internal loops like portable radios. My theory is that given the right orientation of the line with respect to the transmitter, and maybe even the distance between transformers, a lot of RF is received by the power line which is re-radiated. This happens with Yagi antennas where the signal is re-radiated by the directors and reflector.

My job for about ten years provided me with a lot of windshield time most of which I spent fiddling with radios. I observed several hot spots under power lines while tuned to a distant station. Of course this was most noticeable while moving slow or stopped at an intersection.

I believe FM hot spots are caused by reflections from surrounding terrine or obstructions. These reflections are much more common and noticeable for VHF frequencies.

Dex, W4DEX

Lee- KI4NEJ wrote:
> Greetings to the list,
>
> As I was driving down the interstate a few afternoons ago, I started
> tuning the AM dial for the chance of DX.
>
> Much to my surprise, as I crossed under some high-tension powerlines
> that crossed the highway on the diagonal, instead of RFI, a station from
> Atlanta came booming-in like I was local. (My QTH is Tampa.)
>
> Was this an example of inductance as I passed under them? I always was
> under the impression the H/T powerlines were our enemy, due to RFI; now
> I may have to rethink that.
>
> 73,
>
> Lee
> KI4NEJ
> Tampa, FL USA

7060. Re: High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-16 20:50:12 UTC
From: Lee- KI4NEJ
Topic: 7051 Message: 7060

> Lee, Do you experience this phenomena each time you pass at this location (with the same car radio) or what was an exception?
>
> Danny
>

Danny,

I was able to duplicate this on the same trip (giving a ride to my daughter) a little later under the same set of powerlines, but approx 5 miles away from the first location.

The station I was listening to was WMLB 1690 Atlanta. Nothing local (frequency-wise) to compete with it. Just6 happened to be bored and was doing a bit of AM DXing on the return trip when this happened. Thought it was pretty cool.

73,

Lee
Tampa

_____ Information from ESET Smart Security, version of virus signature database 4778 (20100116) _____

The message was checked by ESET Smart Security.

http://www.eset.com

7061. Re: High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-16 20:57:06 UTC
From: Lee- KI4NEJ
Topic: 7051 Message: 7061

> Lee,
>
> I believe what you experienced is re-radiation of the AM BC signal under the
> power line instead of inductive coupling. I say this because car radios
> typically have high impedance antennas instead of internal loops like portable
> radios. My theory is that given the right orientation of the line with respect
> to the transmitter, and maybe even the distance between transformers, a lot of
> RF is received by the power line which is re-radiated. This happens with Yagi
> antennas where the signal is re-radiated by the directors and reflector.
>
> My job for about ten years provided me with a lot of windshield time most of
> which I spent fiddling with radios. I observed several hot spots under power
> lines while tuned to a distant station. Of course this was most noticeable
> while moving slow or stopped at an intersection.
>
> I believe FM hot spots are caused by reflections from surrounding terrine or
> obstructions. These reflections are much more common and noticeable for VHF
> frequencies.
>
> Dex, W4DEX

Thanks for the info, Dex. It was a pleasant surprise, to be sure. I was
southbound on the highway and the lines crossed at a shallow angle from
NNW-SSE, so even at highway speeds, I was under them 20-30 seconds, and
just happened to catch the station ID.

The reason I offered inductance as a theory from my very limited
background is that I knew the Pennsylvania Railroad used this technology
to enable engineers to talk engine-caboose, engine engine (of another
train), or engine dispatcher using the trackside powerlines as a medium.

Again, thanks for the info. Still a fascinating hobby, isn't it?

Lee
Tampa

_____ Information from ESET Smart Security, version of virus signature database 4778
(20100116) _____

The message was checked by ESET Smart Security.

http://www.eset.com

7062. Re: High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-16 21:20:10 UTC
From: dannibou
Topic: 7051 Message: 7062

--- In loopantennas@yahoogroups.com, Lee- KI4NEJ <ki4nej@...> wrote:
>
> > Lee, Do you experience this phenomena each time you pass at this location (with the same car radio) or what was an exception?
> >
> > Danny
> >
>
> Danny,
>
> I was able to duplicate this on the same trip (giving a ride to my
> daughter) a little later under the same set of powerlines, but approx 5
> miles away from the first location.

I'm curious to know what would be the results if you try with another car radio from another car? If you can do it, that would be interesting to me. Thanks
Danny

7063. Re: High-Tension Inductance/Re-radiation?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-17 16:20:24 UTC
From: Lee- KI4NEJ
Topic: 7063 Message: 7063

> I'm curious to know what would be the results if you try with another car radio from another car? If you can do it, that would be interesting to me. Thanks
> Danny

Danny,

Will do!

Lee

_____ Information from ESET Smart Security, version of virus signature database 4779 (20100117) _____

The message was checked by ESET Smart Security.

http://www.eset.com

7064. Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-17 16:42:26 UTC
From: kugellagers
Topic: 7064 Message: 7064

Question regarding loop antennas, directional nulling and lightning.

I DX NDBs and AM BCB and have a vertical antenna I built that pulls them in from good distances. It is also is low noise compared to all of the other antennas I have built. If there is a large storm system in the Gulf of Mexico like there was the last couple of days trying to DX in the LW band is nearly impossible.

I am considering adding a multi-turn loop to my antennas. Will a loop make a big difference nulling out lightning? For instance, when there is a big storm in the Gulf of Mexico will orienting a loop in the E-W direction null the lightning crashes out enough or is lightning just too strong of a noise souce?

I live in the Denver, Colorado area by the way so a Gulf storm would be to the south.

John
];')

7065. Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-17 17:58:58 UTC
From: W1AEX
Topic: 7064 Message: 7065

John

I use two 85 foot triangular receive loops for BCB and SW listening, one favors N-S reception and the other favors E-W reception. Much to my amazement, I have found that when a thunderstorm is approaching from the west, by switching to my N-S loop the static crashes are significantly reduced. I have no idea if lightning static from an approaching storm is high angle or low angle, or how it compares to lightning static from distant equatorial activity, but it's worth a shot.

Rob W1AEX

--- In loopantennas@yahoogroups.com, "kugellagers" <kugellager@...> wrote:
>
> I am considering adding a multi-turn loop to my antennas. Will a loop make a big difference nulling out lightning? For instance, when there is a big storm in the Gulf of Mexico will orienting a loop in the E-W direction null the lightning crashes out enough or is lightning just too strong of a noise souce?

7066. Re: [loopantennas] Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-17 19:15:44 UTC
From: Jim Dunstan
Topic: 7064 Message: 7066

At 04:42 PM 1/17/2010 +0000, you wrote:
>
>
>Question regarding loop antennas, directional nulling and lightning.
>
>I DX NDBs and AM BCB and have a vertical antenna I built that pulls them
>in from good distances. It is also is low noise compared to all of the
>other antennas I have built. If there is a large storm system in the Gulf
>of Mexico like there was the last couple of days trying to DX in the LW
>band is nearly impossible.
>
>I am considering adding a multi-turn loop to my antennas. Will a loop make
>a big difference nulling out lightning? For instance, when there is a big
>storm in the Gulf of Mexico will orienting a loop in the E-W direction
>null the lightning crashes out enough or is lightning just too strong of a
>noise souce?
>
>I live in the Denver, Colorado area by the way so a Gulf storm would be to
>the south.
>
>John
>];')

Hi John

Yes, the loop will null distant electrical storms. As the storm gets closer the direction becomes broader and the electromagnetic pulses get stronger. The narrower the band pass (tuned) and the better the balance of the loop and feed system the better the rejection.

By the way .... there is some interesting listening to be had as electrical storms get closer. Years ago when I was a kid I built a multi-turn loop which I hung in the attic and connected directly to the mic input of a high gain audio amplifier. eerie whales and whispers can be heard in relation to immanent lightning strikes. They appear to be modulated magnetic fields ..... in any event the loop seems to work as a transducer of some kind connected directly to the AF amplifier.

Of course being in Denver you would need the electrical storm a lot closer than the gulf hi hi.

Jim

7067. Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-18 01:19:49 UTC
From: capntripps2000
Topic: 7064 Message: 7067

A shielded loop is reported to be better against noise pickup as compared to a single or multi-turn tuned loop. Many 160M amateurs use them for receive and claim to hear signal below the average noise level on their dipoles.

Andrew

7068. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-18 08:04:22 UTC
From: brian russell
Topic: 7064 Message: 7068

John / Rob,
For 30+ years I have used a full wave horizontal loop on 40m and
without doubt it is prone to static.
My first experience was on a day with an impending storm and I had disconnected
the radio and antenna but was aware of a ' ticking ' sound, looking around I noticed
sparking between the barrel and center of the S0-239 wall antenna socket.
I promptly dashed out and lowered the antenna to the lawn hi!
That is now the practice in stormy wx, though I have still had a few clouts
whilst disconnecting.
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

7069. Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-18 14:32:51 UTC
From: tenorman1952
Topic: 7064 Message: 7069

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...> wrote:
>
> John / Rob,
> For 30+ years I have used a full wave horizontal loop on 40m and
> without doubt it is prone to static.
> My first experience was on a day with an impending storm and I had disconnected
> the radio and antenna but was aware of a ' ticking ' sound, looking around I noticed
> sparking between the barrel and center of the S0-239 wall antenna socket.
> I promptly dashed out and lowered the antenna to the lawn hi!
> That is now the practice in stormy wx, though I have still had a few clouts
> whilst disconnecting.
> 72, Brian, G0NSL-QRP.
>

Brian, you probably would have been safer not going out and touching your antenna.

Some place a 33k or 47k ohm resistor across the center feed up at the dipole's feedpoint to bleed off static.

I always disconnect my antennas when leaving the shack. One old ham told me to put the ends in a glass mason jar. I haven't going that far, but it's a good idea.

73
Paul
AE5JU

7070. Re: High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-18 15:13:57 UTC
From: Dave
Topic: 7051 Message: 7070

--- In loopantennas@yahoogroups.com, Lee- KI4NEJ <ki4nej@...> wrote:
>
> > Lee,
> >
> > I believe what you experienced is re-radiation of the AM BC signal under the
> > power line instead of inductive coupling. I say this because car radios
> > typically have high impedance antennas instead of internal loops like portable
> > radios. My theory is that given the right orientation of the line with respect
> > to the transmitter, and maybe even the distance between transformers, a lot of
> > RF is received by the power line which is re-radiated. This happens with Yagi
> > antennas where the signal is re-radiated by the directors and reflector.
> >
> > My job for about ten years provided me with a lot of windshield time most of
> > which I spent fiddling with radios. I observed several hot spots under power
> > lines while tuned to a distant station. Of course this was most noticeable
> > while moving slow or stopped at an intersection.
> >
> > I believe FM hot spots are caused by reflections from surrounding terrine or
> > obstructions. These reflections are much more common and noticeable for VHF
> > frequencies.
> >
> > Dex, W4DEX
>
> Thanks for the info, Dex. It was a pleasant surprise, to be sure. I was
> southbound on the highway and the lines crossed at a shallow angle from
> NNW-SSE, so even at highway speeds, I was under them 20-30 seconds, and
> just happened to catch the station ID.

It might be interesting to use something like Google-Earth or one of the
other satellite mapping programs to trace the power lines and see if they
run particularly close to the AM transmitter site.

> The reason I offered inductance as a theory from my very limited
> background is that I knew the Pennsylvania Railroad used this technology
> to enable engineers to talk engine-caboose, engine engine (of another
> train), or engine dispatcher using the trackside powerlines as a medium.

I rather doubt that the utility company would be too thrilled to have an
AM station intentionally coupling into their lines. On the other hand, there's
not a lot that can be done to keep a 50KW torch from coupling into a LOT
of things (And, for the worst case scenario, look up what happened when
WLW had a Special Temporary Authorization to run 500KW!).

> Again, thanks for the info. Still a fascinating hobby, isn't it?

Always!

> Lee
> Tampa

Dave

7071. Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-18 18:20:40 UTC
From: W1AEX
Topic: 7064 Message: 7071

Yah, very good advice regarding lightning and pretty much any outdoor antenna. All my wire antennas are at DC ground so I avoid the rain and snow static issue, but that certainly does not protect you from lightning!

When a storm is closing in, I disconnect all my feeds and simply hope that the installed grounds at the feedpoint of each antenna look more attractive than anywhere else a lightning strike might choose to go.

My loops are very simple, but very quiet. I use them at times when working 160 meters, 75 meters, 40 meters, and for general BCB and shortwave listening:

http://members.cox.net/w1aex.fn31/loop.html

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@> wrote:
> >
> > John / Rob,
> > I promptly dashed out and lowered the antenna to the lawn hi!
> > That is now the practice in stormy wx, though I have still had a few clouts
> > whilst disconnecting.
> > 72, Brian, G0NSL-QRP.
> >

7072. Re: [loopantennas] Re: High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-18 19:54:12 UTC
From: kevin asato
Topic: 7051 Message: 7072

typically AM stations are rectified onto the AC lines due to dirty insulators and line connections. The dirty connections are basically acting as diodes. I have a 50KW AM (KNX 1070) here in the Los Angeles area than can get into everything - AC, phone lines, stereo. Even had a 10W FM in high school that would always rebroadcast their signal as the AM carrier got into everything including the wiring and RF section!

73,
kevin
kc6pob

I rather doubt that the utility company would be too thrilled to have an

AM station intentionally coupling into their lines. On the other hand, there's

not a lot that can be done to keep a 50KW torch from coupling into a LOT

of things (And, for the worst case scenario, look up what happened when

WLW had a Special Temporary Authorization to run 500KW!).

[Non-text portions of this message have been removed]

7073. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-18 22:43:12 UTC
From: Andy
Topic: 7064 Message: 7073

> Some place a 33k or 47k ohm resistor across the center feed up at
> the dipole's feedpoint to bleed off static.

That might work for a dipole, but a loop already has DC continuity.

Resistors from both terminals to ground are an even better idea, and would work for the loop too, assuming that the induced voltage is a gradual static build-up relative to ground. (Make sure to size the resistors appropriately so that you don't exceed their power ratings when transmitting.)

If the sparking was across the SO-239, then the lightning must be inducing large voltage spikes across your loop, and the resistors might not have helped. The resistors help bleed off a gradual voltage build-up, not a sudden induced voltage on a nano- or microsecond scale.

Andy

7074. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-19 07:43:54 UTC
From: brian russell
Topic: 7064 Message: 7074

Paul,
Good point, but from a safety aspect I only let go the
halyard and down comes the loop hi!
I am not sure what a ' Mason Jar ' is, educate me.
72, Brian, G0NSL-QRP.

----- Original Message -----
From: tenorman1952
To: loopantennas@yahoogroups.com
Sent: Monday, January 18, 2010 2:32 PM
Subject: [loopantennas] Re: Loops and Lightning

Brian, you probably would have been safer not going out and touching your antenna.

Some place a 33k or 47k ohm resistor across the center feed up at the dipole's feedpoint to bleed off static.

I always disconnect my antennas when leaving the shack. One old ham told me to put the ends in a glass mason jar. I haven't going that far, but it's a good idea.

73
Paul
AE5JU

[Non-text portions of this message have been removed]

7075. Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-19 15:16:24 UTC
From: Dave
Topic: 7064 Message: 7075

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...> wrote:
>
> Paul,
> Good point, but from a safety aspect I only let go the
> halyard and down comes the loop hi!
> I am not sure what a ' Mason Jar ' is, educate me.

http://en.wikipedia.org/wiki/Mason_jar

> 72, Brian, G0NSL-QRP.

Dave
WA4QAL

7076. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-19 15:24:35 UTC
From: Tracey Gardner
Topic: 7064 Message: 7076

We know them as Kilner jars in the UK

http://en.wikipedia.org/wiki/Kilner_jar

Tracey

----- Original Message -----
From: "Dave" <wa4qal@...>
To: <loopantennas@yahoogroups.com>
Sent: Tuesday, January 19, 2010 3:16 PM
Subject: [loopantennas] Re: Loops and Lightning

> --- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...>
> wrote:
>>
>> Paul,
>> Good point, but from a safety aspect I only let go the
>> halyard and down comes the loop hi!
>> I am not sure what a ' Mason Jar ' is, educate me.
>
> http://en.wikipedia.org/wiki/Mason_jar
>
>> 72, Brian, G0NSL-QRP.
>
> Dave
> WA4QAL
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

>

7077. Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-19 15:34:17 UTC
From: tenorman1952
Topic: 7064 Message: 7077

--- In loopantennas@yahoogroups.com, "brian russell" <brian-nsl@...> wrote:
>
> Paul,
> Good point, but from a safety aspect I only let go the
> halyard and down comes the loop hi!
> I am not sure what a ' Mason Jar ' is, educate me.
> 72, Brian, G0NSL-QRP.
>
>

After I had posted I noticed the UK call sign.

A "Mason Jar" (brand name, the term used generically, too) is a heavy glass jar with screw on lid, which has a rubber seal, that is used for home canning or "preserves"... jams, vegetables, etc. Most commonly seen in pint and quart sizes.

http://en.wikipedia.org/wiki/Mason_jar

When I was first licensed an older ham I spoke with told me he always disconnects the power plugs and antennas from his radio, putting the end of the antenna coax in a Mason Jar so that any sparking will not set something on fire.

73
Paul
AE5JU

7078. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-19 15:47:40 UTC
From: Andy
Topic: 7064 Message: 7078

> ... One old ham told me to put the ends in a glass mason jar. ...

A different email list had a (slightly heated) argument a while back about using a Mason jar to stuff the feedline into, to protect your gear and home from a lightning strike.

If I could summarize, and add how I feel about the subject, a Mason jar is one way to keep the metal parts of your feedline insulated from everything else, when small to moderate voltages come down from the antenna. It's better than leaving the feedline dangling where it could arc and spark and start a fire.

The Mason jar is OK for gradual wind/precip. static build-up if your antenna isn't DC-grounded already. It can probably handle transients in the low thousands of volts due to lightning across town. It can certainly not handle anything close to a direct hit.

The problem with the mason jar approach, is that you need to remember to disconnect the cable and stuff the end into the jar. A permanent protection device would be better.

And you shouldn't depend on either, to protect you from a direct hit. Neither the jar nor an expensive transient protection device will do that.

A better way to protect yourself from a direct hit is to disconnect all feedlines and move them way away, keeping several yards of separation between the antennas (and attached feedlines), and anything in or coming out of your house. And ground everything. Even with that, lightning can find its way from a disconnected antenna into your house if it wants to.

Andy

7079. Re: High-Tension Inductance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-19 17:01:09 UTC
From: Lee- KI4NEJ
Topic: 7051 Message: 7079

> It might be interesting to use something like Google-Earth or one of the
> other satellite mapping programs to trace the power lines and see if they
> run particularly close to the AM transmitter site.

Wow- I never thought of that. I guess it's plausible, but we're talking
Tampa-Atlanta here. That would be something, huh?

> I rather doubt that the utility company would be too thrilled to have an
> AM station intentionally coupling into their lines. On the other hand, there's
> not a lot that can be done to keep a 50KW torch from coupling into a LOT
> of things (And, for the worst case scenario, look up what happened when
> WLW had a Special Temporary Authorization to run 500KW!).

I'm intrigued enough to park my car under them and DX in many different
bands just to see what happens.

Lee
KI4NEJ
Tampa

_____ Information from ESET Smart Security, version of virus signature database 4786
(20100119) _____

The message was checked by ESET Smart Security.

http://www.eset.com

7080. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-19 17:58:45 UTC
From: Dexter McIntyre W4DEX
Topic: 7064 Message: 7080

>> ... One old ham told me to put the ends in a glass mason jar. ...

The fellow was right in saying the jar will contain a spark caused by wind or snow charge build up.

But unfortunately this practice got distorted over time leading many to think the jar would prevent a lightning strike. Now just think, if a bolt of lightning has traveled many miles to find a discharge path is a jar going to contain it?

Provide a good ground path for your feed lines outside the shack!

My first experience with such static was as an early 60s novice who reached for his 75 ohm twin lead to connect it to his 6V6 transmitter during a dry windy snowy day. Lesson learned the hard way!!!!

Dex

7081. Multi-lead Wire For Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 02:29:50 UTC
From: VectorC
Topic: 7081 Message: 7081

Greetings to the list-

I've been giving a good amount of 6-strand solid-core 18AWG shielded cable. I was thinking of making a loop antenna with some of this cable, but have a few questions:

1. Good idea or not? Does multi-lead wire lend itself as useful in a loop?

2. What size should I make this loop? Primary interest is NDB's (LW), followed by Military and Utility on HF. I plan on joining the individual strands together, so whatever the radius of the loop is, the actual wire length will be 6 times longer.

Any help is appreciated.

Lee
Tampa

7082. Re: [loopantennas] Multi-lead Wire For Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 02:40:07 UTC
From: Tony Magon
Topic: 7081 Message: 7082

Have a look at this URL - It might give you some ideas

www.hard-core-dx.com/nordicdx/antenna/*loop*/hula*loop*.html

Regards

Tony VK2IC

On Wed, Jan 20, 2010 at 1:29 PM, VectorC <ki4nej@...> wrote:

>
>
> Greetings to the list-
>
> I've been giving a good amount of 6-strand solid-core 18AWG shielded cable.
> I was thinking of making a loop antenna with some of this cable, but have a
> few questions:
>
> 1. Good idea or not? Does multi-lead wire lend itself as useful in a loop?
>
> 2. What size should I make this loop? Primary interest is NDB's (LW),
> followed by Military and Utility on HF. I plan on joining the individual
> strands together, so whatever the radius of the loop is, the actual wire
> length will be 6 times longer.
>
> Any help is appreciated.
>
> Lee
> Tampa
>
>
>

[Non-text portions of this message have been removed]

7083. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 04:55:41 UTC
From: kevin asato
Topic: 7064 Message: 7083

Provided that your Mason Jar did not contain any moonshine in it!. A spark in their would likely cause an explosion!

73,
kevin
kc6pob

When I was first licensed an older ham I spoke with told me he always disconnects the power plugs and antennas from his radio, putting the end of the antenna coax in a Mason Jar so that any sparking will not set something on fire.

[Non-text portions of this message have been removed]

7084. RE: [loopantennas] Multi-lead Wire For Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 06:22:39 UTC
From: Notareal
Topic: 7081 Message: 7084

Hi !

Check this Shielded loop am antenna;

http://radiomagonline.com/currents/radio_shieldedloop_am_antenna/index.html

It works surprisingly well with a good pre-amplifier.

br

> To: loopantennas@yahoogroups.com
> From: ki4nej@...
> Date: Wed, 20 Jan 2010 02:29:50 +0000
> Subject: [loopantennas] Multi-lead Wire For Loop
>
> Greetings to the list-
>
> I've been giving a good amount of 6-strand solid-core 18AWG shielded cable. I was thinking of making a loop antenna with some of this cable, but have a few questions:
>
> 1. Good idea or not? Does multi-lead wire lend itself as useful in a loop?
>
> 2. What size should I make this loop? Primary interest is NDB's (LW), followed by Military and Utility on HF. I plan on joining the individual strands together, so whatever the radius of the loop is, the actual wire length will be 6 times longer.
>
> Any help is appreciated.
>
> Lee
> Tampa
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>

> And please trim all this when replying!Yahoo! Groups Links
>
>
>

Windows Live: Keep your friends up to date with what you do online.
http://www.microsoft.com/middleeast/windows/windowslive/see-it-in-action/social-network-basics.aspx?ocid=PID23461::T:WLMTAGL:ON:WL:en-xm:SI_SB_1:092010

[Non-text portions of this message have been removed]

7085. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 07:44:57 UTC
From: brian russell
Topic: 7064 Message: 7085

Paul,
All revealed now by the groups reference to ' Kilner Jar ' as we know them here, though I have not seen one in many a long year.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: tenorman1952
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 19, 2010 3:34 PM
Subject: [loopantennas] Re: Loops and Lightning

[Non-text portions of this message have been removed]

7086. Re: [loopantennas] Multi-lead Wire For Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 08:20:48 UTC
From: Marc
Topic: 7081 Message: 7086

Tony Magon schreef:
> Have a look at this URL - It might give you some ideas
>
>
> www.hard-core-dx.com/nordicdx/antenna/*loop*/hula*loop*.html
>
>

.. like replacing the *??

http://www.hard-core-dx.com/nordicdx/antenna/loop/hulaloop.html

Marc

look at my web site: you'll spend some time, afterwards saying: what
have I done??

--
What's on Shortwave guide: choose an hour, go!
http://shortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

7087. Re: [loopantennas] Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 06:47:36 UTC
From: Sam Morgan
Topic: 7064 Message: 7087

kevin asato wrote:
> Provided that your Mason Jar did not contain any moonshine in it!. A spark in their would likely cause an explosion!
>
not to mention a waste of damn fine liquor!

--
GB & 73
K5OAI
Sam Morgan

7088. Re: Multi-lead Wire For Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 15:11:47 UTC
From: Lee- KI4NEJ
Topic: 7081 Message: 7088

Tony, br & Marc,

Thanks for the info- it is most certainly appreciated.

Lee
Tampa

_____ Information from ESET Smart Security, version of virus signature database 4790 (20100120) _____

The message was checked by ESET Smart Security.

http://www.eset.com

7089. Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 15:42:03 UTC
From: wild_bill_yonder
Topic: 7064 Message: 7089

I've heard of using an NE-2 neon bulb between antenna lines and groung to blead static. So a loop with ballanced line would use 2, one from each wire to ground. Anybody done that? Also, can you do that with a Tx antenna?

Bill

--- In loopantennas@yahoogroups.com, Dexter McIntyre W4DEX <dmcintyre@...> wrote:
>
>
> >> ... One old ham told me to put the ends in a glass mason jar. ...
>
> The fellow was right in saying the jar will contain a spark caused by wind or
> snow charge build up.
>
> But unfortunately this practice got distorted over time leading many to think
> the jar would prevent a lightning strike. Now just think, if a bolt of
> lightning has traveled many miles to find a discharge path is a jar going to
> contain it?
>
> Provide a good ground path for your feed lines outside the shack!
>
> My first experience with such static was as an early 60s novice who reached for
> his 75 ohm twin lead to connect it to his 6V6 transmitter during a dry windy
> snowy day. Lesson learned the hard way!!!!
>
> Dex
>

7090. Re: Loops and Lightning

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-20 18:51:52 UTC
From: jrtow3rd@bellsouth.net
Topic: 7064 Message: 7090

The neon bulb is an open circuit until the ionization potential - ~65V for an NE-2 - is reached - above that, it needs current limiting for longevity. It also adds a small amount of capacitance to ground. A solid state receiver would likely suffer some damage at that input level. At 50 Ohms, transmitter RF power levels, allowing some safety, <10 Watts would be safe. Raise that to 600 Ohms, and your limit would be 1 W. A grounded antenna is best. Of course, it beats the old spark gap style lightning protection with a recever!

Most of the old ARRL transmitter schematics included an RFC to ground across the pi-network PA output to protect against output coupling capacitor failure - and the resultant HV DC on the antenna lead. It also would bleed static charges.

John

--- In loopantennas@yahoogroups.com, "wild_bill_yonder" <wild_bill_yonder@...> wrote:
>
> I've heard of using an NE-2 neon bulb between antenna lines and groung to blead static. So a loop with ballanced line would use 2, one from each wire to ground. Anybody done that? Also, can you do that with a Tx antenna?
>
> Bill

7091. Not sure if this is my group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-21 15:56:55 UTC
From: Mike
Topic: 7091 Message: 7091

Not sure if this is my group, are we mainly dealing with and taking about HAM transmitting loops re copper tubing or MW loops with wire turns as we seem to have a lot about lightning and neon's and such like, if its a group for loops in general that is somewhat fine be they for LW MW SW, but being a member of the MW Group anyway why should I be a member here, if you get my point, no good me being a member of both is there, not wishing to be rude in anyway. Confused. Mike.

7092. RE: [loopantennas] Not sure if this is my group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-21 19:25:29 UTC
From: Cor Beijersbergen
Topic: 7091 Message: 7092

Well Mike,

If you don't like the group, nobody will stop you from leaving at this very moment, but I think it might be a sensible thing to do is the listen for a while to see what subjects come up, or take up the active approach by bringing up a subject or ask a question. It is not up to this group to prove itself to be attractive enough to have you as a member but it is up to you to decide whether you are someone that should be a member of this group. So, enjoy our company or leave.

Cor Beijersbergen

7093. Re: Not sure if this is my group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 14:50:19 UTC
From: m0dvo
Topic: 7091 Message: 7093

You chose to join - you can choose to leave. No confusion at all.

mike M0DVO

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> Not sure if this is my group, are we mainly dealing with and taking about HAM transmitting loops re copper tubing or MW loops with wire turns as we seem to have a lot about lightning and neon's and such like, if its a group for loops in general that is somewhat fine be they for LW MW SW, but being a member of the MW Group anyway why should I be a member here, if you get my point, no good me being a member of both is there, not wishing to be rude in anyway. Confused. Mike.
>

7094. Such a simple question but got a complicated answer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 19:06:27 UTC
From: Michael in Suffolk
Topic: 7094 Message: 7094

Re my question is this my group, re membership. I hope you all saw the answer. What I can't fathom out is what is the main objective of this group? What was its objective? To talk about loop antennas in general including those for reception which I think is being dealt with on the medium wave group quite effectively. Of late there seems to be an abundance of issues relating to transmitting loops and I do wonder if it is going to end! I will stay a member for a few more weeks and if the same subject is constantly to the fore I will resign my membership. Mike

[Non-text portions of this message have been removed]

7095. Re: [loopantennas] Such a simple question but got a complicated answer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 19:15:17 UTC
From: david
Topic: 7094 Message: 7095

Of late there seems to be an abundance of issues relating to transmitting loops and I do wonder if it is going to end! ..... err correct me if i am wrong but isnt a transmitting loop a loop .... if you want something that suits you why dont you start a thread ... david

[Non-text portions of this message have been removed]

7096. RE: [loopantennas] Such a simple question but got a complicated answer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 19:37:06 UTC
From: Cor Beijersbergen
Topic: 7094 Message: 7096

Would you be so kind to inform us when your scrutiny of the group has ended and what the outcome is, so we can relax again?
In the meantime, you could search the message archive, the file and photo section and even make an interesting loopantenna related contribution to the group.

Cor Beijersbergen

Re my question is this my group, re membership. I hope you all saw the answer. What I can't fathom out is what is the main objective of this group? What was its objective? To talk about loop antennas in general including those for reception which I think is being dealt with on the medium wave group quite effectively. Of late there seems to be an abundance of issues relating to transmitting loops and I do wonder if it is going to end! I will stay a member for a few more weeks and if the same subject is constantly to the fore I will resign my membership. Mike

7097. loop range

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 20:00:20 UTC
From: tvdxrools
Topic: 7097 Message: 7097

hi i am using a flag antenna for mw dx which is a rectangle and its 2m in the verticals and 4m in the horizontals it has a 48/11 turn overlapping balun at the feed and a fixed 540 ohm resistor for the back null. from 530 khz to 1600 khz it works great but it seems to stop dead at 1600 and from 1600 - 1700 khz it works bad as i said it seems to stop dead at 1600 khz any suggestions for that little extra bit of band ... cheers david

7098. Re: [loopantennas] loop range

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 21:26:23 UTC
From: Andy Ikin
Topic: 7097 Message: 7098

David wrote on the 22 Jan

"hi i am using a flag antenna for mw dx which is a rectangle and its 2m in the verticals and 4m in the horizontals it has a 48/11 turn overlapping balun at the feed and a fixed 540 ohm resistor for the back null. from 530 khz to 1600 khz it works great but it seems to stop dead at 1600 and from 1600 - 1700 khz it works bad as i said it seems to stop dead at 1600 khz any suggestions for that little extra bit of band ... cheers david"

David, the problem may be due to the 48/11 turn overlapping balun i.e. the primary to secondary winding capacitance is too high. This will cause the antenna to behave like an endfed vertical and thus reduce the null. Suggest that you rewind the matching transformer on a ring core(AL value 4uH per turn) with the primary to secondary winding separated to reduce the capacitance. The presence of nearby metallic objects can also degrade the null at certain frequencies. This can be a particular issue when using Flag or K9AY antennas in Phased array configurations.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

7099. Re: [loopantennas] loop range

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 21:57:47 UTC
From: Chris Trask
Topic: 7097 Message: 7099

> David wrote on the 22 Jan
>
> > "hi i am using a flag antenna for mw dx which is a rectangle and its 2m in the
> > verticals and 4m in the horizontals it has a 48/11 turn overlapping balun at
> > the feed and a fixed 540 ohm resistor for the back null. from 530 khz to 1600
> > khz it works great but it seems to stop dead at 1600 and from 1600 - 1700 khz
> > it works bad as i said it seems to stop dead at 1600 khz any suggestions for
> > that little extra bit of band ... cheers david"
>
> David, the problem may be due to the 48/11 turn overlapping balun i.e. the
> primary to secondary winding capacitance is too high. This will cause the
> antenna to behave like an endfed vertical and thus reduce the null. Suggest
> that you rewind the matching transformer on a ring core(AL value 4uH per turn)
> with the primary to secondary winding separated to reduce the capacitance. The
> presence of nearby metallic objects can also degrade the null at certain
> frequencies. This can be a particular issue when using Flag or K9AY antennas
> in Phased array configurations.
>

Hmmm.... That's interesting. The 48/11 turns ratio is very close to 48/12, which would readily boil down to 4:1. You could make a much better performing transformer with a pair of 2:1 baluns in series. (or a 2:1 UnUn and a 2:1 BalUn). They can be made with twisted wires, which will provide much better high-end performance due to the lower leakage inductance and higher coupling coefficient.

Chris

7100. Re: [loopantennas] Not sure if this is my group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 22:19:33 UTC
From: Jim Dunstan
Topic: 7091 Message: 7100

At 03:56 PM 1/21/2010 +0000, you wrote:
>
>
>Not sure if this is my group, are we mainly dealing with and taking about
>HAM transmitting loops re copper tubing or MW loops with wire turns as we
>seem to have a lot about lightning and neon's and such like, if its a
>group for loops in general that is somewhat fine be they for LW MW SW, but
>being a member of the MW Group anyway why should I be a member here, if
>you get my point, no good me being a member of both is there, not wishing
>to be rude in anyway. Confused. Mike.

Dear Confused,

not wishing to be rude in any way .... I do not see a way of answering your question, "why should I be a member here" .... I would say you have to make a hard decision ... if you get my point. ..... look deep, take some breaths, gird the loins, and go ahead. I hope you stay ... as I am sure you will make interesting contributions to discussions.

Jim

7101. RE: [loopantennas] Such a simple question but got a complicated answer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 22:33:12 UTC
From: Jim Dunstan
Topic: 7094 Message: 7101

At 08:37 PM 1/22/2010 +0100, you wrote:
>
>
>Would you be so kind to inform us when your scrutiny of the group has ended
>and what the outcome is, so we can relax again?
>In the meantime, you could search the message archive, the file and photo
>section and even make an interesting loopantenna related contribution to the
>group.
>
>Cor Beijersbergen
>
>Re my question is this my group, re membership. I hope you all saw the
>answer. What I can't fathom out is what is the main objective of this
>group? What was its objective? To talk about loop antennas in general
>including those for reception which I think is being dealt with on the
>medium wave group quite effectively. Of late there seems to be an abundance
>of issues relating to transmitting loops and I do wonder if it is going to
>end! I will stay a member for a few more weeks and if the same subject is
>constantly to the fore I will resign my membership. Mike

Dear can't fathom,

Please don't grant us the favour of further group analysis .... stay and
listen in, contribute something (other than further group analysis), or
simply leave ... you don't have to let us know why, or when you leave ... I
can't speak for others ... but I can take it hi hi.

Jim

7102. Re: [loopantennas] Such a simple question but got a complicated answer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 22:38:36 UTC
From: David Towers
Topic: 7094 Message: 7102

Mike
this from the home page answers your question

Description

*This is the Loop Antenna Group to Ask Your Questions, Get Answers and Information about Loop Antennas for improved your Radio Listening and Enjoyment. *

This is your "HOW TO" Loop Antenna Forum to : Get Information, Plan, Design and Build Loop Antennas for both Radio Reception and Transmission.

Loop antennas are used to reduce interference or can be used as compact antennas or for radio direction finding (RDF).

Post Your Question Here! To Get Needed Information and Opinions about a Commercial "Ready-Made" Loop Antenna or help with a home-made loop.

Discussion of this Group is focused on the subject of Loop Antennas. All types of Loop Antennas including Ferrite Rod Loop Antennas; Air-Core Loop Antennas, Shielded Coax Cable Loop Antennas; all types of loop antennas.

Loop Antennas for All Bands : VLF, LF, MF, HF, VHF, UHF, SHF etc. Longwave, Medium Wave (AM/MW/BCB), Shortwave and more.
73
dave g8szx

Michael in Suffolk wrote:

> Re my question is this my group, re membership. I hope you all saw the answer. What I can't fathom out is what is the main objective of this group? What was its objective?

[Non-text portions of this message have been removed]

7103. Re: [loopantennas] loop range

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 22:43:42 UTC
From: Jim Dunstan
Topic: 7097 Message: 7103

At 08:00 PM 1/22/2010 +0000, you wrote:
>
>
>hi i am using a flag antenna for mw dx which is a rectangle and its 2m in
>the verticals and 4m in the horizontals it has a 48/11 turn overlapping
>balun at the feed and a fixed 540 ohm resistor for the back null. from 530
>khz to 1600 khz it works great but it seems to stop dead at 1600 and from
>1600 - 1700 khz it works bad as i said it seems to stop dead at 1600 khz
>any suggestions for that little extra bit of band ... cheers david

Hi David

I have been thinking of experimenting with a Flag antenna this coming summer ... Do you rotate your 4x2 mtr antenna? on what MW frequencies does it work best? I am fortunate in that there are no local MW broadcast stations in my location .... everything is DX. I like daytime listening of MW stations in the Duluth and Iron Range area of Minn. .... all of which are at least 100 miles south of me. To date I have been using small tuned loops. Something like the Flag may be useful in allowing me to simply tune between stations without constantly tuning the loop.

Jim

7104. Thanks NICE Dave T

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 23:20:05 UTC
From: Mike
Topic: 7094 Message: 7104

Well one very nice reply, and of course you ALWAYS get the not so nice one that almost say B off, quite rude JIM "Scrutiny of the group has ended" can one not ask a scrunty question! Now I have had two such replies.
I am the moderator of skywaves chat and if someone came to me with such a question, I would do a David Towers reply, not a reply such as the other one, please stop quaking in your shoes Jim, question time is over.
BTW I do make loops - have put up sales - and responded quite well in the past so why make me a non provider and non participant.
I was just wondering how long one subject was going to last, and that's all. Mike.

7105. How many tuning capacitors has each member.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 23:39:01 UTC
From: Mike
Topic: 7094 Message: 7105

OK starting a new thread.

As asked to do.

How many tuning capacitors has each member in there junk box!
what values are there and what are you using them for now or in the future, also what price did you pay and from where, where they new or ex equipment.

That should change the subject matter. Mike.

7106. Re: How many tuning capacitors has each member.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 00:21:12 UTC
From: bm40g
Topic: 7094 Message: 7106

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> OK starting a new thread.
>
> As asked to do.
>
> How many tuning capacitors has each member in there junk box!
> what values are there and what are you using them for now or in the future, also what price did you pay and from where, where they new or ex equipment.
>
> That should change the subject matter. Mike.
>

Hi Michael,

Probably about 150 or so. In fact the Butterfly cap for my TRANSMITTING LOOP :-) antenna was in the the junk box. I go it from a Gen Rad Vacuum Tube Bridge that was donated to me, and I diassembled to reduce the volume of the junk box.

7107. Re: [loopantennas] Not sure if this is my group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 02:43:20 UTC
From: ZephyrNYC
Topic: 7091 Message: 7107

Mike,

Check out the archived messages on the group page to find out if you like what you'll see.

73,
Frank

--
http://www.theadvocates.org/quiz.html

"Those who would give up Essential Liberty to purchase a little Temporary Safety, deserve neither Liberty nor Safety."

- attributed to Benjamin Franklin (January 17, 1706 – April 17, 1790), one of the founding fathers of the United States of America, printer, scientist, inventor, civic activist, and diplomat

7108. Re: Such a simple question but got a complicated answer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 19:37:16 UTC
From: Bill
Topic: 7094 Message: 7108

Well Mike, I just joined a short time ago. I have been looking for better American AM band reception. Thinking that this would be included in this group, I joined. I had read a lot about ferrite bar antennas and inductive loops, as well as tuned loops, but I have a dilemma with each of these. I want something simple.

You see, I capture my television via antennas...SIX of them pointed in different directions. they are connected via Channel Master "Jointennas" and amplified at the mast. The signal is then split 4 ways. I can watch TV on any of 4 televisions in the house without a rotor. Each TV can watch its own signal from a different antenna. This is outstanding!

OK, next, I tackled the FM radio band. I decided to upgrade my current FM, which consisted of a pair of Antennacraft FM6 antennas and an A/B switch. This was OK, but it was not my ideal setup of any channel at any time from any tuner. I bought a vertical FM whip antenna and placed it at the top of my TV tower...48' above ground. I amplified the signal (a very poor decision according to most FM enthusiasts) and split it to 3 tuners. My main tuner needed better selectivity, due to the omnidirectional nature of the antenna. I bought a Sony XDR-F1HD tuner and had it calibrated and modded. I now receive a station on EVERY spot on the American FM dial, and about 80% of them are VERY clean. OK, now my FM works like my TV does!

Here was my next problem. The Sony collects AM stations very well. I decided that I needed to do a better job on AM because the tuner is capable of it. I decided that I could be very happy ointing a loop antenna in one direction...towards Chicago. This direction is aligned nearly perfectly with my local stations for daytime listening and also with Milwaukee for day and nighttime listening.

Well, I don't want a tunable antenna. I want to be able to tune to a station and have it be received well. I am not a DXer, just someone who likes certain portions of AM radio.

I built a Carver "Ultimate AM Antenna" from internet plans and it works better than the plastic loop that came with the tuner. I built a second one and run them in parallel. I have even better gain now. I know that this 2 loop system is not nearly what a tuned loop is capable of, but I have no hassle of individually tuning stations either.

I joined this group to learn more about the Wellbrook antennas. I read many good things about them and I am hoping that they could be an equal to mosed tuned loops. I am considering the newest version of the ALA 1530s+. If it works as good as other loops without any need for manual tuning, it may be for me. I have read all of the posts on this forum regarding Wellbrook, and most are positive. I simply wish that someone here was in about the same position that I am in. I am really enjoying AM hybrid digital. I can listen to distant, out of market ball games very clearly, but for the most part, my antennas are holding me back.

Any thoughts?

Bill

--- In loopantennas@yahoogroups.com, Michael in Suffolk <michaelrae65@...> wrote:
>
> Re my question is this my group, re membership. I hope you all saw the answer. What I can't fathom out is what is the main objective of this group? What was its objective? To talk about loop antennas in general including those for reception which I think is being dealt with on the medium wave group quite effectively. Of late there seems to be an abundance of issues relating to transmitting loops and I do wonder if it is going to end! I will stay a member for a few more weeks and if the same subject is constantly to the fore I will resign my membership. Mike
>
>
>
>
> [Non-text portions of this message have been removed]
>

7109. Re: [loopantennas] Not sure if this is my group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-22 20:23:34 UTC
From: john@2ad.com
Topic: 7091 Message: 7109

I've been watching this thread unfold as a typical example of misguided question leading to a variety of apparently dismissive and reactionary feedback. Its the Internet after all ;)

I hardly speak for the group, mostly just a reader, but my take:

- yes it's for MW loops, and other loops, I've built 2 MW loops for reception and want to build another soon
- as several have said, post your thread, everyone will be amenable to your ideas and interests I'm sure
- don't complain about other peoples threads, I think alot of the technophile kibitzing is rather entertaining, I'm sure others do as well
- and about the xmit vs recieve thing, most people don't realize but the physics of xmit and recieve are surprisingly similar, even a receiver builder could learn something from an xmit discussion!

Glad to hear the middlewave group is steaming along as well.

John

> Not sure if this is my group, are we mainly dealing with and taking about
> HAM transmitting loops re copper tubing or MW loops with wire turns as we
> seem to have a lot about lightning and neon's and such like, if its a
> group for loops in general that is somewhat fine be they for LW MW SW, but
> being a member of the MW Group anyway why should I be a member here, if
> you get my point, no good me being a member of both is there, not wishing
> to be rude in anyway. Confused. Mike.
>

7110. Re: Not sure if this is my group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 06:15:02 UTC
From: alienrelics
Topic: 7091 Message: 7110

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> Not sure if this is my group, are we mainly dealing with and taking about HAM transmitting loops re copper tubing or MW loops with wire turns as we seem to have a lot about lightning and neon's and such like, if its a group for loops in general that is somewhat fine be they for LW MW SW, but being a member of the MW Group anyway why should I be a member here, if you get my point, no good me being a member of both is there, not wishing to be rude in anyway. Confused. Mike.
>

You've got me confused. You can just read the list description on the group home page:
http://groups.yahoo.com/group/loopantennas/

Only you can say if the list is or isn't for you.

Steve Greenfield
listowner loopantennas

7111. Re: Thanks NICE Dave T

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 06:19:11 UTC
From: alienrelics
Topic: 7094 Message: 7111

This is feeling more like an attempt to fish for members for another group.

I feel like you are being a bit of a troll.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
>
> Well one very nice reply, and of course you ALWAYS get the not so nice one that almost say B off, quite rude JIM "Scrutiny of the group has ended" can one not ask a scrunty question!
> Now I have had two such replies.
> I am the moderator of skywaves chat and if someone came to me with such a question, I would do a David Towers reply, not a reply such as the other one, please stop quaking in your shoes Jim, question time is over.
> BTW I do make loops - have put up sales - and responded quite well in the past so why make me a non provider and non participant.
> I was just wondering how long one subject was going to last, and that's all. Mike.
>

7112. Re: [loopantennas] loop range

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 08:37:06 UTC
From: david
Topic: 7097 Message: 7112

hi jim no i dont rotate my flag as i am only interested in transatlantic dx on the mw band here in scotland and as i said in my main question its works great from 530 - 1600 khz and i have had west coast usa ie KOMO KJR and KBRW alaska and even peru but as i said it seems to stop dead at 1600 and from 1610 - 1700 khz its sounds as if there is no antenna in and btw my flag is indoors in the attic and i get a great back null ie i use a dutch station on 1008 or 747 and when the resistor is in use the dutch goes away completely you can see my flag in action here
http://www.youtube.com/user/tvdxrools#p/u and for a indoor antenna it works well but just a bit anoying that it stops at 1600 khz as there is some good dx to be found from 1610 - 1700. thanks for all the other answers re the balun and i will give it a try cheers david ... ayrshire scotland http://band1tvdx.blogspot.com/

Hi David

I have been thinking of experimenting with a Flag antenna this coming summer ... Do you rotate your 4x2 mtr antenna? on what MW frequencies does it work best? I am fortunate in that there are no local MW broadcast stations in my location .... everything is DX. I like daytime listening of MW stations in the Duluth and Iron Range area of Minn. .... all of which are at least 100 miles south of me. To date I have been using small tuned loops. Something like the Flag may be useful in allowing me to simply tune between stations without constantly tuning the loop.

Jim

[Non-text portions of this message have been removed]

7113. Please tell me what group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 08:53:58 UTC
From: Mike
Topic: 7094 Message: 7113

Re fishing for members, just wondering for which group, if the thinking is the chat one, no thank you, we have members who are mainly just starting in the hobbie and that's fine, the techee prolems can come here even to YOU. We just chat and you would not like that. Mike.
--- In loopantennas@yahoogroups.com, "alienrelics" <alienrelics@...> wrote:
>
> This is feeling more like an attempt to fish for members for another group.
>
> I feel like you are being a bit of a troll.
>
> Steve Greenfield
>
>
> --- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@> wrote:
> >
> >
> > Well one very nice reply, and of course you ALWAYS get the not so nice one that almost say B off, quite rude JIM "Scrutiny of the group has ended" can one not ask a scrunty question!
> > Now I have had two such replies.
> > I am the moderator of skywaves chat and if someone came to me with such a question, I would do a David Towers reply, not a reply such as the other one, please stop quaking in your shoes Jim, question time is over.
> > BTW I do make loops - have put up sales - and responded quite well in the past so why make me a non provider and non participant.
> > I was just wondering how long one subject was going to last, and that's all. Mike.
> >
>

7114. Re: How many tuning capacitors VERY nice TROLLING LOL reply.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 08:58:49 UTC
From: Mike
Topic: 7094 Message: 7114

150 that's some junk box. Yes that should change the subject matter H I. mike.

7115. Re: Well Cor I did as asked.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 09:03:32 UTC
From: Mike
Topic: 7094 Message: 7115

As asked I changed the subject matter, much more interesting now, next part, as PW always ask's is, where do you get your DIY supplies from. Anyone want copper tubing. H I; Mike

7116. Re: [loopantennas] Re: Thanks NICE Dave T

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 13:44:31 UTC
From: Chris Trask
Topic: 7094 Message: 7116

>
>This is feeling more like an attempt to fish for members for another group.
>
>I feel like you are being a bit of a troll.
>

Exactly right. I've put him into the SPAM filter so as to save wear and tear on the delete key.

Chris Trask
N7ZWY
WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7117. Anyone for a troll!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 14:35:48 UTC
From: Mike
Topic: 7117 Message: 7117

Found a great group, the Taiwanese MW group. mike.

7118. This months Radio User.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 14:39:44 UTC
From: Mike
Topic: 7118 Message: 7118

Well a few pages on the guy wanting those extra long special ferrite rods has been featured in this months Radio User, now it looks like he will be getting none, as there so good he has been advertising for them since 1992, interesting read. mike.

7119. Dismissive etc..

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 14:50:50 UTC
From: Mike
Topic: 7091 Message: 7119

John. Dismissive - Reactionary - Defending of the faithful, that said it all, with not much more to be said, apart from things are changing, thing is who cares! as you said, it's the internet.
Who is going to answer that 4 page question from the guy with multi antennas and problems, not me, but waiting for the interesting replies. mike.

7120. Re: Not sure if this is my group.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 19:01:44 UTC
From: gmcjetpilot
Topic: 7091 Message: 7120

Mike:

Click home for the group and read the description of the groups focus. Just because you have a narrow interest does not mean everyone is not interested. Also there is the delete key or you can cancel membership. I have about 20 yahoo groups I belong to and this is one of the better ones..... Stay or go.... But there is no need to announce it either way. You can cancel the email digest and just view the group at your pleasure. Cheers

PS: You can start your MW (listen only) Loop antenna group if you like.

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> Not sure if this is my group, are we mainly dealing with and taking about HAM transmitting loops re copper tubing or MW loops with wire turns as we seem to have a lot about lightning and neon's and such like, if its a group for loops in general that is somewhat fine be they for LW MW SW, but being a member of the MW Group anyway why should I be a member here, if you get my point, no good me being a member of both is there, not wishing to be rude in anyway. Confused. Mike.
>

7121. Re: Such a simple question but got a complicated answer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 19:03:33 UTC
From: gmcjetpilot
Topic: 7094 Message: 7121

Mike mike mike look at the home page of the group, it clear and detailed. Subject matter goes in waves. If you have a specific MW listen only antenna question than ask it. Why complain?

--- In loopantennas@yahoogroups.com, Michael in Suffolk <michaelrae65@...> wrote:
>
> Re my question is this my group, re membership. I hope you all saw the answer. What I can't fathom out is what is the main objective of this group? What was its objective? To talk about loop antennas in general including those for reception which I think is being dealt with on the medium wave group quite effectively. Of late there seems to be an abundance of issues relating to transmitting loops and I do wonder if it is going to end! I will stay a member for a few more weeks and if the same subject is constantly to the fore I will resign my membership. Mike
>
>
>
>
> [Non-text portions of this message have been removed]
>

7122. Re: Dismissive etc..

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-23 19:19:16 UTC
From: Bill
Topic: 7091 Message: 7122

Thanks...the multiple antennas was a background for what I have done to make viewing and listening easier for multiple users in multiple home locations. My real question was quite well stated at the end. I simply wanted to know if the Wellbrook ALA1530S+ was what I was looking for and if there were any members who had any suggestions, comments or opinions.

I am new here and generally have found it to be too technical for me in many respects, but I find your passive comment about not answering my "4 page question" rather humorous. You asked to get back to reception loops, yet you find my question too trivial to spend time answering??? Yet, you will attack others here for not catering to your desires of what this site should be about?

Bill

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> John. Dismissive - Reactionary - Defending of the faithful, that said it all, with not much more to be said, apart from things are changing, thing is who cares! as you said, it's the internet.
> Who is going to answer that 4 page question from the guy with multi antennas and problems, not me, but waiting for the interesting replies. mike.
>

7123. The moderators job is to moderate, moderately

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-24 15:31:49 UTC
From: alienrelics
Topic: 7123 Message: 7123

My job as moderator is to keep spam off the list, send trolls packing, cool things off if there are misunderstandings/anger, keep the list on topic if it drifts too far, and that sort of thing.

It is -not- my job to decide how long a subject will get hashed out. If people are still talking about something, it is because they want to.

The previous loopantennas list went bust because the moderator ruled with an iron, but erratic and obvious, hand. I try to stay as transparent as possible. I've removed a -lot- of spammers and spam links without any fuss. I've calmed down fusses without fuss. Sometimes I put someone(s) on moderated status and I may block some of their messages, sometimes I am forced to ban someone.

In the current fuss, I've put someone on moderated status so we can get back to talking about all kinds of loop antennas. Transmitting, receiving, copper pipe, ferrite, SLF, VLF, LF, MF, HF, VHF, UHF, SHF, DDRR, UFO (how'd -that- get in there?), RFID, whatever kind members want to talk about.

I won't tolerate trolling. Occasionally we get someone who finds it amusing to push people's buttons. I don't find it amusing.

Let's talk about loop antennas again.

Steve Greenfield

7124. About links to other groups

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-24 15:41:06 UTC
From: alienrelics
Topic: 7124 Message: 7124

By all means, post links to other groups! When I started this group, I put a section in the Links specifically for other groups that might be of interest to our members, and even put some in there myself.

What I object to is when someone tries to sow dissension and trouble in order to drive people to another group, forum, or list.

Enough of this fuss. Let's talk about loops!

Steve Greenfield
listowner loopantennas

7125. Re: [loopantennas] The moderators job is to moderate, moderately

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-24 15:48:42 UTC
From: Chris Trask
Topic: 7123 Message: 7125

>
> My job as moderator is to keep spam off the list, send trolls
> packing, cool things off if there are misunderstandings/anger,
> keep the list on topic if it drifts too far, and that sort of
> thing.
>

"All things in moderation"
- Greek proverb

"All things in moderation, including moderation"
- Mark Twain

Thank you for effectively dealing with the recent troll.

Chris Trask
N7ZWY
WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7126. Loop from computer flat cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-24 15:53:13 UTC
From: alienrelics
Topic: 7126 Message: 7126

Not exactly a loop antenna, but many years ago I built a BFO metal detector. The first model had a wooden form with a layer of shielding tape, wire wound around that, then another layer of shielding tape. With a break in the shielding tape so it wasn't a shorted turn.

It drifted like mad. Just moving it from sun to shade, or even from the warm air a foot above the ground to the cooler air an inch above the ground was enough to induce a slow but substantial drift. If I didn't keep retuning, it would drift right out of audible range.

So I took a chunk of largish flexible copper hose about 18 inches long, and took some computer ribbon cable that I sort of twist-rolled and inserted into the copper hose. Rolled the copper into a ring, then soldered the ends 1a to 2b, 2a to 3b, 3a to 4b, etc. then connected to 1b and 50a. I ended up trying a few other taps to get the correct inductance, I think I ended up somewhere around mid-40 turns.

Wow... solid as a rock! From sitting in a cold garage to summer sunlight, to being buried in wet grass in the shade, no more than a few Hz drift.

I used parts pulled out of a pocket AM radio. The tuning capacitor, reference oscillator LC, volume control, and some of the other parts came from the radio. I made a mount for the thumbwheel volume control by cutting and soldering pieces of PCB onto the back of the double-sided PCB I used as the front panel. The front panel I "brushed" with circles by using a pencil with big eraser chucked into a drill press. Rub-on lettering and a coat of clear finished it. The case was a PVC end-cap. The transistors and resistors I bought from Radio Shack.

I should dig it out and try it as a receiving loop. I expect the computer cable's close wire spacing to potentially limit the frequency, but with all those taps I don't see a problem with that.

Steve Greenfield

7127. Re: [loopantennas] Loop from computer flat cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-24 16:07:33 UTC
From: Chris Trask
Topic: 7126 Message: 7127

>
> Not exactly a loop antenna, but many years ago I built a BFO metal
> detector. The first model had a wooden form with a layer of
> shielding tape, wire wound around that, then another layer of
> shielding tape. With a break in the shielding tape so it wasn't a
> shorted turn.
>

<<SNIP>>

>
> I should dig it out and try it as a receiving loop. I expect the
> computer cable's close wire spacing to potentially limit the
> frequency, but with all those taps I don't see a problem with that.
>

The dielectric constant of the plastic insulation is also a culprit. However, the HP(whatever) WWVB receiver loop uses a similar method for easing the construction of the multi-turn loop, so what you're proposing will probably make a nice LF/VLF/ELF loop.

Chris Trask
N7ZWY
WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7128. WL1030, sources required

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-24 16:41:55 UTC
From: Wilhelm
Topic: 7128 Message: 7128

Hi members,

I am searching for a source for the circuit board and the amplifiers to build the WL1030 loopantenna. Any advice would be very appreciated.

73
Wilhelm

7129. RE: [loopantennas] WL1030, sources required

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-24 19:12:51 UTC
From: Cor Beijersbergen
Topic: 7128 Message: 7129

Hello Wilhelm,
Kent Electronics in the Netherlands (http://www.kent-electronics.nl/) had them in their program last year for the PE1KTH active loop antenna, which is the same concept as the WL1030. Maybe they still do. They do ship abroad. I can send you a magazine article on that one if you like, but it is in dutch!

Regards,

Cor Beijersbergen

I am searching for a source for the circuit board and the amplifiers to build the WL1030 loopantenna. Any advice would be very appreciated.

7130. Re: [loopantennas] WL1030, sources required

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-24 20:14:10 UTC
From: richard woltmann
Topic: 7128 Message: 7130

hello W, let me know if you find the lost WL1030- rwoltmann@... Thanks

---
From: Wilhelm <wilhelm.hombach@...>
To: loopantennas@yahoogroups.com
Sent: Sun, January 24, 2010 11:41:55 AM
Subject: [loopantennas] WL1030, sources required

Hi members,

I am searching for a source for the circuit board and the amplifiers to build the WL1030 loopantenna. Any advice would be very appreciated.

73
Wilhelm

[Non-text portions of this message have been removed]

7131. Re: How many tuning capacitors has each member.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 05:56:38 UTC
From: pappy_hiram
Topic: 7094 Message: 7131

hummm. not sure how many, I got a whole bunch! many I bought on Ebay, some I salvaged from old radios that weren't worth restoring, the small variables for the bc band I get from old clock radios and alarm clock radios, I got a bunch of those from thrift stores.
Pappy Hiram

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> OK starting a new thread.
>
> As asked to do.
>
> How many tuning capacitors has each member in there junk box!
> what values are there and what are you using them for now or in the future, also what price did you pay and from where, where they new or ex equipment.
>
> That should change the subject matter. Mike.
>

7132. Re: WL1030, sources required

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 11:39:12 UTC
From: Wilhelm
Topic: 7128 Message: 7132

Hi Cor,

bedankt for u mail. I just looked at the internet site of kent. Unfortunately they don't sell the board and the amplifier. I will send an email to them.

Totsiens
Wilhelm

--- In loopantennas@yahoogroups.com, "Cor Beijersbergen" <c.beijersbergen@...> wrote:
>
> Hello Wilhelm,
> Kent Electronics in the Netherlands (http://www.kent-electronics.nl/) had
> them in their program last year for the PE1KTH active loop antenna, which is
> the same concept as the WL1030. Maybe they still do. They do ship abroad. I
> can send you a magazine article on that one if you like, but it is in dutch!
>
> Regards,
>
> Cor Beijersbergen
>
>
>
> I am searching for a source for the circuit board and the amplifiers to
> build the WL1030 loopantenna. Any advice would be very appreciated.
>

7133. loop range

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 12:40:34 UTC
From: tvdxrools
Topic: 7097 Message: 7133

hi as stated in my last post my flag works from 530 - 1600 kHz and it seems to stop dead at 1600 and before i tried another balun my feed and resistor was in the middle of the vertical legs so i tried corner feeding it and this seems to have done the trick ie conditions wasn't so good this morning but i actually heard stations on 1610 - 1700 but whether this affects the actually performance of the flag i don't know as conditions were poor this morning so i will leave it a few days and see how it works cheers David http://band1tvdx.blogspot.com/

7134. Balcony Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 17:01:39 UTC
From: Mike
Topic: 7134 Message: 7134

Anyone made the balcony loop as advertised in the pages of Practical Wireless!

7135. Small CUBE capacitors .

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 10:06:20 UTC
From: Mike
Topic: 7094 Message: 7135

Yes I also have a large number of CUBE capacitors, getting the bolts and spindle extension is the main problem, at one time I made and sold {about 30} table top loops, the main frame was from a cut of 60mm {24 inches} round underground tubing and the box was open ended as it was a section of square water pipe, these sold for £25.00
those were the days. Mike.
--- In loopantennas@yahoogroups.com, "pappy_hiram" <daveleb55@...> wrote:
>
> hummm. not sure how many, I got a whole bunch! many I bought on Ebay, some I salvaged from old radios that weren't worth restoring, the small variables for the bc band I get from old clock radios and alarm clock radios, I got a bunch of those from thrift stores.
> Pappy Hiram
>
>
> --- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@> wrote:
> >
> > OK starting a new thread.
> >
> > As asked to do.
> >
> > How many tuning capacitors has each member in there junk box!
> > what values are there and what are you using them for now or in the future, also what price did you pay and from where, where they new or ex equipment.
> >
> > That should change the subject matter. Mike.
> >
>

7136. Re: Balcony Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 19:39:27 UTC
From: capntripps2000
Topic: 7134 Message: 7136

Can you post the details or a link to where they could be found?

Andrew

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> Anyone made the balcony loop as advertised in the pages of Practical Wireless!
>

7137. Re: Balcony Mil type Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 20:31:05 UTC
From: Mike
Topic: 7134 Message: 7137

It would seem it's not in this month PW, could it be it's not a good seller, I am sure it was a military copy, it looked to be about 3-4 foot long going by the very small picture and about 3 foot tall, with a metal mesh under it, so square oblong, it just sat on the balcony, cost if I recall was about £125, surely someone has an old PW with this advertised, yellow pages at the front of PW, was sold by one of the big four Haydon - W&S etc. Mike.

7138. Re: [loopantennas] Re: Balcony Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 21:38:00 UTC
From: Steve,g4vbd
Topic: 7134 Message: 7138

Maybe it is this one frfom Moonraker

http://www.moonraker.eu/Amateur-Radio/HF-Special-Antennas/HF-Balcony/BAHF-4

regards
Steve, g4vbd

----- Original Message -----
From: capntripps2000
To: loopantennas@yahoogroups.com
Sent: Monday, January 25, 2010 7:39 PM
Subject: [loopantennas] Re: Balcony Loop

Can you post the details or a link to where they could be found?

Andrew

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> Anyone made the balcony loop as advertised in the pages of Practical Wireless!
>

[Non-text portions of this message have been removed]

7139. Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 22:08:23 UTC
From: Bill
Topic: 7139 Message: 7139

I like US commercial AM radio. Or rather, I like talk radio on the American AM band. My tuner is a Sony XDR-F1HD that has been highly modified and calibrated. The tuner accepts twin wires, apparently in a balanced configuration.

I would like to add a very good wideband AM antenna and have been considering a Wellbrook. I asked a question here and Andy from Wellbrook sent me a reply, but also said that he could not provide a balanced output.

I am not an electrical engineer. Is there a balun or adapter that would change the output RG58c(?) of the Wellbrook, or other antenna, to one that can be used by the Sony? How can I make this work?

Thanks,

Bill

7140. Re: Balcony Loop - That's the one.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-25 22:18:38 UTC
From: Mike
Topic: 7134 Message: 7140

Yes Steve that's the one, now please one and all, who in there right mind would pay just under £160 for that, also tell me, 1; how hard to make your own and 2; at what cost, and most of all, how practical would it be.
I used 30 turns over a hula hoop with a 150pF tuning cap and tapping points for 80-10 mts,it worked very well, but being inside a room not the place for RF not even 10 watts, but it worked, cost well under £15.00, hope no one paid £159.95 for this if you did!!!!!!!! own up. mike. M3EMB

7141. Re: [loopantennas] Re: Balcony Loop - That's the one.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-26 00:12:39 UTC
From: jacob_twotwo@q.com
Topic: 7134 Message: 7141

What would that be in US currency, thanks.

On 1/25/2010 3:18 PM, Mike wrote:
> Yes Steve that's the one, now please one and all, who in there right mind would pay just under ?160 for that, also tell me, 1; how hard to make your own and 2; at what cost, and most of all, how practical would it be.
> I used 30 turns over a hula hoop with a 150pF tuning cap and tapping points for 80-10 mts,it worked very well, but being inside a room not the place for RF not even 10 watts, but it worked, cost well under ?15.00, hope no one paid ?159.95 for this if you did!!!!!!!! own up. mike. M3EMB
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>

7142. Re: [loopantennas] Re: Balcony Loop - That's the one.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-26 09:24:03 UTC
From: richard
Topic: 7134 Message: 7142

On Mon, 25 Jan 2010 17:12:39 -0700
jacob_twotwo@... wrote:

> What would that be in US currency, thanks.
>
>
>
>

I make it about US$ 259.
You can guarantee some poor mug will buy it, The quality of antennas from that company is poor, so
anyone who buys one shouldn't expect it to last very long.
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7143. Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-26 15:36:31 UTC
From: aircheckIover
Topic: 7139 Message: 7143

Bill; Yes a balun in reverse would work. 75 ohm unbal to 300 ohm bal. (I'm guessing 300 ohms is the impedance of the Sony's loop but it might be lower since it is twisted wires. Anyone know?)

Question: I heard an XDR tuner and thought the AM bandwidth was too narrow to enjoy listening. You mention modding yours. Did you widen the AM bandwidth or is it OK for you?

Tnx,

Mark

==========

--- In loopantennas@yahoogroups.com, "Bill" <willscarlett@...> wrote:
>
> I like US commercial AM radio. Or rather, I like talk radio on the American AM band. My tuner is a Sony XDR-F1HD that has been highly modified and calibrated. The tuner accepts twin wires, apparently in a balanced configuration.
>
> I would like to add a very good wideband AM antenna and have been considering a Wellbrook. I asked a question here and Andy from Wellbrook sent me a reply, but also said that he could not provide a balanced output.
>
> I am not an electrical engineer. Is there a balun or adapter that would change the output RG58c(?) of the Wellbrook, or other antenna, to one that can be used by the Sony? How can I make this work?
>
> Thanks,
>
> Bill
>

7144. Re: Balcony Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-26 18:14:25 UTC
From: i2ndt
Topic: 7134 Message: 7144

AS far as I know this antenna is manufactured by the Italian "Eco Antenne":
http://www.ecoantenne.it/index.php?cPath=21_25&language=en
I bought this antenna some 15 years ago...but never used it as its tuning (on transmit) was too complicated for me. At that time the only tx I had was a valve RTX by Swan: the Cygnet 270B. So tuning a multiband antenna with a valve tx was not that easy...The antenna is still in a corner of my balcony...

i2NDT Claudio

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> Anyone made the balcony loop as advertised in the pages of Practical Wireless!
>

7145. Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-26 20:41:14 UTC
From: rbrucecarter
Topic: 7139 Message: 7145

Is the Wellbrook a broadband loop, or a tuned box loop? The Sony employs an auto tuning AM front end - it will add capacitance to the inductive loop automatically to tune the station. If you have a tuned loop out there, the Sony will not be able to accommodate the loop because it will try to ramp down to zero capacitance - apparently out of its range. The Sangean HDT-1x is the same way. Don't put a tuned loop on either one!

What you should do is make a large loop that matches the inductance of the small one. If you get anywhere close, the auto-ranging capacitance inside the tuner IC will match it. Any way you look at it - you WILL have a tuned loop when you are done, it is just that the capacitance is all inside an IC. I've had really good luck with a large un-tuned loop. Unfortunately IBOC is a defective system. HD lock on the only station I am interested in is a lost cause no matter what I do. But regular analog AM is pretty good. It is no GE Superadio, but adequate for most listeners.

By the way - a large loop antenna is balanced by its very nature. The center ground connection, which is sometimes used, is unnecessary because voltage swings around it are symmetrical and AC potential will therefore always be zero. Getting back to the tuner - inside the tuner - there must be a ground connection somewhere on one side of the loop to make the auto-ranging capacitance feature work. Fully differential signal path is very unlikely inside the IC.

--- In loopantennas@yahoogroups.com, "Bill" <willscarlett@...> wrote:
>
> I like US commercial AM radio. Or rather, I like talk radio on the American AM band. My tuner is a Sony XDR-F1HD that has been highly modified and calibrated. The tuner accepts twin wires, apparently in a balanced configuration.
>
> I would like to add a very good wideband AM antenna and have been considering a Wellbrook. I asked a question here and Andy from Wellbrook sent me a reply, but also said that he could not provide a balanced output.
>
> I am not an electrical engineer. Is there a balun or adapter that would change the output RG58c(?) of the Wellbrook, or other antenna, to one that can be used by the Sony? How can I make this work?
>
> Thanks,
>
> Bill
>

7146. Re: Balcony Loop - by reply.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-26 20:16:09 UTC
From: Mike
Topic: 7134 Message: 7146

Hi Claudio

This is only a joke - So 99p on ebay LOL.
Mike.
--- In loopantennas@yahoogroups.com, "i2ndt" <i2ndt@...> wrote:
>
> AS far as I know this antenna is manufactured by the Italian "Eco Antenne":
http://www.ecoantenne.it/index.php?cPath=21_25&language=en
> I bought this antenna some 15 years ago...but never used it as its tuning (on transmit) was too complicated for me. At that time the only tx I had was a valve RTX by Swan: the Cygnet 270B. So tuning a multiband antenna with a valve tx was not that easy...The antenna is still in a corner of my balcony...
>
> i2NDT Claudio
>
> --- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@> wrote:
> >
> > Anyone made the balcony loop as advertised in the pages of Practical Wireless!
> >
>

7147. Gamma Feed Point...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-26 23:52:55 UTC
From: n6dmb
Topic: 7147 Message: 7147

Hello fellow loop enthusiasts, I have a question or two for you if I may. My loop 5' loop is made of 1.5" copper tubing which has been rolled into a continuous loop by a local metal fabricator set up for such operations. The gap is about 3 inches. An internet source shows a plan for a loop which is very similar to mine except for the relatively narrow tubing. The link will take you to this plan, a plan I offer for illustration purposes only...
http://nmwilliam.tripod.com/mla.jpg
If you take a moment to look at the plan, you will see that the gamma feed location point is placed 300 mm to the right of center, with a spacing of 100 mm. My question to the group is how was that point determined to be the "sweet spot" for the gamma feed location and how do I determine where that point is on my loop antenna? If I understand correctly, shouldn't that feed point should allow for a minimum SWR of 1:1? Using my antenna analyzer, the lowest SWR I can achieve is 1:3. These readings are "without" the capacitor installed. During 1 test, I touched the loop and watched the SWR drop to 1:1. That would bring me to my second question, what gives with that? Will my body act as a capacitor if I am ungrounded? Does it matter to the gamma feed point if the capacitor is installed or not?
Thanks in advance for any advice you might have for me.
Don N6DMB

[Non-text portions of this message have been removed]

7148. Re: [loopantennas] Gamma Feed Point...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 02:50:40 UTC
From: Jim Dunstan
Topic: 7147 Message: 7148

At 11:52 PM 1/26/2010 +0000, you wrote:
>
>
>Hello fellow loop enthusiasts, I have a question or two for you if I
>may. My loop 5' loop is made of 1.5" copper tubing which has been
>rolled into a continuous loop by a local metal fabricator set up for
>such operations. The gap is about 3 inches. An internet source shows a
>plan for a loop which is very similar to mine except for the relatively
>narrow tubing. The link will take you to this plan, a plan I offer for
>illustration purposes only...
><http://nmwilliam.tripod.com/mla.jpg>http://nmwilliam.tripod.com/mla.jpg
>If you take a moment to look at the plan, you will see that the gamma
>feed location point is placed 300 mm to the right of center, with a
>spacing of 100 mm. My question to the group is how was that point
>determined to be the "sweet spot" for the gamma feed location and how do
>I determine where that point is on my loop antenna? If I understand
>correctly, shouldn't that feed point should allow for a minimum SWR of
>1:1? Using my antenna analyzer, the lowest SWR I can achieve is 1:3.
>These readings are "without" the capacitor installed. During 1 test, I
>touched the loop and watched the SWR drop to 1:1. That would bring me
>to my second question, what gives with that? Will my body act as a
>capacitor if I am ungrounded? Does it matter to the gamma feed point if
>the capacitor is installed or not?
>Thanks in advance for any advice you might have for me.
>Don

Hi Don,

I assume the loop is 5' in diameter and you are planning to use it on 80m.
I have built a number of transmitting loops ... several with the gamma match.
I have never used a formula to determine the structure. I simply did quick
seat
of the pants experiments to get approx dimensions that work. It is usually
quite easy to get a good match near or at 1:1. There is some interaction
between resonance and gamma match settings. (it is easier than getting the
match with a coupling loop).

The loop needs to be tuned to resonance for the experimentation to work ...
without the capacitor the loop is like a dipole formed into a circle and would
probably resonate somewhere higher than 10m. If you wanted to make the
gamma match for 10m the structure would be very much smaller. However
if you want to build the gamma match for 80m ... it will require the loop to
be resonant at 80m in order to build and adjust it.

The 5' diam. loop made of 1.5" copper tubing should work very well on 80m.

Jim

VE3CI

[Non-text portions of this message have been removed]

7149. Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 03:20:01 UTC
From: Bill
Topic: 7139 Message: 7149

Thanks Bruce. The Wellbrook would be a broadband loop, I believe. It's output is an RG58C with BNC connectors, from what I have been told. I am thinking of perhaps RG6 with BNC on one end and an RF connector on the other end. This would allow for the 75-300 ohm balun, but I am wondering if this will even be close to working considering the 2 different cables and the 50 to 75 to 300 ohm changes. Again, I am no electrical enginner, but I don't want to "shoot myself in the foot" with this either.

Mark, The frequency responce is indeed limited, but that makes this radio quite clear and really doesn't hurt when listening to a phoned-in ballgame or talk-radio shows with a lot of callers. Also, I pick up quite a few HD stations from Milwaukee to Chicago and as far south as Nashville (I live in north central Wisconsin). I believe that the response in AM HD is 20-20k down perhaps 1db at the far ends. My mods were done by RadioX Tuners and to my ears, it sounds wonderful.

I lost a large FM antenna in a storm. With the new and modded Sony (and aligned), I use a Fanfare FM-2G whip antenna mounted 48' above ground and amplified with a Channel Master 7777 preamp. Both the antenna and amplification is frowned upon by vintage FM purists, but this trio picks up an FM station on every spot on the band, and of the 100 or so possible spots, over 80 are very clear and about 50 are perfect. No rotor, about 100 miles max coverage. The tuner has also had an output stage modified for better sound. I never heard it unmodified, but it sounds very good to me now!

Perhaps the Wellbrook loop is overkill, but I really like the AM HD radio I have received, and I figure that the Wellbrook should be a big upgrade over my pair of home-built "Ultimate AM Antennas" from the old Carver design.

Thanks for the replies guys! Any other help, thoughts or concerns would be appreciated!

Bill

--- In loopantennas@yahoogroups.com, "rbrucecarter" <rbrucecarter@...> wrote:
>
> Is the Wellbrook a broadband loop, or a tuned box loop? The Sony employs an auto tuning AM front end - it will add capacitance to the inductive loop automatically to tune the station. If you have a tuned loop out there, the Sony will not be able to accommodate the loop because it will try to ramp down to zero capacitance - apparently out of its range. The Sangean HDT-1x is the same way. Don't put a tuned loop on either one!
>
> What you should do is make a large loop that matches the inductance of the small one. If you get anywhere close, the auto-ranging capacitance inside the tuner IC will match it. Any way you look at it - you WILL have a tuned loop when you are done, it is just that the capacitance is all inside an IC. I've had really good luck with a large un-tuned loop. Unfortunately IBOC is a defective system. HD lock on the only station I am interested in is a lost cause no matter what I do. But regular analog AM is pretty good. It is no GE Superadio, but adequate for most listeners.
>

> By the way - a large loop antenna is balanced by its very nature. The center ground connection, which is sometimes used, is unnecessary because voltage swings around it are symmetrical and AC potential will therefore always be zero. Getting back to the tuner - inside the tuner - there must be a ground connection somewhere on one side of the loop to make the auto-ranging capacitance feature work. Fully differential signal path is very unlikely inside the IC.
>
>
> --- In loopantennas@yahoogroups.com, "Bill" <willscarlett@> wrote:
> >
> > I like US commercial AM radio. Or rather, I like talk radio on the American AM band. My tuner is a Sony XDR-F1HD that has been highly modified and calibrated. The tuner accepts twin wires, apparently in a balanced configuration.
> >
> > I would like to add a very good wideband AM antenna and have been considering a Wellbrook. I asked a question here and Andy from Wellbrook sent me a reply, but also said that he could not provide a balanced output.
> >
> > I am not an electrical engineer. Is there a balun or adapter that would change the output RG58c(?) of the Wellbrook, or other antenna, to one that can be used by the Sony? How can I make this work?
> >
> > Thanks,
> >
> > Bill
> >
>

7150. RE: [loopantennas] Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 04:00:45 UTC
From: Fredric J. Einstein
Topic: 7139 Message: 7150

The big problem with the Wellbrook loop is that it is NOT sold in the United States. I ordered their shortwave model after reading glowing reviews of it in terms of its quietness on the bands. My first one was defective and received NOTHING. After sending it back to Wellbrook in the U.K. (at a cost of over $50), the owner sent me a second one. It too was defective and it cost me another $50 to return it to the U.K. Until he sells it via a U.S. dealer, I would stay away from it.

[Non-text portions of this message have been removed]

7151. Re: Gamma Feed Point...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 04:37:48 UTC
From: capntripps2000
Topic: 7147 Message: 7151

First, as previously posted, hook up a capacitor. Heck, use a cheap 365pf broadcast variable since you are using an analyzer. I use a cheap var. cap. to get the ballpark resonance and then cut a length of RG8 coax and trim it for resonance. I have several monoband magnetic loops in the attic. Easy and cheap to build.

Connect a short length of wire with a hose clamp and start adjusting for best match, 1:1 will definitely be obtainable.

Using gamma matching you might not get 5 band coverage as is typical using a feed loop. I design my mag loops to cover 2 bands and gamma matching works great.

Nearby objects will alter the impedance of the antenna and affect the gamma match size, also limiting how many bands you can achieve a low acceptable SWR.

You can always compromise, as we do with feed loops, and adjust the gamma match for 1.5:1 SWR across all the bands you intend to cover.

Trial and error, no substitute for that. I guarantee if you tune the loop outside or indoors and finally mount the loop in the attic, for example, you will need to touch up the matching and the tuning for resonance.

The work will be well worth the effort as you will be amazed with the results on receive as well as signal reports.

Keep us posted.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "n6dmb" <N61W160@...> wrote:
>
> Hello fellow loop enthusiasts, I have a question or two for you if I
> may. My loop 5' loop is made of 1.5" copper tubing which has been
> rolled into a continuous loop by a local metal fabricator set up for
> such operations. The gap is about 3 inches. An internet source shows a
> plan for a loop which is very similar to mine except for the relatively
> narrow tubing. The link will take you to this plan, a plan I offer for
> illustration purposes only...
> http://nmwilliam.tripod.com/mla.jpg
> If you take a moment to look at the plan, you will see that the gamma
> feed location point is placed 300 mm to the right of center, with a
> spacing of 100 mm. My question to the group is how was that point
> determined to be the "sweet spot" for the gamma feed location and how do
> I determine where that point is on my loop antenna? If I understand
> correctly, shouldn't that feed point should allow for a minimum SWR of
> 1:1? Using my antenna analyzer, the lowest SWR I can achieve is 1:3.
> These readings are "without" the capacitor installed. During 1 test, I

> touched the loop and watched the SWR drop to 1:1. That would bring me
> to my second question, what gives with that? Will my body act as a
> capacitor if I am ungrounded? Does it matter to the gamma feed point if
> the capacitor is installed or not?
> Thanks in advance for any advice you might have for me.
> Don N6DMB
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7152. Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 12:35:46 UTC
From: Bill
Topic: 7139 Message: 7152

Very interesting! This is the first bad thoughts I have read about Wellbrook anywhere. This has always been a fear of mine and thank you for the post. I find it almost strange that NOBODY in the US builds an antenna similar to this.

Thanks for the opposing view. It is much appreciated.

Bill

--- In loopantennas@yahoogroups.com, "Fredric J. Einstein" <byungjaykim@...> wrote:
>
> The big problem with the Wellbrook loop is that it is NOT sold in the United
> States. I ordered their shortwave model after reading glowing reviews of it
> in terms of its quietness on the bands. My first one was defective and
> received NOTHING. After sending it back to Wellbrook in the U.K. (at a cost
> of over $50), the owner sent me a second one. It too was defective and it
> cost me another $50 to return it to the U.K. Until he sells it via a U.S.
> dealer, I would stay away from it.
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7153. Re: [loopantennas] Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 14:01:01 UTC
From: Andy Ikin
Topic: 7139 Message: 7153

Fredric J. Einstein wrote on the 27th Jan 2009

"The big problem with the Wellbrook loop is that it is NOT sold in the United States. I ordered their shortwave model after reading glowing reviews of it in terms of its quietness on the bands. My first one was defective and received NOTHING. After sending it back to Wellbrook in the U.K. (at a cost of over $50), the owner sent me a second one. It too was defective and it cost me another $50 to return it to the U.K. Until he sells it via a U.S. dealer, I would stay away from it."

Fredric,

It is not cost effective to have a dealer in the USA.

The situation as I recall was that after exchanging the Interface units we were unable to get the antenna working properly and you accepted a refund.

You also sent the following e-mail on the 30 Jan 2007

"Dear Andy,

Thanks for your integrity in dealing with this problem. I really wanted this thing to work, but my results were always the same. I did try the old interface with my Yaesu FT-847 ham transceiver. The results were the same, the only thing that attaching the loop did was increase the noise, reception was still impossible. Do you want me to mail back the old interface box as well? Have you heard of any other Americans with these problems? Perhaps the U.S. Postal Service subjects the antenna loop unit to some electronic inspection which blows a component within it? I'm having our local post office check this out.

Regards,

Fred Einstein"

Andrew

Andrew Ikin

Wellbrook Communications

[Non-text portions of this message have been removed]

7154. Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 14:21:16 UTC
From: Bill
Topic: 7139 Message: 7154

Thanks Andy. It's good to hear both sides.

Bill

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
> Fredric J. Einstein wrote on the 27th Jan 2009
>
>
>
> "The big problem with the Wellbrook loop is that it is NOT sold in the United
> States. I ordered their shortwave model after reading glowing reviews of it
> in terms of its quietness on the bands. My first one was defective and
> received NOTHING. After sending it back to Wellbrook in the U.K. (at a cost
> of over $50), the owner sent me a second one. It too was defective and it
> cost me another $50 to return it to the U.K. Until he sells it via a U.S.
> dealer, I would stay away from it."
>
>
>
>
>
> Fredric,
>
>
>
> It is not cost effective to have a dealer in the USA.
>
>
>
> The situation as I recall was that after exchanging the Interface units we were unable to get the antenna working properly and you accepted a refund.
>
>
>
> You also sent the following e-mail on the 30 Jan 2007
>
>
>
> "Dear Andy,
>
> Thanks for your integrity in dealing with this problem. I really wanted this thing to work, but my results were always the same. I did try the old interface with my Yaesu FT-847 ham transceiver. The results were the same, the only thing that attaching the loop did was increase the noise, reception was still impossible. Do you want me to mail back the old

interface box as well? Have you heard of any other Americans with these problems? Perhaps the U.S. Postal Service subjects the antenna loop unit to some electronic inspection which blows a component within it? I'm having our local post office check this out.
>
>
>
> Regards,
>
>
>
> Fred Einstein"
>
>
>
>
>
>
> Andrew
>
> Andrew Ikin
>
>
> Wellbrook Communications
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7155. [loopantennas] Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 14:58:33 UTC
From: Fredric J. Einstein
Topic: 7139 Message: 7155

Bill wrote:

Thanks Andy. It's good to hear both sides.

I reply:

There are no "sides" to this. I simply stated a fact. North American buyers are taking a risk purchasing a Wellbrook product because there's no service available over here and failed parts in the circuit cannot be replaced since Wellbrook chooses to encase their electronics in a hard potting-compound to protect Wellbrook's proprietary inventions.

I did not say that Andy Iken was dishonest. I did not say that he made a bad product. What I did say was that I received two items that arrived in Oak Park, MI in a not-working state and were unable to receive ANYTHING. I was totally not at fault for the defective products. I wanted the antenna to work, otherwise I wouldn't have purchased it! I am electronically-capable and am an Extra-Class ham operator who has erected his own antenna tower and Cushcraft Yagi, so I know how to mount a loop onto a fiberglass mast!

I don't know why I received 2 defective products. Perhaps they were X-rayed en-route and delicate components were damaged. My return of these defective items cost me over $100 since I shipped the defective item back to Iken via the SAFEST way possible (Airborne Express) and without complaint and always being polite and considerate of Andy's feelings. He did not inform me that he would not accept items sent via Airborne, UPS, or DHL because they would charge him a duty fee whereas items shipped via the Post Office did not have this duty fee attached. He knew the law, when he corresponded with me, he should have warned me to ONLY ship the returned items via the Post Office - more hassles for me, the innocent victim of these defective products!

Thus, I issued a caveat to North American buyers of Wellbrook products that they are taking a risk. I should not have to be put on the defensive by relating my true and undeniable experience with this product and my decency in putting up with the numerous inconveniences and costs caused by these defective products. Mr. Iken would be well-advised to listen to his customers instead of attacking.someone who dealt honestly and truthfully with him and simply suffered from his company's defective product.

Did Mr. Iken analyze the returned products? What was the problem? That he actually discovered an issue with the returned products would certainly reassure his potential North American buyers that the problems that I experienced have been solved.

[Non-text portions of this message have been removed]

7156. Re: Gamma Feed Point...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 17:05:44 UTC
From: n6dmb
Topic: 7147 Message: 7156

Hello Jim and Andrew,

Thanks for taking the time to reply to my post. Yes, the loop is 5' OD. The circumference is just under 15 feet. The intended band is 15 meters. Using one of the loop design formulas in the files section, I came up with 1/4 wavelength divided by 3.14 or 15.66' circumference. Actually, I plugged information into ALL the loop design formulas listed and couldn't get any two to agree. Since 1.5" heavy copper tubing comes in 20' lengths, the best the metal fabricator could do for me is the loop I now have, 5 feet across with a circumference just under 15.66'. It works out because this should keep me away from self resonance issues within my desired band. We'll see.

I brought this up a few months ago, but got frustrated with the project and rolled my loop out of sight, behind a shed. My "Buddipole" antenna system works fine. It's time for me to see this loop project through. I will keep everyone informed of my progress.

73,
Don N6DMB

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
> Hi Don,
>
> I assume the loop is 5' in diameter and you are planning to use it on 80m.
> I have built a number of transmitting loops ... several with the gamma match.
> I have never used a formula to determine the structure. I simply did quick
> seat
> of the pants experiments to get approx dimensions that work. It is usually
> quite easy to get a good match near or at 1:1. There is some interaction
> between resonance and gamma match settings. (it is easier than getting the
> match with a coupling loop).
>
> The loop needs to be tuned to resonance for the experimentation to work ...
> without the capacitor the loop is like a dipole formed into a circle and would
> probably resonate somewhere higher than 10m. If you wanted to make the
> gamma match for 10m the structure would be very much smaller. However
> if you want to build the gamma match for 80m ... it will require the loop to
> be resonant at 80m in order to build and adjust it.
>
> The 5' diam. loop made of 1.5" copper tubing should work very well on 80m.
>
> Jim
>
> VE3CI
>
>
>
> [Non-text portions of this message have been removed]

>

7157. Re: [loopantennas] Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 19:28:36 UTC
From: Jay Heyl
Topic: 7139 Message: 7157

On Wed, Jan 27, 2010 at 4:35 AM, Bill <willscarlett@...> wrote:

> Very interesting! This is the first bad thoughts I have read about
> Wellbrook anywhere. This has always been a fear of mine and thank you for
> the post. I find it almost strange that NOBODY in the US builds an antenna
> similar to this.
>

Not to dispute Fred's account in any way, but I know there have been dozens of Wellbrook antennas shipped to the US without incident. I was one of the earlier purchasers of a Wellbrook antenna in the US. I think Andy hadn't quite got the packaging fully worked out at that time. Mine arrived with the box containing the interface unit looking like it had been mistaken for a rugby ball. Fortunately, the antenna worked fine.

In contrast, and to support Fred's account of damage occurring in shipping, a couple years ago I bought a ferrite loop antenna from someone who has been building and selling them for many years. When it arrived it was very well packed and the box showed no signs of damage. Yet it was completely dead. I eventually returned it and was told by the seller that this was the first of literally hundreds of these units that had been damaged in shipment. He repaired it and it's been working fine ever since. Just for reference, this package never left the state of origin and traveled less than 300 miles from origin to destination.

Buying anything that has to be shipped to you, you're running a risk of damage during shipping. Ordering from overseas amplifies this risk. It would certainly be preferable if Wellbrook had an agent in the US, but they don't and it seems unlikely that situation will change any time soon. You have to decide if the product is worth the added risk of damage during shipment. Fred's experience, which was certainly unfortunate, I don't believe is typical. The Wellbrook loops are sturdily constructed and have been successfully shipped to dozens (hundreds?) of customers in the US. I see the potential for damage during shipping as just one more thing to consider, not as an overriding concern.

-- Jay

[Non-text portions of this message have been removed]

7158. Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 20:26:53 UTC
From: aircheckclover
Topic: 7139 Message: 7158

Thanks Bruce. I did not know about the auto tuning electronics for AM. That would explain the untuned loop that came with the XDR-F1.

The Wellbrook is a broadband pre-amplified loop. The signal leaves the pre-amp, mounted at the base of the antenna, as 50 ohm unbal. Soooo - I don't think putting a balun at the base of the auto-tuning XDR will work.

I wonder - Would using the supplied untued loop as a pickup loop for a larger tuned loop work? I will have to try.

Bill, I am in Milwaukee and cannot trigger HD on any Chicago stations - only on locals WTMJ, WISN & WOKY. What kind of mods where done to your tuner?

Mark

==========

--- In loopantennas@yahoogroups.com, "rbrucecarter" <rbrucecarter@...> wrote:
>
> Is the Wellbrook a broadband loop, or a tuned box loop? The Sony employs an auto tuning AM front end - it will add capacitance to the inductive loop automatically to tune the station. If you have a tuned loop out there, the Sony will not be able to accommodate the loop because it will try to ramp down to zero capacitance - apparently out of its range. The Sangean HDT-1x is the same way. Don't put a tuned loop on either one!
>
> What you should do is make a large loop that matches the inductance of the small one. If you get anywhere close, the auto-ranging capacitance inside the tuner IC will match it. Any way you look at it - you WILL have a tuned loop when you are done, it is just that the capacitance is all inside an IC. I've had really good luck with a large un-tuned loop. Unfortunately IBOC is a defective system. HD lock on the only station I am interested in is a lost cause no matter what I do. But regular analog AM is pretty good. It is no GE Superadio, but adequate for most listeners.
>
> By the way - a large loop antenna is balanced by its very nature. The center ground connection, which is sometimes used, is unnecessary because voltage swings around it are symmetrical and AC potential will therefore always be zero. Getting back to the tuner - inside the tuner - there must be a ground connection somewhere on one side of the loop to make the auto-ranging capacitance feature work. Fully differential signal path is very unlikely inside the IC.
>
>
> --- In loopantennas@yahoogroups.com, "Bill" <willscarlett@> wrote:
> >
> > I like US commercial AM radio. Or rather, I like talk radio on the American AM band. My tuner is a Sony XDR-F1HD that has been highly modified and calibrated. The tuner accepts twin wires, apparently in a balanced configuration.

> >
> > I would like to add a very good wideband AM antenna and have been considering a Wellbrook. I asked a question here and Andy from Wellbrook sent me a reply, but also said that he could not provide a balanced output.
> >
> > I am not an electrical engineer. Is there a balun or adapter that would change the output RG58c(?) of the Wellbrook, or other antenna, to one that can be used by the Sony? How can I make this work?
> >
> > Thanks,
> >
> > Bill
> >
>

7159. Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 20:52:19 UTC
From: Bill
Topic: 7139 Message: 7159

Mark,

I am just outside the southwest corner of New London. I am listening to TMJ right now in HD, and For a few hours every afternoon I get WISN in HD also. I also get ESPN AM 1070 out of Madison in HD during much of the day. From Chicago, I just switched to AM 670 and it popped into HD after 8 seconds and is stable. WBBM floats in and out occasionally, but usually is not in HD. At night, I pick up AM 700 out of Cinci in HD. All of this is done with the home made twin "Carver Ultimate AM Antennas". With the factory loop, WTMJ flickers in and out and none of the others lock on HD.

Mike Williams over at radioxtuners.com did my mods. In fact, the picture on his site of the dual cooling fan option is my unit. I begged for and was the first to get fan cooling. I also had the higher feet installed, forced analog, memory extension, disabled LCD backlight in standby, and the treble correction and audiophile output with active filter. Of course, it was also aligned using Brian Beezley's techniques by Mike Williams. I have $370 into the tuner (including both sale price and modifications and alignment) and I am very happy with it.

Bill

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
> Thanks Bruce. I did not know about the auto tuning electronics for AM. That would explain the untuned loop that came with the XDR-F1.
>
> The Wellbrook is a broadband pre-amplified loop. The signal leaves the pre-amp, mounted at the base of the antenna, as 50 ohm unbal. Soooo - I don't think putting a balun at the base of the auto-tuning XDR will work.
>
> I wonder - Would using the supplied untued loop as a pickup loop for a larger tuned loop work? I will have to try.
>
> Bill, I am in Milwaukee and cannot trigger HD on any Chicago stations - only on locals WTMJ, WISN & WOKY. What kind of mods where done to your tuner?
>
> Mark
>
> ================================
>
>
>
> --- In loopantennas@yahoogroups.com, "rbrucecarter" <rbrucecarter@> wrote:
> >
> > Is the Wellbrook a broadband loop, or a tuned box loop? The Sony employs an auto tuning AM front end - it will add capacitance to the inductive loop automatically to tune the station. If you have a tuned loop out there, the Sony will not be able to accommodate the

loop because it will try to ramp down to zero capacitance - apparently out of its range. The Sangean HDT-1x is the same way. Don't put a tuned loop on either one!
> >
> > What you should do is make a large loop that matches the inductance of the small one. If you get anywhere close, the auto-ranging capacitance inside the tuner IC will match it. Any way you look at it - you WILL have a tuned loop when you are done, it is just that the capacitance is all inside an IC. I've had really good luck with a large un-tuned loop. Unfortunately IBOC is a defective system. HD lock on the only station I am interested in is a lost cause no matter what I do. But regular analog AM is pretty good. It is no GE Superadio, but adequate for most listeners.
> >
> > By the way - a large loop antenna is balanced by its very nature. The center ground connection, which is sometimes used, is unnecessary because voltage swings around it are symmetrical and AC potential will therefore always be zero. Getting back to the tuner - inside the tuner - there must be a ground connection somewhere on one side of the loop to make the auto-ranging capacitance feature work. Fully differential signal path is very unlikely inside the IC.
> >
> >
> > --- In loopantennas@yahoogroups.com, "Bill" <willscarlett@> wrote:
> > >
> > > I like US commercial AM radio. Or rather, I like talk radio on the American AM band. My tuner is a Sony XDR-F1HD that has been highly modified and calibrated. The tuner accepts twin wires, apparently in a balanced configuration.
> > >
> > > I would like to add a very good wideband AM antenna and have been considering a Wellbrook. I asked a question here and Andy from Wellbrook sent me a reply, but also said that he could not provide a balanced output.
> > >
> > > I am not an electrical engineer. Is there a balun or adapter that would change the output RG58c(?) of the Wellbrook, or other antenna, to one that can be used by the Sony? How can I make this work?
> > >
> > > Thanks,
> > >
> > > Bill
> > >
> >
>

7160. Re: Balun??? for Sony XDR-F1HD?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-27 20:55:13 UTC
From: Bill
Topic: 7139 Message: 7160

I almost forgot...there is a disney radio channel out of Milwaukee that I get in HD every other day or so for a few hours. I believe it is AM 1640?

Bill

--- In loopantennas@yahoogroups.com, "aircheckclover" <mdh@...> wrote:
>
> Thanks Bruce. I did not know about the auto tuning electronics for AM. That would explain the untuned loop that came with the XDR-F1.
>
> The Wellbrook is a broadband pre-amplified loop. The signal leaves the pre-amp, mounted at the base of the antenna, as 50 ohm unbal. Soooo - I don't think putting a balun at the base of the auto-tuning XDR will work.
>
> I wonder - Would using the supplied untued loop as a pickup loop for a larger tuned loop work? I will have to try.
>
> Bill, I am in Milwaukee and cannot trigger HD on any Chicago stations - only on locals WTMJ, WISN & WOKY. What kind of mods where done to your tuner?
>
> Mark
>
> ================================
>
>
>
> --- In loopantennas@yahoogroups.com, "rbrucecarter" <rbrucecarter@> wrote:
> >
> > Is the Wellbrook a broadband loop, or a tuned box loop? The Sony employs an auto tuning AM front end - it will add capacitance to the inductive loop automatically to tune the station. If you have a tuned loop out there, the Sony will not be able to accommodate the loop because it will try to ramp down to zero capacitance - apparently out of its range. The Sangean HDT-1x is the same way. Don't put a tuned loop on either one!
> >
> > What you should do is make a large loop that matches the inductance of the small one. If you get anywhere close, the auto-ranging capacitance inside the tuner IC will match it. Any way you look at it - you WILL have a tuned loop when you are done, it is just that the capacitance is all inside an IC. I've had really good luck with a large un-tuned loop. Unfortunately IBOC is a defective system. HD lock on the only station I am interested in is a lost cause no matter what I do. But regular analog AM is pretty good. It is no GE Superadio, but adequate for most listeners.
> >
> > By the way - a large loop antenna is balanced by its very nature. The center ground connection, which is sometimes used, is unnecessary because voltage swings around it are symmetrical and AC potential will therefore always be zero. Getting back to the tuner -

inside the tuner - there must be a ground connection somewhere on one side of the loop to make the auto-ranging capacitance feature work. Fully differential signal path is very unlikely inside the IC.
> >
> >
> > --- In loopantennas@yahoogroups.com, "Bill" <willscarlett@> wrote:
> > >
> > > I like US commercial AM radio. Or rather, I like talk radio on the American AM band. My tuner is a Sony XDR-F1HD that has been highly modified and calibrated. The tuner accepts twin wires, apparently in a balanced configuration.
> > >
> > > I would like to add a very good wideband AM antenna and have been considering a Wellbrook. I asked a question here and Andy from Wellbrook sent me a reply, but also said that he could not provide a balanced output.
> > >
> > > I am not an electrical engineer. Is there a balun or adapter that would change the output RG58c(?) of the Wellbrook, or other antenna, to one that can be used by the Sony? How can I make this work?
> > >
> > > Thanks,
> > >
> > > Bill
> > >
> >
>

7161. Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 01:15:08 UTC
From: w0hrf
Topic: 7161 Message: 7161

Hi, Does anyone have any feedback on the differences in performance? I understand that this depends largely on the size, but comparatively how would a 12" ferrite loop perform compared to a 3 foot air core loop?

Thanks in advance,

Jim

7162. Re: [loopantennas] Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 05:29:28 UTC
From: John Popelish
Topic: 7161 Message: 7162

w0hrf wrote:
> Hi, Does anyone have any feedback on the differences in
> performance? I understand that this depends largely on
> the size, but comparatively how would a 12" ferrite loop
> perform compared to a 3 foot air core loop?

I think the rule of thumb is that a loop with a diameter
equal to the rod length will equal or outperform the rod.
Rods have a point only when the space for a loop is not
available.

--
Regards,

John Popelish

7163. Re: Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 09:17:39 UTC
From: EDUARDO
Topic: 7161 Message: 7163

Hello Jim

Well on the question of comparison, is very relative. I think the ideal would not "compare", but to make an assessment of both antennas. The ferrite loop, although with large 12 ", can generate a large collection of noise as a function of ferrite, taking advantage of only one more field inductance, allowing you to work with the receiver a little farther, without a saturation signal. The loop with air-core in turn will have an excellent collection on its size, but loses its directionality because the longer the loop, the less directional it is. Both antennas are very good, but I think it is not compare income because each one has its feature in particular. www.radiodx.qsl.br Visit the site and see the different kinds of networks that already did, looostick g has only one ferrite rod of 18 cm and has a higher yield than one loop of ferrite with 10 sticks of 22 cm. This is real! The clock high "q" is the setting of the coil. Check out the videos on youtube, search for "Loopstick GE.
I'm sorry for my english.

Respectfully,

Eduardo
Mairiporã- SP- Brasil
Grid Locator: GG66qq
www.radiodx.qsl.br

----- Original Message -----
From: "w0hrf" <219@...>
To: <loopantennas@yahoogroups.com>
Sent: Wednesday, January 27, 2010 11:15 PM
Subject: ***SPAM*** [loopantennas] Ferrite Loop vs Air Core Loop

> Hi, Does anyone have any feedback on the differences in performance? I understand that this depends largely on the size, but comparatively how would a 12" ferrite loop perform compared to a 3 foot air core loop?
>
> Thanks in advance,
>
> Jim
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.

> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 8.5.432 / Virus Database: 271.1.1/2650 - Release Date: 01/27/10 19:36:00

[Non-text portions of this message have been removed]

7164. Re: [loopantennas] Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 17:01:13 UTC
From: john@2ad.com
Topic: 7161 Message: 7164

As with many things there is a practicality/cost vs efficiency trade off. The magnetic permeability of iron is about 8 times that of air. So if air were made of iron we would all get better performance from our loops.

But magnetic flux is also proportional to area, the "ballpark" point of equivalence might be about:

r^2 = 8

In other words, an air loop will induce more current when it is roughly 3 times larger in diameter than an iron core loop. For your example, 12" = 3*3', so they will be roughly the same. Next I would consider practicality, since air is so much lighter and cheaper, I'd choose the 3' air loop, given the choice.

Of course this is a gross over simplification and I ignored a huge factor: the number of windings. If you want to consider more than one variable things will get more complicated. The other answer, "build em both" is good advice.

John

> Hi, Does anyone have any feedback on the differences in performance? I
> understand that this depends largely on the size, but comparatively how
> would a 12" ferrite loop perform compared to a 3 foot air core loop?
>
> Thanks in advance,
>
> Jim
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links

>
>
>
>
>

7165. Re: [loopantennas] Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 17:39:11 UTC
From: John Popelish
Topic: 7161 Message: 7165

john@... wrote:
> As with many things there is a practicality/cost vs
> efficiency trade off. The magnetic permeability of iron
> is about 8 times that of air. So if air were made of
> iron we would all get better performance from our loops.
>
> But magnetic flux is also proportional to area, the
> "ballpark" point of equivalence might be about:
>
> r^2 = 8
>
> In other words, an air loop will induce more current when
> it is roughly 3 times larger in diameter than an iron
> core loop. For your example, 12" = 3*3', so they will
> be roughly the same. Next I would consider
> practicality, since air is so much lighter and cheaper,
> I'd choose the 3' air loop, given the choice.
>
> Of course this is a gross over simplification and I
> ignored a huge factor: the number of windings. If you
> want to consider more than one variable things will get
> more complicated. The other answer, "build em both" is
> good advice.
>
> John

I am having trouble making physical sense of this.
Ferromagnetic materials have a relative permeability that is
a function of frequency. The ferrite used for antennas
usually have relative permeability in the range of tens to
thousands. I don't know where you got 8 from.

High permeability cores allow and a magnetic antenna to be
essentially linear, instead of one that covers area. So the
two most general dimensions to be compared are length (of
the ferromagnetic material) versus area of air core loop.
As long as the total wire length is a small fraction of the
wavelength in question, turns count is essentially just an
impedance issue.

There is also the noise contribution of ferromagnetic
material to consider (Google Barkhausen noise).
http://en.wikipedia.org/wiki/Barkhausen_effect

--
Regards,

John Popelish

7166. Re: [loopantennas] Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 21:05:44 UTC
From: Richard (Rick) Karlquist
Topic: 7161 Message: 7166

> > John
>
> I am having trouble making physical sense of this.
> Ferromagnetic materials have a relative permeability that is
> a function of frequency. The ferrite used for antennas
> usually have relative permeability in the range of tens to
> thousands. I don't know where you got 8 from.

No, you are the one who is incorrect. Once the material's
intrinsic permeability is >100 or so, the effective permeability
depends on the length to diameter ratio, because of the "air gap"
from one end to the other.

>
> High permeability cores allow and a magnetic antenna to be
> essentially linear, instead of one that covers area. So the

No they don't. Length is only relevant insofar as it affects
effective permeability as mentioned above. Area is still the
important parameter.

Because of its small size, a ferrite loopstick with any reasonable
bandwidth simply cannot have much sensitivity.

Rick N6RK

>
> John Popelish

7167. Re: [loopantennas] Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 12:59:42 UTC
From: Denis Zoqbi
Topic: 7161 Message: 7167

Hi,

The thought of John is correct. The catchment area of an air core loop is larger and more sensitive to the local induction of radio waves, than any other variation, with ferrite or not. The distress signal, whatever it is, will always be on the level of noise that already exists and that the radio can detect. Never a small ferrite antenna will have the same ability to detect if it is compared to a 3 foot air core loop.
I set the antenna proposed by our friend K7WW ,Tom (Seatle) , with 42 inches and compared with an antenna that we made using the same ferrite antenna LA 1 Palomar Engineers working in MW. The signal of the air core loop was strongest and clearest ever. All antennas ferrite when they need to raise the received signal to a higher level, require a signal amplifier with very low noise.
All my main listening transcontinental or North American receptions might be possible with the large loop antenna 6 foot air core I made years ago.

Best regards

Denis

----- Original Message -----
From: "John Popelish" <jpopelish@...>
To: <loopantennas@yahoogroups.com>
Sent: Thursday, January 28, 2010 3:29 AM
Subject: Re: [loopantennas] Ferrite Loop vs Air Core Loop

> w0hrf wrote:
>> Hi, Does anyone have any feedback on the differences in
>> performance? I understand that this depends largely on
>> the size, but comparatively how would a 12" ferrite loop
>> perform compared to a 3 foot air core loop?
>
> I think the rule of thumb is that a loop with a diameter
> equal to the rod length will equal or outperform the rod.
> Rods have a point only when the space for a loop is not
> available.
>
> --
> Regards,
>
> John Popelish
>
>
> ------------------------------------
>

> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

7168. Re: Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 22:17:30 UTC
From: w0hrf
Topic: 7161 Message: 7168

--- In loopantennas@yahoogroups.com, "w0hrf" <219@...> wrote:
>
> Hi, Does anyone have any feedback on the differences in performance? I understand that this depends largely on the size, but comparatively how would a 12" ferrite loop perform compared to a 3 foot air core loop?
>
> Thanks in advance,
>
> Jim
>
Thank you very much all of your feedback. I may build both ferrite and aircore loops. A smaller ferrite loop-stick would be great for travel and indoors, while a larger aircore could be remotely tuned and kept outdoors. Thanks again :)

Jim WØHRF

7169. Re: [loopantennas] Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 23:13:19 UTC
From: John Popelish
Topic: 7161 Message: 7169

Richard (Rick) Karlquist wrote:
> John Popelish wrote:
>> I am having trouble making physical sense of this.
>> Ferromagnetic materials have a relative permeability that is
>> a function of frequency. The ferrite used for antennas
>> usually have relative permeability in the range of tens to
>> thousands. I don't know where you got 8 from.
>
> No, you are the one who is incorrect. Once the material's
> intrinsic permeability is >100 or so, the effective permeability
> depends on the length to diameter ratio, because of the "air gap"
> from one end to the other.

I agree that the ratio of length yo diameter affects the
effective permeability. I was talking about the relative
permeability of the material, itself. This was in response
to this line "The magnetic permeability of iron
is about 8 times that of air."

>> High permeability cores allow and a magnetic antenna to be
>> essentially linear, instead of one that covers area. So the
>
> No they don't. Length is only relevant insofar as it affects
> effective permeability as mentioned above. Area is still the
> important parameter.

But a high relative permeability material lets a rod shape
(length much bigger than diameter) couple into a volume of
space roughly equivalent to what an air core loop with a
diameter equal to the rod length couples with. This assumes
that the relative permeability of the rod material is much
more than its length to diameter ratio.

Here is a link to a graph of how the material relative
permeability and length to diameter ratio relate to the
effective permeability (inductance multiplier for a coil
wound close to the rod) of the rod in air:

http://www.magneticsgroup.com/pdf/erods.pdf

> Because of its small size, a ferrite loopstick with any reasonable
> bandwidth simply cannot have much sensitivity.

Neither can an air core loop with a diameter no larger than
the rod length. And that loop is harder to fit inside a
radio so that the rest of the stuff in there dies not
interfere with its operation.

--
Regards,

John Popelish

7170. Re: [loopantennas] Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-28 23:39:01 UTC
From: Paul V Birke PEng
Topic: 7161 Message: 7170

"The magnetic permeability of iron is about 8 times that of air."

for steel Westinghouse used Ur=100
for steel General Electric used Ur=500

iron at Ur=8 is way too low

Paul in Guelph
VE3PVB

[Non-text portions of this message have been removed]

7171. Re: Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-29 17:19:47 UTC
From: Darren Hennig
Topic: 7161 Message: 7171

Interesting discussion!

Barkhausen noise seems to be related mostly to the higher intensity field changes. Very small RF changes should not be a major issue here [note that even in the Wiki article, they talk of pulses an dnoise related to very large changes]. The key to building a successful ferrite [or really any] loop is to design it with high Q so that it has very sharp tuning. trying to broadband a loop is not a good idea, because one of the key benefits is high S/N if made properly. If "B-noise" was a major issue, we would not see ferrites used much even in broadband RF Xfrs.

Check Stormwise.com. these folks have really nice 125u large diameter [>1"] long ferrite rods. I made a tunable MW antenna using one of the 13" rods, and it's superb! I used 220/46 litz for the windings. The effective capture area of a loop is dependant on the u factor, but too high a u [mu] will reduce the HF response of the loop making it harder to work at the top end of the band. The noise levels in this 125u rod a VERY low - so low that very weak signals are still audible - often get 3-5 BCB signals overlapping! I can also tune this unit and orient it sufficiently to null out 50kW boomers within 20km of my location. Stacking several ferrite rods and winding about all of them also increases the capture area nicely.

Ferrite materials, if well chosen for geometry/size/dia etc., can have the benefit of reducing overall antenna size while providing excellent performance. The key is in the windings ratio(s) and minimizing inter-winding capacity [use of woven/basket winding, pi [multi-stack] windings, or litz. Then, when tuning, the antenna can double as a preselection device, and pull in the toughies!

Darren
VE6IZ

[Non-text portions of this message have been removed]

7172. Re: [loopantennas] Re: Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-29 18:01:33 UTC
From: John Popelish
Topic: 7161 Message: 7172

Darren Hennig wrote:
> Interesting discussion!
>
> Barkhausen noise seems to be related mostly to the higher
> intensity field changes. Very small RF changes should not
> be a major issue here [note that even in the Wiki
> article, they talk of pulses an dnoise related to very
> large changes]. The key to building a successful ferrite
> [or really any] loop is to design it with high Q so that
> it has very sharp tuning. trying to broadband a loop is
> not a good idea, because one of the key benefits is high
> S/N if made properly. If "B-noise" was a major issue, we
> would not see ferrites used much even in broadband RF
> Xfrs.
(snip)

I didn't mean to imply that Barkhausen noise is a big problem, but it is one difference between ferromagnetic core antennas and air core loops. I think it is inherent in the ferromagnetic effect in any material that has magnetic domains, at all field strengths below complete saturation. But you have to look pretty close to see it in most applications. It does set a limit on signal reception, just as any other source of noise does. Resistance makes noise, also, but it is a limitation only in very low signal amplitude applications.

--
Regards,

John Popelish

7173. Re: [loopantennas] Re: Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-29 18:30:24 UTC
From: Paul V Birke PEng
Topic: 7161 Message: 7173

very nice response Darren

good to learn new ideas from an experimentalist !

best Paul VE3PVB

From: Darren Hennig <dhennig2@...>
To: loopantennas@yahoogroups.com
Sent: Fri, January 29, 2010 12:19:47 PM
Subject: [loopantennas] Re: Ferrite Loop vs Air Core Loop

Interesting discussion!

Barkhausen noise seems to be related mostly to the higher intensity field changes. Very small RF changes should not be a major issue here [note that even in the Wiki article, they talk of pulses an dnoise related to very large changes]. The key to building a successful ferrite [or really any] loop is to design it with high Q so that it has very sharp tuning. trying to broadband a loop is not a good idea, because one of the key benefits is high S/N if made properly. If "B-noise" was a major issue, we would not see ferrites used much even in broadband RF Xfrs.

Check Stormwise.com. these folks have really nice 125u large diameter [>1"] long ferrite rods. I made a tunable MW antenna using one of the 13" rods, and it's superb! I used 220/46 litz for the windings. The effective capture area of a loop is dependant on the u factor, but too high a u [mu] will reduce the HF response of the loop making it harder to work at the top end of the band. The noise levels in this 125u rod a VERY low - so low that very weak signals are still audible - often get 3-5 BCB signals overlapping! I can also tune this unit and orient it sufficiently to null out 50kW boomers within 20km of my location. Stacking several ferrite rods and winding about all of them also increases the capture area nicely.

Ferrite materials, if well chosen for geometry/size/ dia etc., can have the benefit of reducing overall antenna size while providing excellent performance. The key is in the windings ratio(s) and minimizing inter-winding capacity [use of woven/basket winding, pi [multi-stack] windings, or litz. Then, when tuning, the antenna can double as a preselection device, and pull in the toughies!

Darren
VE6IZ

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7174. Re: [loopantennas] Re: Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-29 18:40:20 UTC
From: Paul V Birke PEng
Topic: 7161 Message: 7174

Dear John et al

all discussion about front end physics of the ferrite

one way to treat the noise is on the output

I use DSP units on my ham equipment but should work fine for MW listerns

I have the West Mountain ClearSpeech little boxie ~ 187 $

also just got and using the new BHI deluxe in line noise DSP which I really like a lot
this unit is on sale this month of 125 pounds, very quick delivery

both these units and others such as TimeWave can be used to effectively remove noise at the audio output stage

best wishes
Paul VE3PVB

From: John Popelish <jpopelish@...>
To: loopantennas@yahoogroups.com
Sent: Fri, January 29, 2010 1:01:33 PM
Subject: Re: [loopantennas] Re: Ferrite Loop vs Air Core Loop

Darren Hennig wrote:
> Interesting discussion!
>
> Barkhausen noise seems to be related mostly to the higher
> intensity field changes. Very small RF changes should not
> be a major issue here [note that even in the Wiki
> article, they talk of pulses an dnoise related to very
> large changes]. The key to building a successful ferrite
> [or really any] loop is to design it with high Q so that
> it has very sharp tuning. trying to broadband a loop is
> not a good idea, because one of the key benefits is high
> S/N if made properly. If "B-noise" was a major issue, we
> would not see ferrites used much even in broadband RF
> Xfrs.
(snip)

I didn't mean to imply that Barkhausen noise is a big
problem, but it is one difference between ferromagnetic core
antennas and air core loops. I think it is inherent in the
ferromagnetic effect in any material that has magnetic
domains, at all field strengths below complete saturation.
But you have to look pretty close to see it in most

applications. It does set a limit on signal reception, just as any other source of noise does. Resistance makes noise, also, but it is a limitation only in very low signal amplitude applications.

--
Regards,

John Popelish

[Non-text portions of this message have been removed]

7175. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-29 18:44:15 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7175

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Barkhausen Noise/Bittel 1961.pdf
Uploaded by : chris3trask <christrask@...>
Description : Noise of Ferromagnetic Materials

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Barkhausen%20Noise/Bittel%201961.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7176. Re: [loopantennas] Re: Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-29 18:44:14 UTC
From: Chris Trask
Topic: 7161 Message: 7176

>
> Barkhausen noise seems to be related mostly to the higher intensity field
> changes. Very small RF changes should not be a major issue here [note that
> even in the Wiki article, they talk of pulses an dnoise related to very
large
> changes].
>

It's more accurately described as being a large field gradient, and it
is a result of the fact that the changes in the magnetization of the core
are not continuous but instead the switching of the magnetic pole (or rather
dipole) orientation at the molecular lavel within the ferrite crystal
lattice. For instance, in the design of small-signal wideband transformers
the tendency is to use smaller cores, sometimes cores that are too small.
Couple that with the fact that the magnetic field on the core is
concentrated along the surfasce of the core (magnetic skin effect) and you
get a more complete picture of what is taking place with regard to
"B-Boise".

"B-Noise" is worst in situations where ther is no net magnetic flux in
the core. As you get closer to saturation, the number of magnetic poles
remaining to be reoriented is greatly diminished, but then you have problems
with linearity due to the flux saturation.

>
> If "B-noise" was a major issue, we would not see ferrites used much
> even in broadband RF Xfrs.
>

Oh, but it is, but the problem is that the majority of designers are not
even aware of it. It's a fairly advanced issue that gets very little
attention, if any at all.

I have three papers here that address this, including the 1939 paper by
Barkhausen, which is in German. I've uploaded the one I have in PDF format
into the files section, and if anyone is interested I'll locate and scan and
upload the other two.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240

\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

7177. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-29 19:47:26 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7177

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Barkhausen Noise/Warren 1961.pdf
Uploaded by : chris3trask <christrask@...>
Description : Barkhausen Noise in Transformer Cores

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Barkhausen%20Noise/Warren%201961.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7178. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-29 20:42:01 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7178

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Barkhausen Noise/Barkhausen 1919.pdf
Uploaded by : chris3trask <christrask@...>
Description : Zwei Hilfe der neue Verst?rker entdeckte Erscheinungen

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Barkhausen%20Noise/Barkhausen%201919.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7179. Re: Ferrite Loop vs Air Core Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-01-30 16:07:55 UTC
From: tenorman1952
Topic: 7161 Message: 7179

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> Dear John et al
>
> all discussion about front end physics of the ferrite
>
> one way to treat the noise is on the output
>
> I use DSP units on my ham equipment but should work fine for MW listerns
>
> I have the West Mountain ClearSpeech little boxie ~ 187 $
>
> also just got and using the new BHI deluxe in line noise DSP which I really like a lot
> this unit is on sale this month of 125 pounds, very quick delivery
>
> both these units and others such as TimeWave can be used to effectively remove noise at the audio output stage
>
> best wishes
> Paul VE3PVB
>

I have the West Mountain CLR-SPKR DSP speaker, which I use with my Icom 718 and R75... I now have those two units slaved together and use the MFJ-1708 RF Sense Switch to switch between them for RX and TX.

I previously had the BHI module installed internally to a Yaesu FT-897. To my ear, they are both probably based on the same chip. They both have 4 levels of DSP and the levels have the same "sound". The West Mountain CLR-SPKR is certainly much easier to install, just plug it in.

A huge improvement.

73
Paul
AE5JU

7180. shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-02 23:55:15 UTC
From: dannibou
Topic: 6363 Message: 7180

Hi! On the topic of shielded loop, can anyone tell me if the metal for build a loop is important electrically speaking. I've read on this group that aluminum or copper are preferred. Is this because they are non magnetic metal? I have a round piece of metal that I could use to build a shielded loop but it is magnetized metal. Any idea? Thanks
Danny

7181. Re: [loopantennas] shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-03 00:34:57 UTC
From: Jim Dunstan
Topic: 6363 Message: 7181

At 11:55 PM 2/2/2010 +0000, you wrote:
>
>
>Hi! On the topic of shielded loop, can anyone tell me if the metal for
>build a loop is important electrically speaking. I've read on this group
>that aluminum or copper are preferred. Is this because they are non
>magnetic metal? I have a round piece of metal that I could use to build a
>shielded loop but it is magnetized metal. Any idea? Thanks
>Danny

Hi,

As with any antenna element the material should have the best conductivity possible. The most common of the "best" material is copper. If the antenna element needs to be as light as possible then aluminium is the common choice. There may be better material ... of which I am not aware .... but silver is the premium plus material. However it is quite expensive to silver plate antenna elements .... although I have heard of it. If the material is magnetized it must be some Ferris material .... containing iron .... such as steel.

I am no expert on the conductivity of steel vs copper ... although I have heard anything from 30 times to 6 times worse than copper. Whatever that means .... steel is very useful for its weight to strength ratio and antenna wire is often constructed by copper or silver coating steel wire.

For small loops ... e.g. 1/10 of a wavelength or less the absolute amount of current carrying ability required for efficient operation pretty much precludes the use of steel. This of course also applies to a loop shield which of course is part of the loop element. If you would like to make a shielded loop then it will be small ... and I would stay away from using ferrous metals .... not because of the their magnetic properties ... but their RF conductivity properties.

Jim

7182. Re: [loopantennas] shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-03 01:18:05 UTC
From: Rick Karlquist
Topic: 6363 Message: 7182

dannibou wrote:
> Hi! On the topic of shielded loop, can anyone tell me if the metal for
> build a loop is important electrically speaking. I've read on this group
> that aluminum or copper are preferred. Is this because they are non
> magnetic metal? I have a round piece of metal that I could use to build a
> shielded loop but it is magnetized metal. Any idea? Thanks
> Danny

Any metal that is magnetic will be very lossy at RF. Forget about it.

Rick N6RK

7183. shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-03 05:13:38 UTC
From: Missouri Guy
Topic: 6363 Message: 7183

>Hi! On the topic of shielded loop, can anyone tell me if the metal for build a loop is important electrically speaking. I've read on this group that aluminum or copper are preferred. Is this because they are non magnetic metal? I have a round piece of metal that I could use to build a shielded loop but it is magnetized metal. Any idea? Thanks
Danny
>

Danny,

Copper or AL is used because it has less RF resistance than iron. Also, those two metals won't have a tendancy to rust away outdoors.

The metal "shield" is actually part of the antenna. You can prove that to yourself by touching the metal loop and noticing that the loop detunes when you touch it. So, really, if your loop is mounted "in the clear", it doesn't make a bit of difference in sensistivity or directivity whether it's shielded or not (read more below). If the loop is very near some metal objects, there might be some benefit of having the shield.

A loop that is UN-shielded may have a higher 'Q' because of less distributed capacitance....depends on how it is wound. Having a higher 'Q' usually results in a more sensitive loop, but with narrower (sharper) tuning. The crystal radio boys know this and some have constructed large loops of large litz wire (the right type of litz) for that very purpose.

Charlie, N0TT

[Non-text portions of this message have been removed]

7184. Re: shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-03 15:39:35 UTC
From: Pronto. (Military)
Topic: 6363 Message: 7184

Because the RF currents run on the "skin" or surface of the metal, You can use copper plated steel for lightness and strength. Remember many of our military whips in the past had that construction. Today they tend to use fibreglass.
At VHF and UHF the plating is frequently silver plated for conductivity but at HF frequencies copper plating is sufficient and even unnecessary.
You could use thinwall copper tubing if you can source some.
Copper becomes magnetic at high current but because , in our case it is oscillating at high frequency, it doesn't show.
I used to work in a copper mine where 1200 amps DC would run through bus bars and you couldn't walk nearby without having your wrist watch destroyed. Carrying a tool box nearby was downright frightening. Fortunately the voltage was low.
I am currently considering building a loop antenna in a square configuration using copper plated steel sections or at least plated where the junctions are. My objectives are lihtness , portability and simple takedown/assembly.
Jim VE3DDY/W4

--- In loopantennas@yahoogroups.com, "dannibou" <dannibou@...> wrote:
>
> Hi! On the topic of shielded loop, can anyone tell me if the metal for build a loop is important electrically speaking. I've read on this group that aluminum or copper are preferred. Is this because they are non magnetic metal? I have a round piece of metal that I could use to build a shielded loop but it is magnetized metal. Any idea? Thanks
> Danny
>

7185. Re: shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-03 17:24:22 UTC
From: Dave
Topic: 6363 Message: 7185

--- In loopantennas@yahoogroups.com, "dannibou" <dannibou@...> wrote:
>
> Hi! On the topic of shielded loop, can anyone tell me if the metal for build a
> loop is important electrically speaking. I've read on this group that aluminum
> or copper are preferred. Is this because they are non magnetic metal? I have
> a round piece of metal that I could use to build a shielded loop but it is
> magnetized metal. Any idea? Thanks

In general, ferromagnetic materials are a VERY poor choice for antennas.
The problem is that, at RF frequencies, the currents flow on the very
outer edge of the conductor (e.g., skin effect). For ferromagnetic materials,
the ferromagnetic properties reduce the skin depth even more, and this
tends to make ferromagnetic materials even more lossy than you'd
normally expect.

There are, of course, ways around this. The common approach is to
plate the ferromagnetic material (and, we're usually talking about steel or
some other Iron compound here) with a higher conductivity,
non-ferromagnetic material. The prototypical plating material is Silver,
due to it's high conductivity, but it's also possible to plate Copper onto
steel (and, this is commercially available as CopperWeld (TM) antenna
wire). Some television lead-in wire, and some telephone wire was also
Copper plated steel.

Failing that, the best wire is Silver, although price usually prevents
the use of that except in very special circumstances (e.g.,
military/government applications, very small microwave antennas, etc.).
Following that, Copper wire is the next best material, quickly followed by
Aluminum wire.

> Danny

Dave

7186. Re: shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-05 01:20:00 UTC
From: dannibou
Topic: 6363 Message: 7186

--- In loopantennas@yahoogroups.com, "dannibou" <dannibou@...> wrote:
>
> Hi! On the topic of shielded loop, can anyone tell me if the metal for build a loop is important electrically speaking.

Hi again. Thanks to those who replied to my question. But I did a mistake in that question. Replace "electrically" by RF. In fact, I want to build a shielded loop because the electric noise level here is strong. My question should have been: if the metal I use for a loop is the kind that attract a magnet, will it lower the RF signal or is it unimportant? I'll upload a photo of the loop in the evening.

The good side of my wrong question is that I learned a lot of things from your answer that I didn't know. Thanks for your help.

Danny

7187. Re: shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-05 17:46:18 UTC
From: gmcjetpilot
Topic: 6363 Message: 7187

Danny It seems you are determined to have a shielded loop. I would suggest you look at a magnetic loop. Do some googling, the available materials, your ability to fabricate come into the picture. I am sure gold might be best but not practical. Silver may be better than copper and so on. Better than what? Litz wire was mentioned. That is what I have in a hula hoop of PVC for a magnetic loop. I could have used copper pipe but this is lighter and works as well. Some make Shielded Loops from coaxial cable!

I think you got some good answers. The answer is best found in antenna books (ARRL books are good) and looking at other successful designs. The topic of antennas I maintain is a science mixed with a little art. Antenna design can go very far into theoretical and mathematics and very fancy spectrum analysis gear to test. At our level and the HF band we are interested it..... there is not much new. Not to say someone might no strike upon a new configuration or design or material no one ever tried before. So research the subject in some good ARRL books and steal.... look at other antennas.

I tend want to assure the results before putting huge effort into an antenna project. I have no desire to invent something new in the antenna World. Clearly there is some creativity in how you make it, which I enjoy. The real joy is making an antenna that works and gives you more gain but best of all is better SNR - Signal to Noise Ratio. It took me a long time to realize that is really the name of the game, SNR. Every antenna has limitations. I still say (sorry know this is a loop group but) the a random wire or variations of it of sufficient length is the "standard" I use. Clearly loops can do better in many areas because it is usually a tuned and directional device, which is also it's drawback.

I don't know what you have tried before but a well installed random wire usually gives good results. The problem is few people install a random wire properly (grounds, baluns). If you have the best random wire installation and it's noisy, than you need to look into getting rid of the noise.

Noise is a big problem for everyone: atmospheric conditions, sun spots and so on, area interference from other stations or bad power transformer and the last area, usually the worst is your home. It is a RFI factory. That is why an outdoor antenna (a reasonable distance from the home) is best (but not always possible). It does not do a lot of good to have the best antenna ever made inside or bolted to your house. Antennas are not magic but amplified magnetic loops (like the welbrook) is the way to go in my opinion for SWL.

Any loop in general has good noise rejection off the sides. I started off with simple unamplified passive resonate loops. They do wonders. You can make two and have one to pick up a signal and another to block interference in an direction, like a phased array antennas. I do this "phased array" with my two MW passive loops. Two loops are better than one.

AM and HF stations use phased arrays to transmit very spacific directional signals in one or more directions while being NULL in other directions. So good luck. George

--- In loopantennas@yahoogroups.com, "dannibou" <dannibou@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "dannibou" <dannibou@> wrote:
> >
> > Hi! On the topic of shielded loop, can anyone tell me if the metal for build a loop is important electrically speaking.
>
> Hi again. Thanks to those who replied to my question. But I did a mistake in that question. Replace "electrically" by RF. In fact, I want to build a shielded loop because the electric noise level here is strong. My question should have been: if the metal I use for a loop is the kind that attract a magnet, will it lower the RF signal or is it unimportant? I'll upload a photo of the loop in the evening.
>
> The good side of my wrong question is that I learned a lot of things from your answer that I didn't know. Thanks for your help.
>
> Danny
>

7188. Re: shielded loop - hula hoop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-06 10:13:11 UTC
From: Mike
Topic: 6363 Message: 7188

Hi. Think I will come in on this, 30 turns from a slinky {child's toys} metal type LOL, over a hula hoop, taped via a 150pF cap and fly lead worked for me as I taped around the turns re band, good from RX and TX I used 10 watts as that is what my licence permits. see back pages of Practical Wireless, the guy also had 3 x Slinky's making a long wire and a broom stick vertical, but the loop worked great. Mike M3EMB.

7189. Re: [loopantennas] Gamma Feed Point...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-07 16:16:31 UTC
From: jacob_twotwo@q.com
Topic: 7147 Message: 7189

On 1/26/2010 4:52 PM, n6dmb wrote:
> Hello fellow loop enthusiasts, I have a question or two for you if I
> may. My loop 5' loop is made of 1.5" copper tubing which has been
> rolled into a continuous loop by a local metal fabricator set up for
> such operations. The gap is about 3 inches. An internet source shows a
> plan for a loop which is very similar to mine except for the relatively
> narrow tubing. The link will take you to this plan, a plan I offer for
> illustration purposes only...
> http://nmwilliam.tripod.com/mla.jpg
> If you take a moment to look at the plan, you will see that the gamma
> feed location point is placed 300 mm to the right of center, with a
> spacing of 100 mm. My question to the group is how was that point
> determined to be the "sweet spot" for the gamma feed location and how do
> I determine where that point is on my loop antenna? If I understand
> correctly, shouldn't that feed point should allow for a minimum SWR of
> 1:1? Using my antenna analyzer, the lowest SWR I can achieve is 1:3.
> These readings are "without" the capacitor installed. During 1 test, I
> touched the loop and watched the SWR drop to 1:1. That would bring me
> to my second question, what gives with that? Will my body act as a
> capacitor if I am ungrounded? Does it matter to the gamma feed point if
> the capacitor is installed or not?
> Thanks in advance for any advice you might have for me.
> Don N6DMB
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos

>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>

7190. Army loop history

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-07 22:00:30 UTC
From: william brooks
Topic: 7190 Message: 7190

Does anyone know the history of the Army loop? Why did they not pursue it further?

[Non-text portions of this message have been removed]

7191. Re: Army loop history

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-08 04:18:43 UTC
From: capntripps2000
Topic: 7190 Message: 7191

They Army did pursue it and there are military vehicles with magnetic loops, more accurately, transmission line antennas, in operation. The military has also pursued magnetic monopoles on Naval vessels. During the Vietnam war the loops replaced the long vertical whips used on backpack radios. It served to help NVIS propagation as well as to save the life of many who wore the radio back pack (the whip no longer gave them away).

The military's interest and use of magnetic loops likely goes back to WWI.

Andrew

--- In loopantennas@yahoogroups.com, william brooks <wb6yvk@...> wrote:
>
> Does anyone know the history of the Army loop? Why did they not pursue it
> further?
>
>
> [Non-text portions of this message have been removed]
>

7192. Re: Army loop history

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-08 11:18:11 UTC
From: shibukiau
Topic: 7190 Message: 7192

The Military DO use HF loops, the German military for one used loops extensively in WWII and prior to that .

Many NGO organizations are switching to loops for mobile operations as they work best for com's less than 1K - 800 miles or so. Have a look at these supplier's sites for more info!!

http://www.stealth.ae

http://www.qmac.com/NVIS_antenna.html

These are just a couple of suppliers of commercial mobile loop antenna!

I believe Siemens supplies a widely used HF base antenna for airports around the world!! There is also an Italian supplier!

It's Hams unfortunately who have not embraced this technology for some unknown reason which continues to baffle me!

Living in a Townhouse condo , I use two loops a MFJ 1786 for 10-20m and a home made one for 80-40m and they work very well! It's not a beam but it's much better than a lot of the Magic antennae being flogged, which I also tried! The 80/40m one beats the attic mounted short 49 ft 40m dipole consistantly!!

Try a loop if you need a small antenna you will be impressed; it is most over looked technology in Hamdom!!

Cheers!
Lloyd
VE3ERQ/VK4ERQ

--- In loopantennas@yahoogroups.com, william brooks <wb6yvk@...> wrote:
>
> Does anyone know the history of the Army loop? Why did they not pursue it
> further?
>
>
> [Non-text portions of this message have been removed]
>

7193. Re: Army loop history

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-08 15:16:49 UTC
From: JohnF
Topic: 7190 Message: 7193

William -- Mr. Kenneth Patterson is resonsible for development of the antenna he described in "Down-to-Earth Army Antenna," "Electronic" magazine, August 21, 1967. Accordingly, the antenna was designed for quick portability and use in Vietnam. By March 1968 the loop had been used succesfully over there because its high angle radiation made it possible to maintain contact beyond barriers posed by the north/south Annam mountains located inland from the South China Sea. In areas like, for example, the Central Higlands normal whip operation was impractical.

73,

John WA2NZO
390th TC/48th AHC RVN 1966

--- In loopantennas@yahoogroups.com, william brooks <wb6yvk@...> wrote:
>
> Does anyone know the history of the Army loop? Why did they not pursue it
> further?
>
>
> [Non-text portions of this message have been removed]
>

7194. Re: Army loop history

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-09 07:04:41 UTC
From: xtemporize
Topic: 7190 Message: 7194

--- In loopantennas@yahoogroups.com, "capntripps2000" <capntripps2000@...> wrote:
>
...During the Vietnam war the loops replaced the long vertical whips used on backpack radios. It served to help NVIS propagation as well as to save the life of many who wore the radio back pack (the whip no longer gave them away).
>
> The military's interest and use of magnetic loops likely goes back to WWI.
> Andrew

Andrew, please be specific. Which particular model of pack radio used in VietNam war? Your source for this?

Another post claimed German armed forces made use of loop antennas in WW2. I assume this refers to the "Dachantenne" or "roof" or "frame antenna" on trucks and some armored vehicles, such as scout armored cars. I maintain this is NOT a loop type antenna, rather a high capacitance short vertical. I made this case over at the milsurplus list; I will not give all the citations here but perhaps if any interest I can find the old emails. I have German radio manuals and also an instruction book on radio installations on trucks which all go to establish that this was NOT a magnetic loop device. As the German and Italian miltary radio equipment tended to use lower frequencies than Allied equipment, even for mobile use, maybe it would have been to their advantage to use the loop antenna. I recall one interesting thing I read, some model of command (Commmander's) tank using the WS30 transmitter (1 - 3 MHz) initially used the frame antenna, but replaced it later with the "Sternantenna" or "Star Antenna", a short vertical with loading hat looking like an partially openend umbrella, without the fabric. I assume the reason was that antennas were frequently damaged, and the frame antenna simply was too difficult and expensive to frequently replace.
I note, however, the replacement vertical was a 1 for 1 replacement; no difference in transmitter loading circuitry was required.
Oh, yes, also: if you cite that article in the U.S. Army magazine, called, I think, "Communicator", that article is without factual basis - it also is based simply on the author's erroneous and unsupported speculation. -Hue Miller

7195. Military Loop Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-10 01:27:40 UTC
From: Bill McGraw
Topic: 7195 Message: 7195

List,

The PRC-77 military radio and photos are here of the radio and antenna parts.

http://en.wikipedia.org/wiki/AN/PRC-77_Portable_Transceiver

and http://www.associated-ind.com/pdf/ANPRC77.pdf

The PRC-77 transceiver used a 10 and 3 foot long vertical antennas. I was in a Signal unit in Korea, 69-70, and we shipped cargo ship loads of Signal equipment to the ROK army in Vietnam. None of the radios had loop antennas that I know about and I'm not able to construct such an antenna. If a loop existed, tell me what they looked like and how they were made. The second site shows the individual parts of the antennas. I calculated both antennas for 1/4 wave depending on the low or high frequency used, 30-76 MHz.

One of the guys on my sites who used them in Vietnam said the PRC-77 had a range of 10 miles at Base Camp but only 1 mile when the NVA and VC were shooting at them and were heavy with a second battery pack.

Bill McGraw
"Somewhere South of Chicago"
Greenville, Mississippi

7196. Re: [loopantennas] Re: Army loop history

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-10 05:13:03 UTC
From: Vaclav
Topic: 7190 Message: 7196

Are we talking about "short" loops?
I think in WW II they were used as direction finding / navigational antennas.
It seems rather odd that someone would use them in mobile service.

The requirement of for tuning (the antenna itself, not the coupler / transmatch)
and high voltage may be the deterrent for usage in ham TX "service" on HF.
73 Vaclav AA7EJ

[Non-text portions of this message have been removed]

7197. Murphy's law

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-10 13:19:28 UTC
From: richard
Topic: 7197 Message: 7197

```
HI all
I've just built a large loop for 80 mtrs, I've use OH7SV's spread sheet, and my attempt
looks to be
500 KHz too high.
I'm using LDF4-50 coax and a 100pF doorknob capacitor for tuning. The circumference of the
loop is
12.15 mtrs, I used a diameter of 14 mm. that resonated at just under 4MHz.
I increased the length of coax by 100mm each side of the capacitor and it reduced the
resonant freq
by 50 KHz.
The bottom of the loop is about 1mtr above ground.
I need to get this sorted quick as the XYL went a bit ape when she saw this loop had
appeared in
the middle of the garden, she'll go a bit more as I'm now using the pipe the rotary clothes
line
goes in to hold the loop up while I'm playing with it.

Here's something useful I' found:-
LDF4-50 is a tight fit into 15 mm Copper pipe

--
Best wishes

Richard Bown

##########################################################################################
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##########################################################################################
```

7198. Re: [loopantennas] Murphy's law

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-10 14:58:28 UTC
From: richard
Topic: 7197 Message: 7198

On Wed, 10 Feb 2010 13:19:28 +0000
richard <richard.bown@...> wrote:

>
> HI all
> I've just built a large loop for 80 mtrs, I've use OH7SV's spread sheet, and my attempt looks to
> be 500 KHz too high.
> I'm using LDF4-50 coax and a 100pF doorknob capacitor for tuning. The circumference of the loop is
> 12.15 mtrs, I used a diameter of 14 mm. that resonated at just under 4MHz.
> I increased the length of coax by 100mm each side of the capacitor and it reduced the resonant
> freq by 50 KHz.
> The bottom of the loop is about 1mtr above ground.
> I need to get this sorted quick as the XYL went a bit ape when she saw this loop had appeared in
> the middle of the garden, she'll go a bit more as I'm now using the pipe the rotary clothes line
> goes in to hold the loop up while I'm playing with it.
>
> Here's something useful I' found:-
> LDF4-50 is a tight fit into 15 mm Copper pipe
>
>
>
A bit more

I have got the loop to resonate at the moment at 3.73MHz,by adding about 1 mtr of 15 mm Cu pipe.
But the vswr is 3:1.
I've use a loop of 141 semirigid coax with a OD of 770 mm at the cold end of the loop

Any suggestions would be appreciated
TIA
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7199. Re: Murphy's law

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-10 16:51:15 UTC
From: capntripps2000
Topic: 7197 Message: 7199

You will need to experiment with the feed loop diameter and spacing/coupling to the main loop. Perhaps squash the feed loop in to an oval making sure the feedloop is very near the main loop. If the SWR goes down increase the size of the feed loop and watch SWR. Also, the loop will need retuning so a variable capacitor will be necessary, or a small length of coax cable used as a capacitor in paralle with the doorknob capacitor. Trim the coax stub capacitor for lowest SWR. It is an iterative process but you will be able to get 1:1 SWR at resonance.

Andrew

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Wed, 10 Feb 2010 13:19:28 +0000
> richard <richard.bown@...> wrote:
>
> >
> > HI all
> > I've just built a large loop for 80 mtrs, I've use OH7SV's spread sheet, and my attempt looks to
> > be 500 KHz too high.
> > I'm using LDF4-50 coax and a 100pF doorknob capacitor for tuning. The circumference of the loop is
> > 12.15 mtrs, I used a diameter of 14 mm. that resonated at just under 4MHz.
> > I increased the length of coax by 100mm each side of the capacitor and it reduced the resonant
> > freq by 50 KHz.
> > The bottom of the loop is about 1mtr above ground.
> > I need to get this sorted quick as the XYL went a bit ape when she saw this loop had appeared in
> > the middle of the garden, she'll go a bit more as I'm now using the pipe the rotary clothes line
> > goes in to hold the loop up while I'm playing with it.
> >
> > Here's something useful I' found:-
> > LDF4-50 is a tight fit into 15 mm Copper pipe
> >
> >
> >
> A bit more
>
> I have got the loop to resonate at the moment at 3.73MHz,by adding about 1 mtr of 15 mm Cu pipe.
> But the vswr is 3:1.
> I've use a loop of 141 semirigid coax with a OD of 770 mm at the cold end of the loop
>

>
>
> Any suggestions would be appreciated
> TIA
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7200. Re: [loopantennas] Re: Murphy's law

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-10 18:49:25 UTC
From: richard
Topic: 7197 Message: 7200

On Wed, 10 Feb 2010 16:51:15 -0000
"capntripps2000" <capntripps2000@...> wrote:

> You will need to experiment with the feed loop diameter and spacing/coupling to the main loop.
> Perhaps squash the feed loop in to an oval making sure the feedloop is very near the main loop.
> If the SWR goes down increase the size of the feed loop and watch SWR. Also, the loop will need
> retuning so a variable capacitor will be necessary, or a small length of coax cable used as a
> capacitor in paralle with the doorknob capacitor. Trim the coax stub capacitor for lowest SWR.
> It is an iterative process but you will be able to get 1:1 SWR at resonance.
>
> Andrew
>
>
Thanks Andrew, I'll try that in the morning.
Is there any advantage in the feedloop being in electrical contact with the loop, ie
the centre point of the loop connected to the ground side of the feedloop ?

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7201. Re: Murphy's law

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-10 19:46:08 UTC
From: capntripps2000
Topic: 7197 Message: 7201

I have used both although lately I find it simpler to keep the loop isolated from the main loop. Easy to do if the feed loop or main loop is insulated.

Since the feed loop efficiency is not as important as the main loop feel free to use easy to adjust mechanical clamps so you can lengthen or shorten the feed loop size without the need to solder.

Andrew

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
>
> >
> >
> Thanks Andrew, I'll try that in the morning.
> Is there any advantage in the feedloop being in electrical contact with the loop, ie
> the centre point of the loop connected to the ground side of the feedloop ?
>
>
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7202. Re: Murphy's law

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 02:09:58 UTC
From: capntripps2000
Topic: 7197 Message: 7202

Richard,

Another note on using feed loops. The lower the loop is to ground the larger the feed loop will need to be. Ground proximity has an effect on feed point impedance as well as proximity to other nearby objects. It is another reason why I like a mechanical clamp for adjusting feed loop side. When I build and tune my loops, generally in the basement or in the yard, I need to readjust the feed loop size and shape when I move the loop to its final destination, usually in the attic or in a corner of the yard hidden among trees near a fence.

I also use toroid with inductive for impedance transformation at the feed point. I built a box with 12 position switch to select the appropriate tap on the primary (coax) side of the toroid while the loop side remains the same at 2 turns. The toroid is a T240-61 core. This matches the impedance over a wide range and I always achieve a 1:1 SWR using this method. The toroid limits you to power, generally 100W for this side core. More information on this can be found at http://g0cwt.co.uk/magloops/

As you can see at the above site there are several ways to effectively feed a magnetic loop.

Andrew

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Wed, 10 Feb 2010 16:51:15 -0000
> "capntripps2000" <capntripps2000@...> wrote:
>
> > You will need to experiment with the feed loop diameter and spacing/coupling to the main loop.

> >
> Thanks Andrew, I'll try that in the morning.
> Is there any advantage in the feedloop being in electrical contact with the loop, ie
> the centre point of the loop connected to the ground side of the feedloop ?
>
>
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##

>

7203. progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 14:02:47 UTC
From: richard
Topic: 7203 Message: 7203

Thanks for the help so far
I'm now in the position of 1:1 VSWR at 3.7550 and 21.4 KHz usable bandwidth to the
1.5:1 VSWR upper and lower points.

I've had it mounted while working on it on the rotary clothes line stub so its about
4.5 mtrs away from the tower.

Am I correct that the directivity of a mag loop is the same quad element,

ie radiation pattern in line with the loop facing you so you can see the whole
circumference of the
loop .

Another question,
Weather proofing , as the capacitor is at a higher impedance , which is better, to wrap
with self
amalgamating tape, or to paint it with a non conductive paint ?

Looking at http://g0cwt.co.uk/magloops/new_page_5.htm, at the feed point I'm using the
feed
impedance would be 5.5 ohms,with the feed loop matching to 50 ohms ish.

Is it better to treat the feed loop as balanced , I do have a balance to unbalanced thing
made of
43 turns of RG58 coax wound on a 50mm glass fibre former.

Sorry for the some what basic questions , but I've spent the last 30 years playing with RF
where
3.5 MHz was like DC with a bit of ripple on it.

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7204. Re: [loopantennas] progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 15:51:02 UTC
From: Richard (Rick) Karlquist
Topic: 7203 Message: 7204

richard wrote:
>
> Am I correct that the directivity of a mag loop is the same quad element,
>
> ie radiation pattern in line with the loop facing you so you can see the
> whole circumference of the
> loop .

No you are not correct

Rick N6RK

7205. Re: [loopantennas] progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 18:03:35 UTC
From: richard
Topic: 7203 Message: 7205

On Thu, 11 Feb 2010 07:51:02 -0800
"Richard (Rick) Karlquist" <richard@...> wrote:

> richard wrote:
> >
> > Am I correct that the directivity of a mag loop is the same quad element,
> >
> > ie radiation pattern in line with the loop facing you so you can see the
> > whole circumference of the
> > loop .
>
> No you are not correct
>
> Rick N6RK
OK now I'm confused.

If I align the loop with the axis in line with the tower, I can't get a VSWR less than 3:1, If I rotate 90 degrees it drops down to 1:1

I've played with loop yagis ,. why should what basically is the driven element change its behaviour
when capacitively shortened and used on its own ?

??

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7206. Re: [loopantennas] progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 18:12:22 UTC
From: Rick Karlquist
Topic: 7203 Message: 7206

richard wrote:
> On Thu, 11 Feb 2010 07:51:02 -0800
> "Richard (Rick) Karlquist" <richard@...> wrote:
>
>> richard wrote:
>> >
>> > Am I correct that the directivity of a mag loop is the same quad
>> element,
>> >
>> > ie radiation pattern in line with the loop facing you so you can see
>> the
>> > whole circumference of the
>> > loop .
>>
>> No you are not correct
>>
>> Rick N6RK
> OK now I'm confused.
>
> If I align the loop with the axis in line with the tower, I can't get a
> VSWR less than
> 3:1, If I rotate 90 degrees it drops down to 1:1
>
> I've played with loop yagis ,. why should what basically is the driven
> element change its behaviour
> when capacitively shortened and used on its own ?
>
> ??
>
> --
> Best wishes
>
> Richard Bown

A so-called "magnetic" loop is by definition small enough that the
current is uniform around the loop. The current in a 1 wavelength
loop as used in a quad beam is definitely not uniform. Small
loops are "end fire" and quad loops are "broadside". The null
of a small loop is perpendicular to the plane of the loop.

It sounds like you are relying on coupling to the tower to make
your loop tune.

Rick N6RK

7207. Re: [loopantennas] progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 18:14:42 UTC
From: Jim Dunstan
Topic: 7203 Message: 7207

At 02:02 PM 2/11/2010 +0000, you wrote:
>
>
>Thanks for the help so far
>I'm now in the position of 1:1 VSWR at 3.7550 and 21.4 KHz usable
>bandwidth to the
>1.5:1 VSWR upper and lower points.
>
>I've had it mounted while working on it on the rotary clothes line stub so
>its about
>4.5 mtrs away from the tower.
>
>Am I correct that the directivity of a mag loop is the same quad element,

Generally speaking a full size loop or 1 wavelength (usual in a quad element) has maximum reception broadside or perpendicular to the plane. However small loops (usually defined as 1/10 wavelength or less) have the null broadside to the loop or perpendicular to the plane. The reason I say 'generally' is that when the small loop is tuned the pattern is shifted to some degree.

>ie radiation pattern in line with the loop facing you so you can see the
>whole circumference of the
>loop .
>
>Another question,
>Weather proofing , as the capacitor is at a higher impedance , which is
>better, to wrap with self
>amalgamating tape, or to paint it with a non conductive paint ?
>
>Looking at
><http://g0cwt.co.uk/magloops/new_page_5.htm,>http://g0cwt.co.uk/magloops/new_page_5.htm,
>at the feed point I'm using the feed
>impedance would be 5.5 ohms,with the feed loop matching to 50 ohms ish.
>
>Is it better to treat the feed loop as balanced , I do have a balance to
>unbalanced thing made of
>43 turns of RG58 coax wound on a 50mm glass fibre former.

Generally speaking (again hi hi) the answer is yes. Imbalance in the loop feed does affect the radiation pattern to a degree. So for example ... if one is designing a loop direction finder then care is taken to balance in all aspects, the feed system, symmetry in construction, and the use of a shield. In other uses ... such as an efficient small loop for xmit/rcv ... balance is not critical.

>Best wishes
>
>Richard Bown

Jim

[Non-text portions of this message have been removed]

7208. Re: [loopantennas] progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 21:19:20 UTC
From: richard
Topic: 7203 Message: 7208

On Thu, 11 Feb 2010 10:12:22 -0800
"Rick Karlquist" <richard@...> wrote:
> > Richard Bown
>
> A so-called "magnetic" loop is by definition small enough that the
> current is uniform around the loop. The current in a 1 wavelength
> loop as used in a quad beam is definitely not uniform. Small
> loops are "end fire" and quad loops are "broadside". The null
> of a small loop is perpendicular to the plane of the loop.
>
> It sounds like you are relying on coupling to the tower to make
> your loop tune.
>
> Rick N6RK
>

Thanks Rick

that makes sense, I hope the loop tuning is not being effected by the proximity of the tower, as
its normal place when I'm happy with it is about 30' away from the house and tower.
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7209. Re: progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 21:24:21 UTC
From: capntripps2000
Topic: 7203 Message: 7209

The pattern is less affected the lower the frequency AND the lower the loop is in height.

My 1/4w circumference 80/160M magnetic loop is 1 meter above the ground at its lowest side and the 4NEC2 models show the patter is very oval in shape, which makes it good enough for general non-directional use. Raise the loop higer and the patter does start to become more directional.

Andrew

>
> Generally speaking (again hi hi) the answer is yes. Imbalance in the loop
> feed does affect the radiation pattern to a degree. So for example ... if
> one is designing a loop direction finder then care is taken to balance in
> all aspects, the feed system, symmetry in construction, and the use of a
> shield. In other uses ... such as an efficient small loop for xmit/rcv ...
> balance is not critical.
>
>
> >Best wishes
> >
> >Richard Bown
>
> Jim
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7210. Re: [loopantennas] progress

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-11 21:29:29 UTC
From: richard
Topic: 7203 Message: 7210

On Thu, 11 Feb 2010 13:14:42 -0500
Jim Dunstan <jimdunstan@...> wrote:> >Am I correct that the directivity of a mag loop is the same quad element,
>
> Generally speaking a full size loop or 1 wavelength (usual in a quad
> element) has maximum reception broadside or perpendicular to the
> plane. However small loops (usually defined as 1/10 wavelength or less)
> have the null broadside to the loop or perpendicular to the plane. The
> reason I say 'generally' is that when the small loop is tuned the pattern
> is shifted to some degree.
>
>

>
> Generally speaking (again hi hi) the answer is yes. Imbalance in the loop
> feed does affect the radiation pattern to a degree. So for example ... if
> one is designing a loop direction finder then care is taken to balance in
> all aspects, the feed system, symmetry in construction, and the use of a
> shield. In other uses ... such as an efficient small loop for xmit/rcv ...
> balance is not critical.
>
>

>
> Jim
>
>
Thanks Jim

I'll fit the Balun on and see if it make a lot of difference, The coax feed to the loop will be
buried, so it would be nice to get as much RF off the braid and to protect it from the XYL with
the mowing machine.

Its definitely working well in its current position as I'm seeing S9+ signals with it.

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7211. Magnetic Loop ON4CEQ

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-12 20:35:01 UTC
From: sidney7539
Topic: 7211 Message: 7211

Hello, Has any one built the small magnetic loop for 14mhz to 28mhz bands, designed by ON4CEQ? If so with what results. Also his design for the variable capacitor,anyone tried building it using double sided printed circuit board.? It would seem to be an interesting project.
Sid.

7212. Envelope tuning capacictor.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-13 18:05:26 UTC
From: Michael in Suffolk
Topic: 7212 Message: 7212

On YOU TUBE one can see this idea, you take a long envelope and cut off a short end, cut two bits of cardboard to go inside, paste on some tin foil one one side of each and with a blank side over a tin foil side slide one bit of cardboard over the other, two wires being taped to each tin foil side. I recall seeing how this was done in a WW2 film, re clandestine radio reception, I think the POLES did it plus the DUTCH using KILM tins. Mike - Suffolk.

[Non-text portions of this message have been removed]

7213. Re: Envelope tuning capacictor.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-14 13:58:50 UTC
From: rbrucecarter
Topic: 7212 Message: 7213

Would you mind posting the link?

A friend of mine does it with aluminum foil and paper around a soft drink can.

--- In loopantennas@yahoogroups.com, Michael in Suffolk <michaelrae65@...> wrote:
>
> On YOU TUBE one can see this idea, you take a long envelope and cut off a short end, cut two bits of cardboard to go inside, paste on some tin foil one one side of each and with a blank side over a tin foil side slide one bit of cardboard over the other, two wires being taped to each tin foil side. I recall seeing how this was done in a WW2 film, re clandestine radio reception, I think the POLES did it plus the DUTCH using KILM tins. Mike - Suffolk.
>
>
>
>
> [Non-text portions of this message have been removed]
>

7214. Re: Magnetic Loop ON4CEQ

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-14 14:01:23 UTC
From: bm40g
Topic: 7211 Message: 7214

--- In loopantennas@yahoogroups.com, "sidney7539" <sid@...> wrote:
>
> Hello, Has any one built the small magnetic loop for 14mhz to 28mhz bands, designed by ON4CEQ? If so with what results. Also his design for the variable capacitor,anyone tried building it using double sided printed circuit board.? It would seem to be an interesting project.
> Sid.
>

Hi Sid,

My antenna is similar to his 7 - 14 MHz Octagon radiator antenna, but I used 7/8 inch Heliax for the radiator, and a junk-box butterfly cap (from an old RF Bridge for Vacuum Tubes).

I would not use PCB for the butterfly cap. The currents involved are large, and might be too much for the foil. Also, you do not want to expose the PCB dielectric to fields. Even the better Microwave PCB dielectrics are probably too lossy. SO, have the PCB double sided, and put a VIA or two between the outer foils. Possibly Polyflon materials could be used, but now your talking bucs.

I have seen other hams who have used telescoping tubing for the capacitor, with a teflon, or cross-linked polyethylene (do not get black!) dielectric tube inbetween built similiary to the trombone trimmer ON4CEQ shows. Polyethylene, even when cross-linked is a very good dielectric. For a single frequency cap, a RG-213/214 Gimick capacitor would work just fine.

7215. Sorry no link

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-14 16:16:05 UTC
From: Michael in Suffolk
Topic: 7215 Message: 7215

Sorry no link, cannot recall under what handing it was but it's on YOU TUBE poss look for DIY tuning caps. Mike.

[Non-text portions of this message have been removed]

7216. Re: [loopantennas] Sorry no link

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-14 18:51:13 UTC
From: Steve,g4vbd
Topic: 7215 Message: 7216

Hi guys

I found this interesting one. I'm sure there are more in there somewhere

http://www.youtube.com/watch?v=VPALB-ZZGbY

regards
Steve, g4vbd

----- Original Message -----
From: Michael in Suffolk
To: loopantennas@yahoogroups.com
Sent: Sunday, February 14, 2010 4:16 PM
Subject: [loopantennas] Sorry no link

Sorry no link, cannot recall under what handing it was but it's on YOU TUBE poss look for DIY tuning caps. Mike.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7217. Re: Sorry no link - YES that's the one.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-15 09:32:26 UTC
From: Mike
Topic: 7215 Message: 7217

Hi Steve. Yes that's the one, glad you found it, good isn't it. Mike {UK} Bungay Suffolk.

7218. Re: Magnetic Loop ON4CEQ

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-15 19:17:33 UTC
From: sidney7539
Topic: 7211 Message: 7218

--- In loopantennas@yahoogroups.com, "bm40g" <donver@...> wrote:

>Hi, many thanks for your reply to my posting. I can see your point about the high currents and PC-boards. Looks as though I will have to look further for inspiration. For example the trombone construction that you mentioned.
Once again my thanks and best regards,
Sid.
>
>
> --- In loopantennas@yahoogroups.com, "sidney7539" <sid@> wrote:
> >
> > Hello, Has any one built the small magnetic loop for 14mhz to 28mhz bands, designed by ON4CEQ? If so with what results. Also his design for the variable capacitor,anyone tried building it using double sided printed circuit board.? It would seem to be an interesting project.
> > Sid.
> >
>
> Hi Sid,
>
> My antenna is similar to his 7 - 14 MHz Octagon radiator antenna, but I used 7/8 inch Heliax for the radiator, and a junk-box butterfly cap (from an old RF Bridge for Vacuum Tubes).
>
> I would not use PCB for the butterfly cap. The currents involved are large, and might be too much for the foil. Also, you do not want to expose the PCB dielectric to fields. Even the better Microwave PCB dielectrics are probably too lossy. SO, have the PCB double sided, and put a VIA or two between the outer foils. Possibly Polyflon materials could be used, but now your talking bucs.
>
> I have seen other hams who have used telescoping tubing for the capacitor, with a teflon, or cross-linked polyethylene (do not get black!) dielectric tube inbetween built similiary to the trombone trimmer ON4CEQ shows. Polyethylene, even when cross-linked is a very good dielectric. For a single frequency cap, a RG-213/214 Gimick capacitor would work just fine.
>

7219. 40 meter mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-17 18:04:56 UTC
From: GeorgeG
Topic: 7219 Message: 7219

I am looking for plans to build a good 40 meter mag loop. Something I can take in my truck camper. 73 George/W2BPI

7220. Re: 40 meter mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-17 22:44:00 UTC
From: capntripps2000
Topic: 7219 Message: 7220

Take a look at Ben G0CWT's wire magnetic mobile loop. I built one and it worked great. If you run it from your camper other stations will think you're running a dipole. Very effective antenna.

http://g0cwt.co.uk/magloops/new_page_2.htm

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "GeorgeG" <w2bpi1@...> wrote:
>
> I am looking for plans to build a good 40 meter mag loop. Something I can take in my truck camper. 73 George/W2BPI
>

7221. Re: [loopantennas] 40 meter mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-18 00:07:20 UTC
From: Chris Trask
Topic: 7219 Message: 7221

>
> I am looking for plans to build a good 40 meter mag loop. Something I can
> take in my truck camper. 73 George/W2BPI
>

Might be a bit large, but try this:

http://www.home.earthlink.net/~christrask/Paper012.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7222. Re: [loopantennas] 40 meter mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-18 09:45:56 UTC
From: richard
Topic: 7219 Message: 7222

On Wed, 17 Feb 2010 18:04:56 -0000
"GeorgeG" <w2bpi1@...> wrote:

> I am looking for plans to build a good 40 meter mag loop. Something I can take in my truck
> camper. 73 George/W2BPI
>
Hiya
You could try what I've just built and works well, and you can disassemble it for packing it away.

Have a good groop thru your junk box , you will need a capacitor that will cover 80 ~100pF , you
could use a fixed door knob capacitor which would give you just under 8KHz of usable band with a
lowish vswr, or a combination of fixed and variable caps.
You will need a 5 mtr length of LDF4-50, and a yard of 1/2" copper pipe.
Now strip back the outer PVC on the LDF4-50 to expose about a foot of the copper at each end.
You will find the copper pipe will slide ove the LDF4-50 hardline coax.
cut the 1/2" copper pie into two sections and fit the capacitor in between the two bits of copper
1/2" copper pipe,
You can form the loop by sliding the 1/2" over each end of the LFD4-50.
Its a tight fit, and you might need to ease the ridges on the LDF4-50.
You can either tune the loop with capicitors (variable), or use a fixed capacitor and alter the
length of the loop by sliding more or less pipe over the coax.

There is a spreadsheet program on OH7SV's site, look under 80 mtr loop .
the coupling loop is 0.3 mtr, about a foot.
when you want to pack it away just pull the thing apart and stow, you could if wanted straighten
the coax out first, then you have a tiny stowage space.
A 5 mtr loop of LDF4-50 is nearly self supporting, so I don't think your will need a frame.
If you feel a frame would be nice, use the glassfibre 1/4" dia rods that are used to support small
frame tents, most camping stores have them, tie with either nylon or string.

If a 5 mtr length of LDF4-50 is awkward to stow, yoiu can allways cut it in half and use a piece of
1/2" copper pipe to join it when in use.

HTH

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7223. Mutually Orthogonal Triple Twin-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-19 03:13:32 UTC
From: radiosparks_com
Topic: 7223 Message: 7223

Yo Mates,

While on a walk about, I found this interesting document.
Thought you may be interested.
Uploaded the PDF to Active Loop Antenna Folder.

GISELLE_ANTENNA_LOOP_DSTO-TR-2321 PR.PDF

TNX
Ralph
VE3XRM

7224. Re: [loopantennas] Mutually Orthogonal Triple Twin-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-19 13:59:45 UTC
From: Chris Trask
Topic: 7223 Message: 7224

>
>While on a walk about, I found this interesting document.
>Thought you may be interested.
>Uploaded the PDF to Active Loop Antenna Folder.
>
>GISELLE_ANTENNA_LOOP_DSTO-TR-2321 PR.PDF
>

Seems there's a fault with that file. Could you check it and then upload it again?

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7225. Re: [loopantennas] Mutually Orthogonal Triple Twin-Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-19 16:39:41 UTC
From: Chris Trask
Topic: 7223 Message: 7225

>
>Yo Mates,
>
>While on a walk about, I found this interesting document.
>Thought you may be interested.
>Uploaded the PDF to Active Loop Antenna Folder.
>
>GISELLE_ANTENNA_LOOP_DSTO-TR-2321 PR.PDF
>

Thanks to Cor making mention of Foxit, I'm now able to read this document.

This is a substantial piece of design work, and the author went much further back into loop antenna history than we would normally see in latter-day publications on this subject.

The cross-connection at the gaps is very curious, and he's gone to a great degree of effort to minimize common-mode interference.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7226. John Bryant

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-23 10:17:42 UTC
From: dx11
Topic: 7226 Message: 7226

Through the years I have been searching for background material on antennas and radio reception. After a while a number of names or callsigns become familiar, because belonging to an author of interesting articles. So on my computer I have a directory named Bryant_Bowers_Connelly. In that directory I have a collection of in my opinion of very good material with theory and practical advice on antennas, cables and baluns. So whenever I saw the name John Bryant somewhere I knew it would made sense to retrieve the information given. I have seen his name mentioned in this group on a regular basis.

Therefore it came as a shock to find the following message on RadioBanter.com .(http://www.radiobanter.com/showthread.php?t=149680)

DefaultRIP - John Bryant, a great DX'er

_____

To my DXplorer friends--

It is my sad duty to inform you that yesterday John Bryant fell from a ladder and received injuries that resulted in his death this morning. As you are, I am shocked--John was not only one of my best friends but also a writing partner and travel buddy. As I find out details on arrangements I will keep you posted. Please raise a glass to John--we have all lost a valued friend and colleague.

Harold Cones
(via Horacio A. Nigro, DXLD)

I wanted to share this with you.

Regards,

Cor Beijersbergen

[Non-text portions of this message have been removed]

7227. Acceptability of 80 meter full wave horizontal loop configuration

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-23 13:43:25 UTC
From: lh1907
Topic: 7227 Message: 7227

Once the 100 year snow in Philly area disappears, the first planned spring antenna project is installing a FW hor loop cut for 3.5 Mhz (287 feet circumference). Shape is rectangular, height above ground is 45 feet. My two story colonial house is within the front part of loop rectangle (approx 164 feet worth of total loop circumference). Closest distance from any second floor room to a point on this 164 feet portion of #16 AWG, pvc covered, wire loop is 20 feet. Planned transmission line interface is 70 ft of RG59, 75 ohm coax along ground, with a balance coax balun (12 turns of coax on 4 inch diameter form) at point where coax connects to 45 ft of #16 AWG stranded speaker wire (estimated surge impedance is about 80 ohms). Top end of speaker wire connects to horizontal loop. If any of my questions have already been addressed, please point me to applicable message number. The Yahoo Group keyword search function is not very useful. 1. Max RF power is 150 watts rms. Will the RF level on second floor be below acceptable personnel safety limits for all transmission modes? Per article at this page : (http://www.arrl.org/news/rfsafety/exposure_regs.html) "At HF, 150 W to any antenna would be unconditionally safe when the antenna is 10 meters from areas of exposure--with a significant safety margin." Unfortunately, I'm about 10 feet below this limit. 2. I plan on building the balanced line current measurement unit described here. (http://users.tpg.com.au/users/ldbutler/Line_Bal_Test_Meter.htm) to measure the transmission line current balance. How much a per cent mismatch between line currents is considered okay? i.e. no significant transmission line radiation which affect antenna radiation pattern. 3. What is the simplest measurement technique for measuring the SWR dependent losses of this transmission line system? Using coax for the last 70 feet of transmission line interface because it is close to ground and house exterior is aluminum siding. Have seen comments which recommend keeping open wire line away from conductive materials. I have a resistive return loss bridge and signal generator, to check the SWR at the ground end of speaker wire. The SWR at transmitter end of coax can also be measured with this same bridge. A LC (or switched to CL configuration) matching unit will be used between transmitter output and coax to antenna. An SWR meter (directional coupler type) will be between transmitter and matching unit. Hopefully, these three SWR measurements (1. coax end of speaker wire, 2. transmitter end of coax, and 3. transmitter end of SWR meter when matching unit is adjusted) will be enough to quantify the "SWR-dependent" loss of transmission line interface. The purpose of this exercise is to help decide if speaker wire should be replaced with windowed ladder line and RG59 replaced with a lower loss type coax to increase effective radiated power. Larry, W2HHV

7228. Re: [loopantennas] Acceptability of 80 meter full wave horizontal loop configuration

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-23 23:57:50 UTC
From: M HOLDEN
Topic: 7227 Message: 7228

1> Use 283 Feet as it is 2nd harmonic on 7.1MHz, 4th on 14.2, 6th on 21.3 and 8th on 28.4MHz. The antenna is a true multibander then. 2> Multi band use means multi impedance with band changes. Fortunately they are all "medium impedances" so use 300 ohm slotted ribbon feeder of a convenient length. COAX is particularly useless and wasteful at impedances other than 50 or 75 ohms. GET RID !!! 3> Connect your feeder in the shack to balanced output terminals on your tuner unit. Failing this, try one side to the earthy wingnut, and the other to the centre prong of a PL259. A balun is not going to give a suitable impedance transformation on all bands. Try using the system without a balun. Guess what happens ! 4> RF levels on HF with 150 watts will not cook anything or anybody. 5> The SWR meter will be between your tcvr and the antenna tuning unit and the loop can be tuned to lowest reflected power. 6> Keep it as simple as that. Keep the feedline away from parallel metal objects (right angles to metal objects won't hurt!) and feed the loop at the nearest point to the shack. 7> Check the finished loop for continuity and expect to see very low ohms. 8> Enter the world of low noise and high gain. Good Dx Larry. Regards, Mike, G4HOL --- On Tue, 23/2/10, lh1907 wrote: From: lh1907 Subject: [loopantennas] Acceptability of 80 meter full wave horizontal loop configuration To: loopantennas@yahoogroups.com Date: Tuesday, 23 February, 2010, 13:43 Once the 100 year snow in Philly area disappears, the first planned spring antenna project is installing a FW hor loop cut for 3.5 Mhz (287 feet circumference) . Shape is rectangular, height above ground is 45 feet. My two story colonial house is within the front part of loop rectangle (approx 164 feet worth of total loop circumference) . Closest distance from any second floor room to a point on this 164 feet portion of #16 AWG, pvc covered, wire loop is 20 feet. Planned transmission line interface is 70 ft of RG59, 75 ohm coax along ground, with a balance coax balun (12 turns of coax on 4 inch diameter form) at point where coax connects to 45 ft of #16 AWG stranded speaker wire (estimated surge impedance is about 80 ohms). Top end of speaker wire connects to horizontal loop. If any of my questions have already been addressed, please point me to applicable message number. The Yahoo Group keyword search function is not very useful. 1. Max RF power is 150 watts rms. Will the RF level on second floor be below acceptable personnel safety limits for all transmission modes? Per article at this page : "At HF, 150 W to any antenna would be unconditionally safe when the antenna is 10 meters from areas of exposure--with a significant safety margin." Unfortunately, I'm about 10 feet below this limit. 2. I plan on building the balanced line current measurement unit described here. to measure the transmission line current balance. How much a per cent mismatch between line currents is considered okay? i.e. no significant transmission line radiation which affect antenna radiation pattern. 3. What is the simplest measurement technique for measuring the SWR dependent losses of this transmission line system? Using coax for the last 70 feet of transmission line interface because it is close to ground and house exterior is aluminum siding. Have seen comments which recommend keeping open wire line away from conductive materials. I have a resistive return loss bridge and signal generator, to check the SWR at the ground end of speaker wire. The SWR at transmitter end of coax can also be measured with this same bridge. A LC (or switched to CL configuration) matching unit will be used between transmitter output and coax to antenna. An SWR meter (directional coupler type) will be between transmitter and matching unit. Hopefully, these three SWR measurements (1. coax end of speaker wire, 2.

transmitter end of coax, and 3. transmitter end of SWR meter when matching unit is adjusted) will be enough to quantify the "SWR-dependent" loss of transmission line interface. The purpose of this exercise is to help decide if speaker wire should be replaced with windowed ladder line and RG59 replaced with a lower loss type coax to increase effective radiated power. Larry, W2HHV [Non-text portions of this message have been removed]

7229. Re: Acceptability of 80 meter full wave horizontal loop configuration

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-25 00:18:36 UTC
From: lh1907
Topic: 7227 Message: 7229

Mike, I added my comments below to your points 1 thru 3, and 6. --- In loopantennas@yahoogroups.com, M HOLDEN wrote: > > 1> Use 283 Feet as it is 2nd harmonic on 7.1MHz, 4th on 14.2, 6th on 21.3 and 8th on 28.4MHz. The antenna is a true multibander then. Your point is well taken. Cutting 80meter full wave length for 3.55 Mhz rather than 3.5 Mhz centers the higher wavelengths closer to mid band on higher frequencies. > 2> Multi band use means multi impedance with band changes. Fortunately they are all "medium impedances" so use 300 ohm slotted ribbon feeder of a convenient length. COAX is particularly useless and wasteful at impedances other than 50 or 75 ohms. GET RID !!! The 115 ft transmission line run from FW loop connection to transmitter includes a 15 ft run from basement window entry to transmitter. Lot of metal along this 15 ft run (HVAC air ducts, copper pipes, vertical metal support columns). I am concerned about balanced line current imbalance due to interaction with nearby metal causing transmission line radiation. How far should the windowed ladder line be away from the house aluminum siding to not upset transmission line current balance? > 3> Connect your feeder in the shack to balanced output terminals on your tuner unit. Failing this, try one side to the earthy wingnut, and the other to the centre prong of a PL259. A balun is not going to give a suitable impedance transformation on all bands. Try using the system without a balun. Guess what happens ! With all the metal in basement (comment for point 2 above), it looks like I need to convert to coax before tuner to avoid transmission line radiation in shack. > 4> RF levels on HF with 150 watts will not cook anything or anybody. > 5> The SWR meter will be between your tcvr and the antenna tuning unit and the loop can be tuned to lowest reflected power. > 6> Keep it as simple as that. Keep the feedline away from parallel metal objects (right angles to metal objects won't hurt!) and feed the loop at the nearest point to the shack. Based on your comments, I assume the speaker wire loss is significantly more than windowed ladder line. Will use ladder line for as much of the 115 ft transmission line run as possible. If I was willing to bridge the added complexity, an outdoor, remotely tuned balanced antenna tuner at base of vertical ladder line feed would be the cat's meow. My shack is mid point between both sides of loop. That is source of 75 foot leg of transmission line run. > 7> Check the finished loop for continuity and expect to see very low ohms. > 8> Enter the world of low noise and high gain. Good Dx Larry. > Regards, Mike, G4HOL > > --- On Tue, 23/2/10, lh1907 wrote: > > From: lh1907 > Subject: [loopantennas] Acceptability of 80 meter full wave horizontal loop configuration > To: loopantennas@yahoogroups.com > Date: Tuesday, 23 February, 2010, 13:43 > > Once the 100 year snow in Philly area disappears, the first planned spring antenna project is installing a FW hor loop cut for 3.5 Mhz (287 feet circumference) . > > Shape is rectangular, height above ground is 45 feet. My two story colonial house is within the front part of loop rectangle (approx 164 feet worth of total loop circumference) . Closest distance from any second floor room to a point on this 164 feet portion of #16 AWG, pvc covered, wire loop is 20 feet. > > Planned transmission line interface is 70 ft of RG59, 75 ohm coax along ground, with a balance coax balun (12 turns of coax on 4 inch diameter form) at point where coax connects to 45 ft of #16 AWG stranded speaker wire (estimated surge impedance is about 80 ohms). Top end of speaker wire connects to horizontal loop. > > If any of my questions have already been addressed, please point me to applicable message number. The Yahoo Group keyword search function is not very useful. > > 1. Max RF power is 150 watts rms. Will the RF level on second floor be below acceptable personnel safety limits for all transmission

modes? Per article at this page : "At HF, 150 W to any antenna would be unconditionally safe when the antenna is 10 meters from areas of exposure--with a significant safety margin." Unfortunately, I'm about 10 feet below this limit. > > 2. I plan on building the balanced line current measurement unit described > > here. > > to measure the transmission line current balance. How much a per cent mismatch between line currents is considered okay? i.e. no significant transmission line radiation which affect antenna radiation pattern. > > 3. What is the simplest measurement technique for measuring the SWR dependent losses of this transmission line system? Using coax for the last 70 feet of transmission line interface because it is close to ground and house exterior is aluminum siding. Have seen comments which recommend keeping open wire line away from conductive materials. I have a resistive return loss bridge and signal generator, to check the SWR at the ground end of speaker wire. The SWR at transmitter end of coax can also be measured with this same bridge. A LC (or switched to CL configuration) matching unit will be used between transmitter output and coax to antenna. An SWR meter (directional coupler type) will be between transmitter and matching unit. Hopefully, these three SWR measurements (1. coax end of speaker wire, 2. transmitter end of coax, and 3. transmitter end of SWR meter when matching unit is adjusted) will be enough to quantify the "SWR-dependent" loss of > transmission line interface. The purpose of this exercise is to help decide if speaker wire should be replaced with windowed ladder line and RG59 replaced with a lower loss type coax to increase effective radiated power. > > Larry, W2HHV

7230. Re: [loopantennas] Re: Acceptability of 80 meter full wave horizontal loop configuration

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-02-25 10:12:17 UTC
From: M HOLDEN
Topic: 7227 Message: 7230

My subsequent comments with asterisks fore and aft Larry. Regards de Mike. --- On Thu, 25/2/10, lh1907 wrote: From: lh1907 Subject: [loopantennas] Re: Acceptability of 80 meter full wave horizontal loop configuration To: loopantennas@yahoogroups.com Date: Thursday, 25 February, 2010, 0:18 Mike, I added my comments below to your points 1 thru 3, and 6. --- In loopantennas@ yahoogroups. com, M HOLDEN wrote: > > 1> Use 283 Feet as it is 2nd harmonic on 7.1MHz, 4th on 14.2, 6th on 21.3 and 8th on 28.4MHz. The antenna is a true multibander then. Your point is well taken. Cutting 80meter full wave length for 3.55 Mhz rather than 3.5 Mhz centers the higher wavelengths closer to mid band on higher frequencies. > 2> Multi band use means multi impedance with band changes. Fortunately they are all "medium impedances" so use 300 ohm slotted ribbon feeder of a convenient length. COAX is particularly useless and wasteful at impedances other than 50 or 75 ohms. GET RID !!! The 115 ft transmission line run from FW loop connection to transmitter includes a 15 ft run from basement window entry to transmitter. Lot of metal along this 15 ft run (HVAC air ducts, copper pipes, vertical metal support columns). I am concerned about balanced line current imbalance due to interaction with nearby metal causing transmission line radiation. How far should the windowed ladder line be away from the house aluminum siding to not upset transmission line current balance?*****I would aim for about a foot, the line is balanced so there is virtually no radiation from it***** > 3> Connect your feeder in the shack to balanced output terminals on your tuner unit. Failing this, try one side to the earthy wingnut, and the other to the centre prong of a PL259. A balun is not going to give a suitable impedance transformation on all bands. Try using the system without a balun. Guess what happens ! With all the metal in basement (comment for point 2 above), it looks like I need to convert to coax before tuner to avoid transmission line radiation in shack. *****Yes, or use the remote auto-tuner on a long coax run.***** > 4> RF levels on HF with 150 watts will not cook anything or anybody. > 5> The SWR meter will be between your tcvr and the antenna tuning unit and the loop can be tuned to lowest reflected power. > 6> Keep it as simple as that. Keep the feedline away from parallel metal objects (right angles to metal objects won't hurt!) and feed the loop at the nearest point to the shack. ***** This side of the pond, the 283 footer is working great guns for 5MHz users. It will give reasonable results on W.A.R.C. bands too.***** Based on your comments, I assume the speaker wire loss is significantly more than windowed ladder line. Will use ladder line for as much of the 115 ft transmission line run as possible. If I was willing to bridge the added complexity, an outdoor, remotely tuned balanced antenna tuner at base of vertical ladder line feed would be the cat's meow. My shack is mid point between both sides of loop. That is source of 75 foot leg of transmission line run. > 7> Check the finished loop for continuity and expect to see very low ohms. > 8> Enter the world of low noise and high gain. Good Dx Larry. > Regards, Mike, G4HOL > > --- On Tue, 23/2/10, lh1907 wrote: > > From: lh1907 > Subject: [loopantennas] Acceptability of 80 meter full wave horizontal loop configuration > To: loopantennas@ yahoogroups. com > Date: Tuesday, 23 February, 2010, 13:43 > > Once the 100 year snow in Philly area disappears, the first planned spring antenna project is installing a FW hor loop cut for 3.5 Mhz (287 feet circumference) . > > Shape is rectangular, height above ground is 45 feet. My two story colonial house is within the front part of loop rectangle (approx 164 feet worth of total loop circumference) . Closest distance from any second floor room to a point on this 164 feet portion of #16 AWG,

pvc covered, wire loop is 20 feet. > > Planned transmission line interface is 70 ft of RG59, 75 ohm coax along ground, with a balance coax balun (12 turns of coax on 4 inch diameter form) at point where coax connects to 45 ft of #16 AWG stranded speaker wire (estimated surge impedance is about 80 ohms). Top end of speaker wire connects to horizontal loop. > > If any of my questions have already been addressed, please point me to applicable message number. The Yahoo Group keyword search function is not very useful. > > 1. Max RF power is 150 watts rms. Will the RF level on second floor be below acceptable personnel safety limits for all transmission modes? Per article at this page : "At HF, 150 W to any antenna would be unconditionally safe when the antenna is 10 meters from areas of exposure--with a significant safety margin." Unfortunately, I'm about 10 feet below this limit. > > 2. I plan on building the balanced line current measurement unit described > > here. > > to measure the transmission line current balance. How much a per cent mismatch between line currents is considered okay? i.e. no significant transmission line radiation which affect antenna radiation pattern. > > 3. What is the simplest measurement technique for measuring the SWR dependent losses of this transmission line system? Using coax for the last 70 feet of transmission line interface because it is close to ground and house exterior is aluminum siding. Have seen comments which recommend keeping open wire line away from conductive materials. I have a resistive return loss bridge and signal generator, to check the SWR at the ground end of speaker wire. The SWR at transmitter end of coax can also be measured with this same bridge. A LC (or switched to CL configuration) matching unit will be used between transmitter output and coax to antenna. An SWR meter (directional coupler type) will be between transmitter and matching unit. Hopefully, these three SWR measurements (1. coax end of speaker wire, 2. transmitter end of coax, and 3. transmitter end of SWR meter when matching unit is adjusted) will be enough to quantify the "SWR-dependent" loss of > transmission line interface. The purpose of this exercise is to help decide if speaker wire should be replaced with windowed ladder line and RG59 replaced with a lower loss type coax to increase effective radiated power. > > Larry, W2HHV
[Non-text portions of this message have been removed]

7232. Harbor Freight

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 00:27:23 UTC
From: Chris Trask
Topic: 7232 Message: 7232

Generally, I don't think much of Harbor Freight Tools. However, they had a one-page ad in today's newspaper with a bunch of coupons, one of which was for a free 9-LED flashlight. They also had a 20% off any one item coupon. I went to the Harbor Freight about 4 miles south of me and looked around. Since my shop has just about every sort of tool I can imagine needing I didn't expect to see anything of interest. However, I spent a good deal of time looking this item over:

http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=99736

Anyone who builds loop antennas knows exactly what this is good for. The number of dies is limited to three sizes. But, I'm going to look in a local junk yard for pulleys and see if I can make my own for bending 1/2", 3/4", and 1" copper pipe. It's a whole lot cheaper than a Greenlee or Rigid hydraulic bender, and you can do any radius you desire by adjusting the centre jack screw.

And I did get the free flashlight. It has a metal body, which is far better than what I was expecting, plus it included the batteries. And it's bright to the point where you don't want to look directly at it.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

7233. Re: [loopantennas] Harbor Freight

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 01:52:56 UTC
From: kevin asato
Topic: 7232 Message: 7233

Yes, the do have good deals. You just have to realize and accept the quality of the parts as you put your money down. Once you do that, just use the piece of equipment without complaint. If you wanted the Craftsman guarantee, you would have bought from Sears/K-Mart/OSH (Orchard Supply Hardware).

I stopped in to Harbor Freight a few weeks ago pick up some stepped drill bits for a project and also ended up buying a heat gun, with two temp ranges - warm & hot, for $9.99. A comparable price is 30 to 40 dollars more. I've always wanted one for personal use when working with heatshrink tubing as some of the tubing I was starting to work with outgrew the capability of my 35w soldering iron. (I used to have access to one when I worked in a company facility. I haven't had access to one for over 5 years since I work from home or at a client's facility.) A heat gun can also be used to preheat the solder paste when working with surface mount parts and also when desoldering ICs.

73,
kevin
kc6pob

--- On Sun, 2/28/10, Chris Trask <christrask@earthlink.net> wrote:

From: Chris Trask <christrask@...>
Subject: [loopantennas] Harbor Freight
To: "Loop Antennas" <loopantennas@yahoogroups.com>
Date: Sunday, February 28, 2010, 4:27 PM

Generally, I don't think much of Harbor Freight Tools. However, they

had a one-page ad in today's newspaper with a bunch of coupons, one of which

was for a free 9-LED flashlight. They also had a 20% off any one item

coupon. I went to the Harbor Freight about 4 miles south of me and looked

around. Since my shop has just about every sort of tool I can imagine

needing I didn't expect to see anything of interest. However, I spent a

good deal of time looking this item over:

http://www.harborfr eight.com/ cpi/ctaf/ displayitem. taf?Itemnumber= 99736

Anyone who builds loop antennas knows exactly what this is good for.

The number of dies is limited to three sizes. But, I'm going to look in a

local junk yard for pulleys and see if I can make my own for bending 1/2",

3/4", and 1" copper pipe. It's a whole lot cheaper than a Greenlee or Rigid

hydraulic bender, and you can do any radius you desire by adjusting the centre jack screw.

And I did get the free flashlight. It has a metal body, which is far better than what I was expecting, plus it included the batteries. And it's bright to the point where you don't want to look directly at it.

Chris

,---------- --------- --. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,---- --------- -' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@earthlin k.net
| | | | \ '. http://www.home. earthlink. net/~christrask
c__; c__; '-..'>.__
Graphics by Loek Frederiks

[Non-text portions of this message have been removed]

7234. Re: loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 12:12:59 UTC
From: shibukiau
Topic: 7040 Message: 7234

Hi Richard -- I just read your request for info!!

Due to antenna restrictions, I use a homebuilt 6 ft dia loop on 80/40m inside my aluminum clad garage alongside my car and still able to work out almost as well as others with average dipoles! The car will shift the tune point a bit and probably doesn't help much but it does work! The Q will be affected more by the loop material and resistance of the loop/cap assembly than anything else!

If you have to mount the loop on a mast I'd go for the aluminum mast, I use one myself and it doesn't appear to affect it!

BTW -- a good cost effective loop can be made out of 7/8 inch Heliax, which is what I used. This stuff can be found used at most fleamarkets for next to nothing as many of the cell towers are removing it due to new equipment configurations! My loop uses about 19 ft of Heliax and a dual gang air variable cap turned by a DC motor feed over the coax from a MFJ loop control box! Very simple but effective!
I also use the MFJ loops, the 20-10m one is a good performer and easy to use!!

If you would like more info on how to make one for 160m Google "vk4amz" as he has a nice web site describing his 160m loop. I've seen his and have heard him on the air. He does extremely well compared to other stations using full size antennae!

Main thing is don't be discouraged, just go ahead and try it as I guarantee you will be impressed by the performance of a well built loop!

Cheers!
VK4ERQ/VE3ERQ

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> Hi all
>
> Now I've got this 12' dia loop nearly constructed, how critical are loop to nearby objects ?
> ie could I mount it on the side of the tower with say a 4' standoff between the tower and the
> loop ?.
>
> Or could I mount it on a 2" dia Aluminium pole fixed at the top and bottom with just 1" separation
> between the loop and pole ?
> TIA
> --
> Best wishes
>
> Richard Bown
>

> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7235. Re: [loopantennas] Re: loops and nearby objects

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 13:00:44 UTC
From: richard
Topic: 7040 Message: 7235

On Mon, 01 Mar 2010 12:12:59 -0000
"shibukiau" <kubisl@...> wrote:

> Hi Richard -- I just read your request for info!!
>
> Due to antenna restrictions, I use a homebuilt 6 ft dia loop on 80/40m inside my aluminum clad
> garage alongside my car and still able to work out almost as well as others with average dipoles!
> The car will shift the tune point a bit and probably doesn't help much but it does work! The Q
> will be affected more by the loop material and resistance of the loop/cap assembly than anything
> else!
>
> If you have to mount the loop on a mast I'd go for the aluminum mast, I use one myself and it
> doesn't appear to affect it!
>
> BTW -- a good cost effective loop can be made out of 7/8 inch Heliax, which is what I used. This
> stuff can be found used at most fleamarkets for next to nothing as many of the cell towers are
> removing it due to new equipment configurations! My loop uses about 19 ft of Heliax and a dual
> gang air variable cap turned by a DC motor feed over the coax from a MFJ loop control box! Very
> simple but effective! I also use the MFJ loops, the 20-10m one is a good performer and easy to
> use!!
>
> If you would like more info on how to make one for 160m Google "vk4amz" as he has a nice web site
> describing his 160m loop. I've seen his and have heard him on the air. He does extremely well
> compared to other stations using full size antennae!
>
> Main thing is don't be discouraged, just go ahead and try it as I guarantee you will be impressed
> by the performance of a well built loop!
>
> Cheers!
> VK4ERQ/VE3ERQ
>
>Hiya

Well my loop is up in the garden now, and works surprisingly well.
Its just under 4 mtrs dia, made from LDF4-50, which interfaces with 15mm Cu water pipe for the
end terminations ect.At the moment I'm using a single 100 pF doorknob cab, which centers it on
3.755 MHz.I now have the motor to drive a 100pF vacuum variable cap which is rated at 10Kv ,
that'll allow 400W to be used.
Still trying to sort out the cap mounting which has to be rock solid, or the belt drive to the motor
will slip, and getting a position indicator back in the shack.
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7236. Re: Harbor Freight

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 16:32:14 UTC
From: tenorman1952
Topic: 7232 Message: 7236

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
However, I spent a
> good deal of time looking this item over:
>
> http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=99736
>
> Anyone who builds loop antennas knows exactly what this is good for.

Chris... wow!!! You could really do some damage with that!

Always look forward to seeing your various projects.

73
Paul
AE5JU

7237. Re: Harbor Freight

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 16:44:37 UTC
From: jrtow3rd@bellsouth.net
Topic: 7232 Message: 7237

I've bought a few H-F items of note, most recently a 12V booster/power supply for ~$30. It contains a 12V 17 A-Hr sealed cell and a 120VAC recharger. Great for DXpeditions... or when you go out and find you left the lights on your car on last night - and your car won't start.

Totally off topic, a large digitally locked 'executive safe', actually, a firearms safe, they regularly have for $140+ makes a great 'dangerous item' holder. I store homebrew ammo in it, but others have their electric hand tools, solvents, paints, etc, in them, too. Not fireproof - or gas tight - they will keep little folks out - and contain any flammable items, thus not causing an explosion. As has been said, one takes their items with a modicum of chagrin. Of course, they do carry a few name-brand items - and even a few USA-made items, too.

Okay, I'll come clean... there is an Ecuadorian restaurant in the same strip mall as the Birmingham H-F. Their Mex food is fantastic.

John

7238. Super Loop 80

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 18:49:02 UTC
From: tenorman1952
Topic: 7238 Message: 7238

Chris, or anyone else...

Any comments on the Super Loop 80? This is a transmit/receive loop with an interesting ladder line shorted stub opposite the feedpoint. It is quite popular with many on the evening 75 meter nets I frequent.

http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

http://larc.hamgate.net/SuperLoop.htm

http://www.radioworks.com/csuperlo.html

It is no wider than an 80/75 meter dipole.

Anyone else use one of these?

73
Paul
AE5JU

7239. Re: [loopantennas] Re: Harbor Freight

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 21:43:58 UTC
From: Chris Trask
Topic: 7232 Message: 7239

>
> --- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
> > However, I spent a good deal of time looking this item over:
> >
> >
http://www.harborfreight.com/cpi/ctaf/displayitem.taf?Itemnumber=99736
> >
> > Anyone who builds loop antennas knows exactly what this is good for.
>
>
> Chris... wow!!! You could really do some damage with that!
>
> Always look forward to seeing your various projects.
>

A fellow on another list sent me this URL for a similar tubing bender
made of wood that appeared in Mother Earth News back in 1980:

http://www.motherearthnews.com/Do-It-Yourself/1980-09-01/Homemade-Tubing-Rol
ler.aspx

Now THAT'S inspirational. I can get that article next time I visit the
university library as they have it bound on the shelves as well as
electronically from Mother Earth News.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7240. Re: [loopantennas] Super Loop 80

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-01 21:50:34 UTC
From: Chris Trask
Topic: 7238 Message: 7240

Paul,
I'll look at these later when I have a WiFi connection.

Chris

----- Original Message -----
From: "tenorman1952" <tenorman1952@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, March 01, 2010 11:49 AM
Subject: [loopantennas] Super Loop 80

Chris, or anyone else...

Any comments on the Super Loop 80? This is a transmit/receive loop with an interesting ladder line shorted stub opposite the feedpoint. It is quite popular with many on the evening 75 meter nets I frequent.

http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

http://larc.hamgate.net/SuperLoop.htm

http://www.radioworks.com/csuperlo.html

It is no wider than an 80/75 meter dipole.

Anyone else use one of these?

73
Paul
AE5JU

7241. 80m loop on motorhome roof

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-02 00:38:11 UTC
From: deseybold
Topic: 7241 Message: 7241

hello to the group, i have my station (ic-7000 w/ah-4) in my motor home. i would like an 80 - 10m nvis emcomm antenna to fit on the roof (8 x 13 ft) horizontally, in a pvc piping framework. perhaps a multi turn loop matched by the ah-4. a magnetic loop's resonance will be too sharp for my purposes. is there a calculator out there for this purpose? any experienced elmers?? no hope??? all suggestions will be gratefully responded to. regards, dave w2ryi

7242. Re: [loopantennas] 80m loop on motorhome roof

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-02 01:45:22 UTC
From: Tony Magon
Topic: 7241 Message: 7242

Have a look at the G0CWT website

Regards

Tony VK2IC

On Tue, Mar 2, 2010 at 11:38 AM, deseybold <deseybold@...> wrote:

>
>
> hello to the group, i have my station (ic-7000 w/ah-4) in my motor home. i
> would like an 80 - 10m nvis emcomm antenna to fit on the roof (8 x 13 ft)
> horizontally, in a pvc piping framework. perhaps a multi turn loop matched
> by the ah-4. a magnetic loop's resonance will be too sharp for my purposes.
> is there a calculator out there for this purpose? any experienced elmers??
> no hope??? all suggestions will be gratefully responded to. regards, dave
> w2ryi
>
>
>

[Non-text portions of this message have been removed]

7243. Insulated wire loop under roof tiles

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-02 05:17:33 UTC
From: billcurd
Topic: 7243 Message: 7243

I'd like to put up a multi-band HF loop antenna (preferably covering 80m-10m transmission, and full 3-30 MHz reception) but have some constraints and would appreciate any advice. I have a Kenwood TS-50 and AT-50 in my second story home office.

The exterior walls are stucco over ungrounded chicken wire and the office has a lot of RF noisy computer equipment. Attempts at HF reception with an indoor antenna have been extremely poor. Because of the RF noise, the chicken wire, and AT-50 not having a balanced output, I'm thinking of running coax through the wall to a balun outside on the edge of the roof.

No quality ground is available (just poor conducting desert soil down one floor).

The XYL wouldn't approve of wires along the fence line or in the yard.

So, I'm thinking of laying (hiding) insulated stranded copper electrical wire directly under the tiles of my roof to roughly form a rectangle. Just below the ridge line, down the slope, and along the bottom tiles. With a couple of small jogs and circumference of approximately 40m.

Would it work?
Any voltage or current dangers to the house (I haven't seen anything about voltage and current patterns in a loop antenna)?
Capacitance problems laying directly on roof?
Impedance ratio for the balun?
Any better ideas than 14AWG insulated stranded copper wire?

If I used cable that was 2-conductor - admittedly spaced very close together, what if I connected it as a double loop totaling 80m?
Or with other cable, even 3 loops or more?

BTW, my other choice is something small on top of my patio roof (I'm thinking of putting a 2m/440 Jpole there). A Tek-tenna? Remember: no ground handy. I have a manual MJF antenna tuner that handles balanced line but would prefer automatic tuning.

Between the HOA and XYL, anything has to be pretty small or hidden. Thank you in advance for any feedback.

73s

WA0TKM

7244. Re: [loopantennas] 80m loop on motorhome roof

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-02 16:59:24 UTC
From: Dave Seybold
Topic: 7241 Message: 7244

thanks, tony. good information, much appreciated. regards, dave w2ryi

_____ Information from ESET Smart Security, version of virus signature database 4909 (20100302) _____

The message was checked by ESET Smart Security.

http://www.eset.com

7245. Re: Insulated wire loop under roof tiles

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-02 20:14:08 UTC
From: capntripps2000
Topic: 7243 Message: 7245

If you want to reduce noise get the antenna as far away from the house as possible. You have a fence, good. Run #24 magnet wire around the perimeter of the fence. Your wife won't see it. Demonstrate that to her. You could run it through the air and it wil be nearly invisible.
You'll need a counterpoise, run it from the base of the fence away and along the ground.

If you truly want a ground independent antenna a magnetic loop will do great. See:
http://groups.yahoo.com/group/loopantennas/photos/album/790192499/pic/list

AA0NI did a great job with his loop considering his obstacles. You could lay that loop on your roof but it will do much better vertically mounted.

Also, give this a look:

http://www.aa5tb.com/loop.html

Is your yard surrounded by trees? Any special landscaping? Covered patio? You would be amazed at what you could do with stealthily hidden wires/loops. Keep the loops vertical if at all possible to reduce your ground losses.

SGC has a very interesting document on stealth loops worth reviewing.

http://www.sgcworld.com/Publications/Books/stealthbook.pdf

If you could remote mount your tuner you an have a more efficient antenna situation.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "billcurd" <yahoo@...> wrote:
>
> I'd like to put up a multi-band HF loop antenna (preferably covering 80m-10m transmission, and full 3-30 MHz reception) but have some constraints and would appreciate any advice. I have a Kenwood TS-50 and AT-50 in my second story home office.
....
>
> The XYL wouldn't approve of wires along the fence line or in the yard.
>

7246. Re: [loopantennas] Super Loop 80

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-02 21:33:27 UTC
From: M HOLDEN
Topic: 7238 Message: 7246

Easier and cheaper to make up a 283Ft wire loop, fed with 300 ohm slotted line of a convenient length running from the shack to the nearest point on the loop. No balun needed but you should either treat it as a balanced line terminals feed or cheat and run one side of the ribbon to the centre pin of a PL259 and the otherside to the earthy wingnut. Hang it horizontally and fire !!! Omni directional and all band 10 - 80. Strap the feeders and tune against earth for 160m.
Regards Mike G4HOL

--- On Mon, 1/3/10, tenorman1952 <tenorman1952@...> wrote:

From: tenorman1952 <tenorman1952@yahoo.com>
Subject: [loopantennas] Super Loop 80
To: loopantennas@yahoogroups.com
Date: Monday, 1 March, 2010, 18:49

Chris, or anyone else...

Any comments on the Super Loop 80? This is a transmit/receive loop with an interesting ladder line shorted stub opposite the feedpoint. It is quite popular with many on the evening 75 meter nets I frequent.

http://www.blooming ton.in.us/ ~wh2t/Super% 20Loop%20Antenna .htm

http://larc. hamgate.net/ SuperLoop. htm

http://www.radiowor ks.com/csuperlo. html

It is no wider than an 80/75 meter dipole.

Anyone else use one of these?

73

Paul

AE5JU

[Non-text portions of this message have been removed]

7247. Re: [loopantennas] Insulated wire loop under roof tiles

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-02 22:54:44 UTC
From: M HOLDEN
Topic: 7243 Message: 7247

My shack is on the (USA) second floor with no short path to earth. Under the carpet I have laid overlapping aluminium foil widths and one leg of my desk is compressing down on a piece of chrome plated brass plate, in contact with the aluminium surface about 7x4 inches, with a drilled hole and solder tag connected. A short length of braid goes from there to the earthy wingnut on the back of my tuner unit. I have no idea what an 8 foot square plate, 8 feet above true ground exhibits by way of capacitance to earth, but this idea gives me a fair artificial earth. This is used in conjunction with a large wire loop, resonant in the 5 MHz band.
That took me from Cornwall UK to Long Island NY last night on 5371.5 kHz, with just 100W. I suggest that an auto tuner on the end of a piece of coax cable coupled to a large wire loop of 283Ft (thin wire OK) would do you proud. Baluns will not change in ratio as your band changes find differing impedances flicking from band to band. I have tried a 4:1 balun in the past but it warmed up with 100W transmission, and hated the bands above 20M. Wires under the tiles will be close to house borne interference, TV timebase racket etc. Good luck Bill. 73 de Mike, G4HOL

--- On Tue, 2/3/10, billcurd <yahoo@...> wrote:

From: billcurd <yahoo@...>
Subject: [loopantennas] Insulated wire loop under roof tiles
To: loopantennas@yahoogroups.com
Date: Tuesday, 2 March, 2010, 5:17

I'd like to put up a multi-band HF loop antenna (preferably covering 80m-10m transmission, and full 3-30 MHz reception) but have some constraints and would appreciate any advice. I have a Kenwood TS-50 and AT-50 in my second story home office.

The exterior walls are stucco over ungrounded chicken wire and the office has a lot of RF noisy computer equipment. Attempts at HF reception with an indoor antenna have been extremely poor. Because of the RF noise, the chicken wire, and AT-50 not having a balanced output, I'm thinking of running coax through the wall to a balun outside on the edge of the roof.

No quality ground is available (just poor conducting desert soil down one floor).

The XYL wouldn't approve of wires along the fence line or in the yard.

So, I'm thinking of laying (hiding) insulated stranded copper electrical wire directly under the tiles of my roof to roughly form a rectangle. Just below the ridge line, down the slope, and along the bottom tiles. With a couple of small jogs and circumference of approximately 40m.

Would it work?

Any voltage or current dangers to the house (I haven't seen anything about voltage and current patterns in a loop antenna)?

Capacitance problems laying directly on roof?

Impedance ratio for the balun?

Any better ideas than 14AWG insulated stranded copper wire?

If I used cable that was 2-conductor - admittedly spaced very close together, what if I connected it as a double loop totaling 80m?

Or with other cable, even 3 loops or more?

BTW, my other choice is something small on top of my patio roof (I'm thinking of putting a 2m/440 Jpole there). A Tek-tenna? Remember: no ground handy. I have a manual MJF antenna tuner that handles balanced line but would prefer automatic tuning.

Between the HOA and XYL, anything has to be pretty small or hidden. Thank you in advance for any feedback.

73s

WA0TKM

[Non-text portions of this message have been removed]

7248. Automated Loop Antenna - Command Set

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-03 09:26:44 UTC
From: VK1OO
Topic: 7248 Message: 7248

Hi,

I'm building an Arduino rotator controller and it occurred to me I could also control the motor drive for the variable capacitor on my magnetic loop. So, the question is what protocol set to use for controlling the loop? There are plenty of such for controlling the azimuth/controller, but I've not seen any for loops. Is there something in common use, or de we need to define a set here?

Mike
VK1OO

7249. Re: Super Loop 80

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-03 16:54:40 UTC
From: wild_bill_yonder
Topic: 7238 Message: 7249

I've got an 80m horiz loop up, was feeding with 300 twinlead, just switched to 450 window line. If you connect to tuner's balanced terminals, it does go through a 4:1 balun on most tuners. I'm running mine through a seperate balun, right before the tuner, then into the coax connector on the tuner. That way I can disconnect and go straight to the radio for MW, which my tuner won't pass. Saves having to tune while doing a little swl, too. What I hope to do in the future is modify the tuner to isolate from ground and put a 1:1 balun between the tuner and the radio, but not sure how much difference it would make.

It's omni directional, but the higher you go in harmonics, the more lodes it develops, with some pretty deep nulls between the lobes, so you could wind up with your target area in one of these nulls depending on orientation.

As far as the super loop goes, I'm thinking of making one, but not sure how I could string it so that the lower section would not be in the way. I've heard good stuff about it.

Bill W2NVD

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> Easier and cheaper to make up a 283Ft wire loop, fed with 300 ohm slotted line of a convenient length running from the shack to the nearest point on the loop. No balun needed

7250. 40 or 80 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-05 15:39:22 UTC
From: ptclefty
Topic: 7250 Message: 7250

I want to improve my 40 meter signal. I have room to put up either a 40 meter or 80 meter loop. If I put up a 80 meter loop that is cut to a size that is 2 times my desired 40 meter operating frequency, will it perform any better than a 40 meter loop cut to the desired frequency?

I would prefer to feed the loop with coax and from what I have been able to read, I could do that with the 40 meter loop. Can I do that with the 80 meter loop and have acceptable swr? Any real advantage of putting up the larger loop for operating only on the desired 40 meter freq?

Thanks for your comments.
Bob

7251. Re: [loopantennas] 40 or 80 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-05 17:46:51 UTC
From: Jim Dunstan
Topic: 7250 Message: 7251

At 03:39 PM 3/5/2010 +0000, you wrote:
>
>
>I want to improve my 40 meter signal. I have room to put up either a 40
>meter or 80 meter loop. If I put up a 80 meter loop that is cut to a size
>that is 2 times my desired 40 meter operating frequency, will it perform
>any better than a 40 meter loop cut to the desired frequency?

Hi Bob

I assume you are talking about a horizontal loop. If so, then the 80 mtr dimension will work better on 40 m. The reason is that a 1 wavelength loop has maximum radiation perpendicular to the plane of the loop ... which in the case of a horizontal configuration is straight up. A 2 wavelength loop will have end fire radiation ... which will produce an improved vertical angle of radiation. If the loop is configured vertically ... e.g. in a triangular configuration ... the 40m loop is an excellent performer ... and a good match for a coax feed line.

>I would prefer to feed the loop with coax and from what I have been able
>to read, I could do that with the 40 meter loop. Can I do that with the 80
>meter loop and have acceptable swr? Any real advantage of putting up the
>larger loop for operating only on the desired 40 meter freq?

Yes, the 2 wavelength loop will not present a good direct match to coax. No doubt you will be able to couple to the end of your coax feed line with an trans-match at the xcvr .... whether the loss in the feed line is acceptable is up to you. Perhaps someone else will address the feed problem to a 2 wavelength loop.

73

Jim, VE3CI

7252. Re: [loopantennas] 40 or 80 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-05 20:16:41 UTC
From: K8MPV@aol.com
Topic: 7250 Message: 7252

Thanks Jim:
Yes I plan on horizontal loop. Good info. Will see if anyone else has comments on the feed.
Thanks again.
Bob

In a message dated 3/5/2010 2:28:39 P.M. Eastern Standard Time, jimdunstan@... writes:

At 03:39 PM 3/5/2010 +0000, you wrote:
>
>
>I want to improve my 40 meter signal. I have room to put up either a 40
>meter or 80 meter loop. If I put up a 80 meter loop that is cut to a size
>that is 2 times my desired 40 meter operating frequency, will it perform
>any better than a 40 meter loop cut to the desired frequency?

Hi Bob

I assume you are talking about a horizontal loop. If so, then the 80 mtr dimension will work better on 40 m. The reason is that a 1 wavelength loop
has maximum radiation perpendicular to the plane of the loop ... which in the case of a horizontal configuration is straight up. A 2 wavelength loop
will have end fire radiation ... which will produce an improved vertical angle of radiation. If the loop is configured vertically ... e.g. in a triangular configuration ... the 40m loop is an excellent performer ... and
a good match for a coax feed line.

>I would prefer to feed the loop with coax and from what I have been able
>to read, I could do that with the 40 meter loop. Can I do that with the 80
>meter loop and have acceptable swr? Any real advantage of putting up the
>larger loop for operating only on the desired 40 meter freq?

Yes, the 2 wavelength loop will not present a good direct match to coax. No doubt you will be able to couple to the end of your coax feed line with an trans-match at the xcvr .... whether the loss in the feed line
is acceptable is up to you. Perhaps someone else will address the feed problem to a 2 wavelength loop.

73

Jim, VE3CI

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

7253. Re: [loopantennas] 40 or 80 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-05 20:42:01 UTC
From: M HOLDEN
Topic: 7250 Message: 7253

80 metre loop will give you more gain than the 40 m one. You will really enjoy the signal reports you get. COAX SUCKS ! (Use either an autotuner on the end of the 283 Ft loop or run some 300ohm slotted twin to a tuner in the shack. The length isn't really important, as it should be regarded as non-radiating and on the other side of the coin noise cancelling for Rx.) You will not get multiband performance with coax. Your 283 Ft loop will work 80 to 10 metres with ease on twin feeder. By the time you get to use it on 28 MHz it is 8 wavelengths and has some high gain at very low (horizon kissing) angles of radiation.
Regards, Mike, G4HOL

--- On Fri, 5/3/10, ptclefty <K8MPV@...> wrote:

From: ptclefty <K8MPV@...>
Subject: [loopantennas] 40 or 80 meter loop
To: loopantennas@yahoogroups.com
Date: Friday, 5 March, 2010, 15:39

I want to improve my 40 meter signal. I have room to put up either a 40 meter or 80 meter loop. If I put up a 80 meter loop that is cut to a size that is 2 times my desired 40 meter operating frequency, will it perform any better than a 40 meter loop cut to the desired frequency?

I would prefer to feed the loop with coax and from what I have been able to read, I could do that with the 40 meter loop. Can I do that with the 80 meter loop and have acceptable swr? Any real advantage of putting up the larger loop for operating only on the desired 40 meter freq?

Thanks for your comments.

Bob

[Non-text portions of this message have been removed]

7254. Re: 40 or 80 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-06 23:13:49 UTC
From: aisea6
Topic: 7250 Message: 7254

I once had a full size 80m loop is a triangular formation and feed it a little away from one of the corners. Interesting as it would be classified as a horizontal loop. I fed it using a quarter section out of 75 coax then mate it with a 50 ohms to the shack.
It never let me down as I could use the turner on any frequency I wanted to bring the swr down in the shack end.
I am not sure if by doubling the length for 40m can apply as I think it has to be an odd harmonic as in the case of a dipole designed for 40m is a 3rd harmonic on 15m.
In any case the antenna analyser will tell of the status but get the swr to a 1.5:1 on 80m then work from there.
The apex in my case was 50 feet and the triangle two corners were 20 feet high.
It was my favourite low band antenna compared to a vertical as it doesn't seem to pick up a lot of noise and static, which I suppose a loop been in close formation electrically.

Cul.

Aisea (3D2AA)

--- In loopantennas@yahoogroups.com, "ptclefty" <K8MPV@...> wrote:
>
> I want to improve my 40 meter signal. I have room to put up either a 40 meter or 80 meter loop. If I put up a 80 meter loop that is cut to a size that is 2 times my desired 40 meter operating frequency, will it perform any better than a 40 meter loop cut to the desired frequency?
>
> I would prefer to feed the loop with coax and from what I have been able to read, I could do that with the 40 meter loop. Can I do that with the 80 meter loop and have acceptable swr? Any real advantage of putting up the larger loop for operating only on the desired 40 meter freq?
>
> Thanks for your comments.
> Bob
>

7255. Progress :)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 13:19:35 UTC
From: richard
Topic: 7255 Message: 7255

Hi All
I have now got my 80mtr mag loop tunable, its 12.5 mtrs dia made from LDF4-50 and the top metre or so from 15 mm copper tubing.
I've used a large Russian 5 -100 pF Vacuum variable and motor driven it. I've used a 810:1` geared
12V motor and belt driven the Capacitor from it using 10mm timing belts, that gives about 1.6:1
additional reduction to the cap. I've used a timing bet to drive a 10 turn pot from the motor with
a 3:1 reduction.
So remote driving it from the shack is easy now. The intention is to switch in a 390 pF door knob
cap in parallel with the cap to cover top band, calculation gives 1.85 to 2.00 MHz.

What has surprised me is it also covers 40 mtrs, and making comparison with the shortened 40 mtr/20
mtrs dipole at 25 feet above ground,(its the design that was in Radcom a few years ago, thats
basically a 20mtr dipole with a trapped shortened 40 mtr extension·)
With the voltage ratings on the capacitors I should be able to run 400W into it.

I found that the cheapest source of hard polycarb 10 mm are the white plastic chopping boards sold
for kitchen use.

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7256. Re: [loopantennas] Progress :)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 13:59:31 UTC
From: richard
Topic: 7255 Message: 7256

On Sun, 7 Mar 2010 13:19:35 +0000
richard <richard.bown@...> wrote:

> Hi All
> I have now got my 80mtr mag loop tunable, its 12.5 mtrs dia

No its me being stupid 12.50 mtrs circumference.. Sorry

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7257. concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 16:00:58 UTC
From: richard
Topic: 7257 Message: 7257

Hi
might sound a daft idea, but
can you place one loop inside another so its on the same axis ,
but resonant at a higher frequency ?
TIA
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7258. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 16:04:39 UTC
From: Tracey Gardner
Topic: 7257 Message: 7258

Isn't that what they do with HF Quad antennas?

Tracey

----- Original Message -----
From: "richard" <richard.bown@...>
To: <loopantennas@yahoogroups.com>
Sent: Sunday, March 07, 2010 4:00 PM
Subject: [loopantennas] concentric loops

> Hi
> might sound a daft idea, but
> can you place one loop inside another so its on the same axis ,
> but resonant at a higher frequency ?
> TIA
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM
> DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz
> & 10 GHz
> ##
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

>

7259. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 16:06:06 UTC
From: Chris Trask
Topic: 7257 Message: 7259

>
>Hi
>might sound a daft idea, but
>can you place one loop inside another so its on the same axis ,
> but resonant at a higher frequency ?
>

If they are orthogonal (at a right angle), possibly.

Chris

7260. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 17:14:13 UTC
From: kevin asato
Topic: 7257 Message: 7260

I don't know how well it works, but like this for example? -
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=481

73,
kevin
kc6pob

--- On Sun, 3/7/10, richard <richard.bown@...> wrote:

From: richard <richard.bown@...>
Subject: [loopantennas] concentric loops
To: loopantennas@yahoogroups.com
Date: Sunday, March 7, 2010, 8:00 AM

Hi

might sound a daft idea, but

can you place one loop inside another so its on the same axis ,

but resonant at a higher frequency ?

TIA

--

Best wishes

Richard Bown

########## ########## ########## ########## ########## ########## ########## ########## ##########

Registered Linux User 36561

OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2

Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz

########## ########## ########## ########## ########## ########## ########## ########## ##########

[Non-text portions of this message have been removed]

7261. Re: [loopantennas] Progress :)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 17:20:34 UTC
From: toddroberts2001@aol.com
Topic: 7255 Message: 7261

In a message dated 3/7/2010 9:09:12 A.M. Eastern Standard Time,
richard.bown@... writes:

Hi All
> I have now got my 80mtr mag loop tunable, its 12.5 mtrs dia

No its me being stupid 12.50 mtrs circumference.. Sorry

--
Best wishes

Richard Bown

Sounds like a very nice construction job!
Thanks for sharing with us what you used.
Will be curious to hear how it compares with your
shortened 40 meter dipole.

73 Todd WD4NGG

7262. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 17:18:31 UTC
From: Jim Dunstan
Topic: 7257 Message: 7262

At 04:00 PM 3/7/2010 +0000, you wrote:
>
>
>Hi
>might sound a daft idea, but
>can you place one loop inside another so its on the same axis ,
>but resonant at a higher frequency ?
>TIA
>--
>Best wishes
>
>Richard Bown

Hi Richard,

You certainly can. That is in fact how one constructs a multi-band Quad antenna.

Jim, VE3CI

7263. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 17:36:01 UTC
From: richard
Topic: 7257 Message: 7263

On Sun, 7 Mar 2010 09:14:13 -0800 (PST)
kevin asato <kc6pob@...> wrote:

> I don't know how well it works, but like this for example? -
> http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=481
>
> 73,
> kevin
> kc6pob
>
yes that kinda thing Kevin , I was thinking of something covering 18-24 MHz.
Maybe orthogonal as Chris suggested.
With that design, I'm guessing that there maybe a fair bit of interaction between them, hence the
need for preamps.

Maybe give it a try, I thought maybe worth asking as there's no point in try to invent the wheel.

Thanks
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7264. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 17:50:40 UTC
From: richard
Topic: 7257 Message: 7264

On Sun, 07 Mar 2010 12:18:31 -0500
Jim Dunstan <jimdunstan@...> wrote:

> At 04:00 PM 3/7/2010 +0000, you wrote:
> >
> >
> >Hi
> >might sound a daft idea, but
> >can you place one loop inside another so its on the same axis ,
> >but resonant at a higher frequency ?
> >TIA
> >--
> >Best wishes
> >
> >Richard Bown
>
> Hi Richard,
>
> You certainly can. That is in fact how one constructs a multi-band Quad
> antenna.
>
> Jim, VE3CI
>
>
Thanks Jim. I'll start collecting parts to build one.

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7265. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 18:51:56 UTC
From: Jim Dunstan
Topic: 7257 Message: 7265

At 12:18 PM 3/7/2010 -0500, you wrote:
>
>
>At 04:00 PM 3/7/2010 +0000, you wrote:
> >
> >
> >Hi
> >might sound a daft idea, but
> >can you place one loop inside another so its on the same axis ,
> >but resonant at a higher frequency ?
> >TIA
> >--
> >Best wishes
> >
> >Richard Bown
>
>Hi Richard,
>
>You certainly can. That is in fact how one constructs a multi-band Quad
>antenna.
>
>Jim, VE3CI

Hi Richard,

As an addendum: concentric full self resonant loops are of a manageable size in the VHF range ... as you move into HF they are commonly used from 14 mhz to 28 mhz .... and rotatable. At frequencies below 14 mhz they are very large and almost always single fixed loops.

Small loops .... less than 1/10 wavelength are by definition non resonant (unless they are tuned) and putting 2 loops on the same axis makes little sense .... the exception being loops used for direction finding ... in which case they are mounted at right angles to each other. the reason for using 2 loops is that the null can be rotated electronically in the radio room instead of actually mechanically rotating the loops.

Jim, VE3CI

7266. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 21:42:03 UTC
From: richard
Topic: 7257 Message: 7266

On Sun, 07 Mar 2010 13:51:56 -0500
Jim Dunstan <jimdunstan@...> wrote:

> At 12:18 PM 3/7/2010 -0500, you wrote:
> >
> >
> >At 04:00 PM 3/7/2010 +0000, you wrote:
> > >
> > >
> > >Hi
> > >might sound a daft idea, but
> > >can you place one loop inside another so its on the same axis ,
> > >but resonant at a higher frequency ?
> > >TIA
> > >--
> > >Best wishes
> > >
> > >Richard Bown
> >
> >Hi Richard,
> >
> >You certainly can. That is in fact how one constructs a multi-band Quad
> >antenna.
> >
> >Jim, VE3CI
>
> Hi Richard,
>
> As an addendum: concentric full self resonant loops are of a manageable
> size in the VHF range ... as you move into HF they are commonly used from
> 14 mhz to 28 mhz .... and rotatable. At frequencies below 14 mhz they are
> very large and almost always single fixed loops.
>
> Small loops .... less than 1/10 wavelength are by definition non resonant
> (unless they are tuned) and putting 2 loops on the same axis makes little
> sense .... the exception being loops used for direction finding ... in
> which case they are mounted at right angles to each other. the reason for
> using 2 loops is that the null can be rotated electronically in the radio
> room instead of actually mechanically rotating the loops.
>
> Jim, VE3CI
>
>
>
>

Hi Jim the reason for thinking of the concentric mag loops , is The mage loop I've just built
4mtrs in diameter tunes from 40 mtrs thru to 80 and with an additional cap switched in will cover
most of top band.
I'm OK for antennas for 14,21.28,50,70,144,432,1296,2320,5760 and 10368 MHz.

I have a hole for 18 & 24 MHz, I can resonate the feeder on the 7/14 MHz dipole but its a pig
and takes a lot of fiddling with the ATU to get it right.
A 1.2 mtr mag loop tuned with 5 -20pF would fill the hole, and thats why the questiopn of putting
them concentrically.

HTH

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7267. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 22:13:14 UTC
From: Jim Dunstan
Topic: 7257 Message: 7267

At 09:42 PM 3/7/2010 +0000, you wrote:
>
>
>On Sun, 07 Mar 2010 13:51:56 -0500

>Hi Jim the reason for thinking of the concentric mag loops , is The mage
>loop I've just built
>4mtrs in diameter tunes from 40 mtrs thru to 80 and with an additional cap
>switched in will cover
>most of top band.
>I'm OK for antennas for 14,21.28,50,70,144,432,1296,2320,5760 and 10368 MHz.
>
>I have a hole for 18 & 24 MHz, I can resonate the feeder on the 7/14 MHz
>dipole but its a pig
>and takes a lot of fiddling with the ATU to get it right.
>A 1.2 mtr mag loop tuned with 5 -20pF would fill the hole, and thats why
>the questiopn of putting
>them concentrically.
>
>HTH
>
>--
>Best wishes
>
>Richard Bown

Hi Richard,

Putting tuned magnetic loops on the same axis is a different story. I assume that doing so is for reasons of access or convenience. Unlike full size loops the tuning one mag loop will have considerably more affect on the resonance of the other loop. In that case it would probably be advisable to orient them in a position that has the least inductive interaction ... probably at right angles to each other ... as I think someone else has suggested.

Jim,

VE3CI

7268. Re: [loopantennas] concentric loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-07 23:38:32 UTC
From: richard
Topic: 7257 Message: 7268

On Sun, 07 Mar 2010 17:13:14 -0500
Jim Dunstan <jimdunstan@...> wrote:

> At 09:42 PM 3/7/2010 +0000, you wrote:
> >
> >
> >On Sun, 07 Mar 2010 13:51:56 -0500
>
>
> >Hi Jim the reason for thinking of the concentric mag loops , is The mage
> >loop I've just built
> >4mtrs in diameter tunes from 40 mtrs thru to 80 and with an additional cap
> >switched in will cover
> >most of top band.
> >I'm OK for antennas for 14,21.28,50,70,144,432,1296,2320,5760 and 10368 MHz.
> >
> >I have a hole for 18 & 24 MHz, I can resonate the feeder on the 7/14 MHz
> >dipole but its a pig
> >and takes a lot of fiddling with the ATU to get it right.
> >A 1.2 mtr mag loop tuned with 5 -20pF would fill the hole, and thats why
> >the questiopn of putting
> >them concentrically.
> >
> >HTH
> >
> >--
> >Best wishes
> >
> >Richard Bown
>
> Hi Richard,
>
> Putting tuned magnetic loops on the same axis is a different story. I
> assume that doing so is for reasons of access or convenience. Unlike full
> size loops the tuning one mag loop will have considerably more affect on
> the resonance of the other loop. In that case it would probably be
> advisable to orient them in a position that has the least inductive
> interaction ... probably at right angles to each other ... as I think
> someone else has suggested.
>
> Jim,
>
> VE3CI
>
>

>
Hi Jim
I had a hunch that it would not be a s simple as hang one one inside the other, :)
Getting the 80 mtr mag loop within 15@ of the tower the VHF arrays are on detuned it, surprisingly
it resonated higher in frequency, I would have expected lower.
I'll gather the bits I need and play..

thanks

--
Best wishes

Richard Bown

###
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
###

7269. Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-11 22:09:45 UTC
From: Adam E
Topic: 7269 Message: 7269

I need to learn more about magnetic AM loop antenna construction. I have an HD radio receiver that is called the HD-100 Radio-sophy small
portable boombox. I tried the AN-200 Grundig AM Loop Antenna, but it does not cut out background noise on WCBS-AM and other semi-local stations. Most of the stations are not locking in just the digital blue LED flashing. I want to learn more on how to construct a AM loop antenna using magnet wire, variable tuning capacitor, and aluminum foil for shielding. I have already constructed a active antenna with MW tuning using an old radio shack 20-280 active antenna. Help would be appreciated. Thank you.

7270. Re: [loopantennas] Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-12 03:24:34 UTC
From: kevin asato
Topic: 7269 Message: 7270

how about search on AM loop antenna. Lots of hits, homebrew, commercial, shielded, unshielded designs of different sizes. Size can be important but so can how well it looks in a home environment unless your listening position is in the garage. Mounting the antenna outside your home might also be a possibility to further reduce noise levels.

http://members.cox.net/rwagoner/columns/am_antenna.html - is an untuned loop design from Carver Corporation. I haven't tried it but sounds like like a simple construction project. makearadio.com has several designs that focus on the furniture aspects of the antennas. Nice looking. Oh yeah, the loops work, too.

73,
kevin
kc6pob

--- On Thu, 3/11/10, Adam E <gccradioscience@...> wrote:

From: Adam E <gccradioscience@...>
Subject: [loopantennas] Magnetic AM Loop Antenna Construction
To: loopantennas@yahoogroups.com
Date: Thursday, March 11, 2010, 2:09 PM

I need to learn more about magnetic AM loop antenna construction. I have an HD radio receiver that is called the HD-100 Radio-sophy small

portable boombox. I tried the AN-200 Grundig AM Loop Antenna, but it does not cut out background noise on WCBS-AM and other semi-local stations. Most of the stations are not locking in just the digital blue LED flashing. I want to learn more on how to construct a AM loop antenna using magnet wire, variable tuning capacitor, and aluminum foil for shielding. I have already constructed a active antenna with MW tuning using an old radio shack 20-280 active antenna. Help would be appreciated. Thank you.

[Non-text portions of this message have been removed]

7271. Re: Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-12 15:09:15 UTC
From: alienrelics
Topic: 7269 Message: 7271

Take a look in the Links section here, lots of good ones.

Also check out the Files section, and this Text file that has loads of links:
<http://groups.yahoo.com/group/loopantennas/files/ModeratorFiles/links.txt>

Steve Greenfield

--- In loopantennas@yahoogroups.com, "Adam E" <gccradioscience@...> wrote:
>
>
> I need to learn more about magnetic AM loop antenna construction. I have an HD radio receiver that is called the HD-100 Radio-sophy small
> portable boombox. I tried the AN-200 Grundig AM Loop Antenna, but it does not cut out background noise on WCBS-AM and other semi-local stations. Most of the stations are not locking in just the digital blue LED flashing. I want to learn more on how to construct a AM loop antenna using magnet wire, variable tuning capacitor, and aluminum foil for shielding. I have already constructed a active antenna with MW tuning using an old radio shack 20-280 active antenna. Help would be appreciated. Thank you.
>

7272. Re: Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-12 17:14:32 UTC
From: osage_archer
Topic: 7269 Message: 7272

Here is a good site with a calculator and explanatory notes below. I made a 24" AM loop antenna for the broadcast band and it works well:
http://www.angelfire.com/mb/amandx/loop.html

Tim C.

--- In loopantennas@yahoogroups.com, "Adam E" <gccradioscience@...> wrote:
>
>
> I need to learn more about magnetic AM loop antenna construction. I have an HD radio receiver that is called the HD-100 Radio-sophy small
> portable boombox. I tried the AN-200 Grundig AM Loop Antenna, but it does not cut out background noise on WCBS-AM and other semi-local stations. Most of the stations are not locking in just the digital blue LED flashing. I want to learn more on how to construct a AM loop antenna using magnet wire, variable tuning capacitor, and aluminum foil for shielding. I have already constructed a active antenna with MW tuning using an old radio shack 20-280 active antenna. Help would be appreciated. Thank you.
>

7273. Re loop antenna try YOU TUBE.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-12 19:53:08 UTC
From: Michael in Suffolk
Topic: 7273 Message: 7273

Hi. Have a look on YOU TUBE loads of ideaS SHOWING YOU HOW TO MAKE THEM. mike- mbr.

[Non-text portions of this message have been removed]

7274. Re: Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-13 16:49:01 UTC
From: tenorman1952
Topic: 7269 Message: 7274

There is a point of diminishing returns as you get larger. For an AM broadcast band (MW) loop it is not worth the effort to make larger than about 3' or 4'.

I am presently using the MTM Scientific AM Loop built from the plans.

http://www.mtmscientific.com/loop.html

A photo is on the page in this link:

http://www.mtmscientific.com/amcust.html

This loop is 12" on a side, 17" diagonal, 15 turns of 22 ga enameled wire ("magnet wire") with 1/8" spacing between turns, and a 10-380 pf tuning capacitor (may be called 9.6-365 pf, or 10-360 pf, etc, by different suppliers, but these are all the same tuning capacitor). In addition, there is a one turn "pickup loop" just inside of the 15 turn main loop. This pickup loop is connected to the two binding posts you see in the photo above.

I can place this loop near my Grundig S350DL, which picks up the signal from the loop with it's internal ferrite bar antenna. I can also hook up the loop to my Icom R75's high impedance terminals or to the AM antenna and ground terminals of any of my AM/FM stereo tuners or receivers with excellent results.

These loops are quite directional.

After Hurricane Gustav when my dipole was still down - it did not blow down, I took it down prior to the storm - I used a loop that I had slapped together quickly similar to the MTM Scientific SW loop.

http://www.mtmscientific.com/swloop.html

This consisted of a simple wood cross made from some scraps of fir molding, about 36" on the diagonal, one turn of 12 ga wire, with a 10-380 tuning capacitor and a small pickup loop. It could tune from just below 80 meters up to about 17 meters.

I made the pickup loop for this SW antenna from a piece of RG-58 coax, making the loop about 12" diameter, and connecting the center conductor of the end to the shield where it was looped back upon itself. I just twisted it together and secured with tape. I used a crimp on PL-259 on the other end to attach to my R75.

Adjust the frequency range by making the one turn larger or smaller.

I could pick up the various hurricane nets and other nets, and hear most of the checkins from around the region... not state... region (LA, TX, MS, AL, AR, OK, etc) with the R75 by just turning the loop a bit to get the direction to the stations calling.

The AM loop goes up to just above the 160 meter band (about 2.1 mhz), and the SW loop I made covered from about 3.4 mhz to 19 mhz. What more do you need?

I've made several loops using the calculator Tim referred to, and that gives pretty good results.

73
Paul
AE5JU

--- In loopantennas@yahoogroups.com, "osage_archer" <timchandler2001@...> wrote:
>
>
> Here is a good site with a calculator and explanatory notes below. I made a 24" AM loop antenna for the broadcast band and it works well:
> http://www.angelfire.com/mb/amandx/loop.html
>
> Tim C.
>
> --- In loopantennas@yahoogroups.com, "Adam E" <gccradioscience@> wrote:
> >
> >
> > I need to learn more about magnetic AM loop antenna construction. I have an HD radio receiver that is called the HD-100 Radio-sophy small
> > portable boombox. I tried the AN-200 Grundig AM Loop Antenna, but it does not cut out background noise on WCBS-AM and other semi-local stations. Most of the stations are not locking in just the digital blue LED flashing. I want to learn more on how to construct a AM loop antenna using magnet wire, variable tuning capacitor, and aluminum foil for shielding. I have already constructed a active antenna with MW tuning using an old radio shack 20-280 active antenna. Help would be appreciated. Thank you.
> >
>

7275. Re: Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-14 16:18:58 UTC
From: gmcjetpilot
Topic: 7269 Message: 7275

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> There is a point of diminishing returns as you get larger. For an
> AM broadcast band (MW) loop it is not worth the effort to make
> larger than about 3' or 4'.

I agree 100% but that is not because BIG loops don't work better (meaning increased performance). You are right but the reason for diminishing returns are many, not the least of which is just moving a 2' box loop manually indoors is a pain... much less 3' or 4'. That is the true drawback.... If course the radio is a limitation and as you get larger loops and impedance changes, on and on. I have seen some really larger loops, and at first it was thought they did not work, but after you tune them and experment they do amazing things.

Last there is only so much signal at your location. The fact of life if noise floor (SNR) and so one means that a super big antenna is handicapped the same way a smaller loop is. Getting a bigger loop will not help.... So you are right but it is complicated as well as practical factors that limits the max size that is optimal.

The ultimate would be a phase array of many smaller loops.

Cheers George

7276. Re: Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-14 16:39:49 UTC
From: Darren Hennig
Topic: 7269 Message: 7276

I have used a fat ferrite rod from Stormwise.com, and wrapped ~48t of litz wire on it as the main winding, and about 3t for the low Z output. [in this case ~450ohm], to go direct to my R75 input. Tuned with a varicap, around 10-365pF. Nominal inductance of the main winding is around 300uH or so for resonance throughout the AM BCB. Very high Q, works well. Quiet. Can even be coupled to a preamp if nec. for even more gain. Ramsey puts out a fantastic PR-2 amp for around $60 assembled, and this has over 20dB from 1-1000MHz. very low noise figure, ~1.5dB, and over 15dB IP3.

I recently tried a aperiodic loop with the PR2 using wire, in a hexagon, about 1.2m across, terminated on the far end [top of loop] with a 100 ohm non inductive resistor, fed into the amp at 50 ohm using a BNC. Very consistent gain from just below 800kHz to well into the SW region. [only tried 25m band as max so far]. Rigging up a better one today, using 12 guage stranded inside plumbing hose [1/4" stuff] and making into a circle. I can then rotate it to try for directivity, etc.

Darren
VE6IZ

[Non-text portions of this message have been removed]

7277. MW LOOP 8 sided.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-14 19:23:54 UTC
From: Mike
Topic: 7277 Message: 7277

Try and make it round at about 3 foot, try and find some under ground piping or use some bent PVC channel held at the bottom with a block of wood, or make a double H frame of plywood about 3.5" wide one vertical the other horizontal this will give you 8 sides to put your turns on, also try and tilt it / turns would be 9 with 500pF tuning variable. mike MBR UK.

7278. Re: Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-15 14:41:49 UTC
From: tenorman1952
Topic: 7269 Message: 7278

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> I have used a fat ferrite rod from Stormwise.com, and wrapped ~48t of litz wire on it as the main winding, and about 3t for the low Z output. [in this case ~450ohm], to go direct to my R75 input. Tuned with a varicap, around 10-365pF. Nominal inductance of the main winding is around 300uH or so for resonance throughout the AM BCB. Very high Q, works well. Quiet.

Darren, this is something that I have wanted to build. Which ferrite rod from Stormwise did you use?

73
Paul
AE5JU

7279. Re: Magnetic AM Loop Antenna Construction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-16 15:34:06 UTC
From: Darren Hennig
Topic: 7269 Message: 7279

I used the 13.5" unit, I actually got two of those, plus a 5.6" rod, for another project. The 13.5" is very long, but really works well. I wound my litz on the middle of one side for the tuning winding and the coupling [hi-Z to radio] winding. Since the outside of the coil is polyethylene, I used Weldbond, a white glue in thin strips to hold the windings on. This can be considered semi-permanent, since one CAN remove the whole thing by scraping gently with a knife. Left alone, they stay. Once dry, they do not affect the Q of the coil, but keep the windings firm and held. One could probably use hot glue also, but this worked really well, and is almost invisible when dry.

Stormwise suggested a minimum of 10" for the 125u rod for best overall sensitivity and performance. The 13.5" rod is nearly ideal. VERY sharp nulls, VERY directional. I plan to try coupling it to my Ramsey PR-2 preamp to play with getting big signal out of it. I tried awhile back the noise antenna input on my ANC1 phaser [that side has a hi-z input for a "noise" or aux antenna that has variable gain]. using modest gain, this combination easily outdid my TCF antenna [CCrane Twin coil Ferrite] - it had lower noise, and I had access to even more gain, had I wanted it.

The Ramsey PR2 preamp is rated at +23dB for 1-1000+MHz, though one unit I have been playing with is easily good to below 700kHz, and even has decent gain to 500. I estimate the rolloff is around 1 decade/0.3MHz [10dB/300kHz] below 900kHz. That's still around 13dB near 500kHz, plenty to help the unit.

My suggestion is to find the largest enclosure you wish to mount this into, then go one size down. 10.5-15" is plenty to work with.

Darren

[Non-text portions of this message have been removed]

7280. Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-17 19:52:39 UTC
From: Darren Hennig
Topic: 7280 Message: 7280

I recently tried an aperiodic variant to a loop for general SWL/BCB receiving. My initial results have shown my prototype unit to OUTDO both my AOR WL-500 and LA390 in many respects. More on that in a few...

QTH Situation: I currently live in an apartment/condo complex, 15m from the electrical room of the facility, and 25m from the boiler room. While these can be a source of significant QRM [man-made noise for you non-hams!], the biggest issue is general QRM from adjacent suites, esp. light dimmer units and such. I am at ground level, facing South. So, most transpolar signals have to travel through the complex, to get to me. No balcony/deck, so generally no outdoor antenna easily done.

While my indoor loops have done a pretty decent job, the main issue with the WL-500 is that it really falls off below 3MHz and BCB is rather weak. The LA390 overcomes this, being tunable from 150kHz to over 30 MHz, but it requires band-switching, and being a desktop style, can be a bit touch to find an ideal location for minimum noise pickup from the main element. The unit can be "extended" using coax to 5m max, but even so, I find that rarely do I ever get noise below S6-S7 on my R75 in the SW bands. Very tough to dig out all but major broadcasters...

After reading a bit obout aperiodic loops, and having recently aquired some Ramsey PR2 preamplifiers [1-1000+MHz, 23dB Gain, <1.5dB n.f., +18dB compression point] based on the new microwave MMIC units out of Japan [~$US60/ea, preassembled], I decided to try using one with an aperiodic loop element design.

My trial antenna was surprisingly simple: 3m total AWG#18 stranded wire, cut into to elements, with a 100 ohm 1/2W non-inductive resistor bridging the two. The unterminated ends went to a BNC connector, and the input of the amp is a BNC. I hung this on an eyelet hook I was using for my WL-500 element about 1m from the window, and made a "spreader" using a small 0.85m, 3mm thick rod of plastic composite from an old kite I used to have. Two plastic clips hold the spreader to the wires to keep a diamond/square shape. Apex has the 100ohm resistor, lower apex has the AMP and connections.

Not fancy, I admit, but this was to test the concept. Initial tests relative to the LA390 showed nearly equal signals [within 3dB or 1/2 S unit] to 12.2MHz, with noise levels [once the aperiodic loop was oriented in minimum noise position] at least 3-4 S units lower than the LA390 in its best minimum noise/max signal orientation. Some situations showed the AOR LA390 a bit higher in signal, but with MORE noise. Down to 1.4MHz, the two were pretty close, though the AOR's tuning ability did allow some BCB DX to come in stronger, albeit with more corresponding noise too. Could not copy Bulgaria on 5900kHz with the AOR [heard something, but too noisy, same on 9420/Greece]; Aperiodic had these licked with at least S7/8 to S9+10dB on the R75 and solid copy. Even VOR (Russia) on 12030 kHz was much cleaner and stronger with this aperiodic.

Here's what was VERY interesting: around 0500Z, I played with the aperiodic on 80m - the AOR could dig out 1-2 strong amateur stations, and the aperiodic loop easily could pull out in excess of 12, in some cases, with weaker signals copied 'under" stronger ones on the

same frequency!

To date, this experimental antenna is superior in general tough signal handling that anything I have used indoors. and it does not need a tuner! One could be employed on the output, and I may try this, but so far, I do not need one! AIR came in 20+ over S9 on 9425kHz, THE BEST and cleanest signal I have heard from that station ever - using the aperiodic wire loop.

Given the huge disadvantages in location described above, I realize that nothing can solve everything. However, I have yet to couple this unit to my Timewave ANC1, which should clean up some residual issues, and given that in general signal/noise has improved over 20dB from what I have had in general, This will be my main indoor antenna from now on! No tuners/tweakers, etc. just a simple loop to a very good amp.

During rotation tests, this unit indeed has the [apparent] cardioid type null on one side of the loop.

I mention this to all who have similar issues and locational constraints: Given slightly better to much better conditions, an aperiodic loop with this amp should be very quiet, and a solid signal performer for your location, and the cost for everything is less that US$80. Certainly < US$100 with coax and such.

The PR2 is preassembled, but could be made to a remote amp/loop system by removing the guts and running a power-over coax scheme.

For those wanting to try coverting a whip-style untuned active unit into an aperiodic, the way to do this is to attach one end to the antenna side, and the other side to ground. Make sure that your loop is planar and terminated in around 100 ohm at the location oppsite the feed. I will probably try a more robust loop using either copper or brass strap, or thicker tubing. One can increase the low-band performance by lengthening the size of the circumference to favor lower frequencies, just remember that on the high freq. end, keep in mind that as the antenna approaches 1/4 wave it reaches an upper limit for the design. Since this unit can go well over 100MHz, it could be useful as a VHF/UHF system with appropriate element feed.

Good DX!

Darren Hennig,
VE6IZ
Edmonton Canada

[Non-text portions of this message have been removed]

7281. Re: Aperiodic antenna experiment: indoor solution? Picture - Drawing Please.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 09:59:51 UTC
From: Mike
Topic: 7280 Message: 7281

I do not in anyway wish to be rude but after the 500th word I was zzzzzzzzzzzing a line drawing would have been nice after all a picture can cut out a 1000 words. I did live in the city of London in fact Fleet Street we to had a boilhouse - stand by gene - lifts - fluorescent light - teleprinters - fax - computers - but I did very well with wipe antennas which being in that plain love car traffic sparking, these were put out of the velux windows on a dry day, the roof was lead covered so not just a Faraday cage but loads of QRM, a drawing next time please, as I just cannot SEE what you did. Mike MBR UK..

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> I recently tried an aperiodic variant to a loop for general SWL/BCB receiving. My initial results have shown my prototype unit to OUTDO both my AOR WL-500 and LA390 in many respects. More on that in a few...
>
> QTH Situation: I currently live in an apartment/condo complex, 15m from the electrical room of the facility, and 25m from the boiler room. While these can be a source of significant QRM [man-made noise for you non-hams!], the biggest issue is general QRM from adjacent suites, esp. light dimmer units and such. I am at ground level, facing South. So, most transpolar signals have to travel through the complex, to get to me. No balcony/deck, so generally no outdoor antenna easily done.
>
> While my indoor loops have done a pretty decent job, the main issue with the WL-500 is that it really falls off below 3MHz and BCB is rather weak. The LA390 overcomes this, being tunable from 150kHz to over 30 MHz, but it requires band-switching, and being a desktop style, can be a bit touch to find an ideal location for minimum noise pickup from the main element. The unit can be "extended" using coax to 5m max, but even so, I find that rarely do I ever get noise below S6-S7 on my R75 in the SW bands. Very tough to dig out all but major broadcasters...
>
> After reading a bit obout aperiodic loops, and having recently aquired some Ramsey PR2 preamplifiers [1-1000+MHz, 23dB Gain, <1.5dB n.f., +18dB compression point] based on the new microwave MMIC units out of Japan [~$US60/ea, preassembled], I decided to try using one with an aperiodic loop element design.
>
> My trial antenna was surprisingly simple: 3m total AWG#18 stranded wire, cut into to elements, with a 100 ohm 1/2W non-inductive resistor bridging the two. The unterminated ends went to a BNC connector, and the input of the amp is a BNC. I hung this on an eyelet hook I was using for my WL-500 element about 1m from the window, and made a "spreader" using a small 0.85m, 3mm thick rod of plastic composite from an old kite I used to have. Two plastic clips hold the spreader to the wires to keep a diamond/square shape. Apex has the 100ohm resistor, lower apex has the AMP and connections.
>
> Not fancy, I admit, but this was to test the concept. Initial tests relative to the LA390 showed nearly equal signals [within 3dB or 1/2 S unit] to 12.2MHz, with noise levels [once

the aperiodic loop was oriented in minimum noise position] at least 3-4 S units lower than the LA390 in its best minimum noise/max signal orientation. Some situations showed the AOR LA390 a bit higher in signal, but with MORE noise. Down to 1.4MHz, the two were pretty close, though the AOR's tuning ability did allow some BCB DX to come in stronger, albeit with more corresponding noise too. Could not copy Bulgaria on 5900kHz with the AOR [heard something, but too noisy, same on 9420/Greece]; Aperiodic had these licked with at least S7/8 to S9+10dB on the R75 and solid copy. Even VOR (Russia) on 12030 kHz was much cleaner and stronger with this aperiodic.
>
> Here's what was VERY interesting: around 0500Z, I played with the aperiodic on 80m - the AOR could dig out 1-2 strong amateur stations, and the aperiodic loop easily could pull out in excess of 12, in some cases, with weaker signals copied 'under" stronger ones on the same frequency!
>
> To date, this experimental antenna is superior in general tough signal handling that anything I have used indoors. and it does not need a tuner! One could be employed on the output, and I may try this, but so far, I do not need one! AIR came in 20+ over S9 on 9425kHz, THE BEST and cleanest signal I have heard from that station ever - using the aperiodic wire loop.
>
> Given the huge disadvantages in location described above, I realize that nothing can solve everything. However, I have yet to couple this unit to my Timewave ANC1, which should clean up some residual issues, and given that in general signal/noise has improved over 20dB from what I have had in general, This will be my main indoor antenna from now on! No tuners/tweakers, etc. just a simple loop to a very good amp.
>
> During rotation tests, this unit indeed has the [apparent] cardioid type null on one side of the loop.
>
> I mention this to all who have similar issues and locational constraints: Given slightly better to much better conditions, an aperiodic loop with this amp should be very quiet, and a solid signal performer for your location, and the cost for everything is less that US$80. Certainly < US$100 with coax and such.
>
> The PR2 is preassembled, but could be made to a remote amp/loop system by removing the guts and running a power-over coax scheme.
>
> For those wanting to try coverting a whip-style untuned active unit into an aperiodic, the way to do this is to attach one end to the antenna side, and the other side to ground. Make sure that your loop is planar and terminated in around 100 ohm at the location oppsite the feed. I will probably try a more robust loop using either copper or brass strap, or thicker tubing. One can increase the low-band performance by lengthening the size of the circumference to favor lower frequencies, just remember that on the high freq. end, keep in mind that as the antenna approaches 1/4 wave it reaches an upper limit for the design. Since this unit can go well over 100MHz, it could be useful as a VHF/UHF system with appropriate element feed.
>
> Good DX!
>
> Darren Hennig,
> VE6IZ

> Edmonton Canada
>
> [Non-text portions of this message have been removed]
>

7282. Re: [loopantennas] Re: Aperiodic antenna experiment: indoor solution? Picture - Drawing Please.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 10:33:38 UTC
From: david
Topic: 7280 Message: 7282

well mike i do wish to be rude .. you need to think before you open that silly mouth of yours you seem to think that this group has to cater for you only ie subject matter and the way posts are put on here .. i for one enjoyed darrens description and found it quite easy to follow and if you didnt understand it a reply stating that not the stupid way you did it ... david ...

I do not in anyway wish to be rude but after the 500th word I was zzzzzzzzzzzing a line drawing would have been nice after all a picture can cut out a 1000 words. I did live in the city of London in fact Fleet Street we to had a boilhouse - stand by gene - lifts - fluorescent light - teleprinters - fax - computers - but I did very well with wipe antennas which being in that plain love car traffic sparking, these were put out of the velux windows on a dry day, the roof was lead covered so not just a Faraday cage but loads of QRM, a drawing next time please, as I just cannot SEE what you did. Mike MBR UK..

[Non-text portions of this message have been removed]

7283. Re: Aperiodic antenna experiment: indoor solution? Picture - Drawing Please.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 14:23:04 UTC
From: pappy_hiram
Topic: 7280 Message: 7283

well, Mr. Hamilton,
I read the description too, and it sounded like a plain old loop to me, not sure what would make it aperiodic, unless there was more than one in an array? A sketch of some sort would be nice, as some of us need to "see" stuff rather than just read about it.
I've gotten to the point now, after many years, that I can read a circuit description, and that's fine, but I don't really "get it" until I look at the schematic.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "david" <dhamilton1@...> wrote:
>
> well mike i do wish to be rude .. you need to think before you open that silly mouth of yours you seem to think that this group has to cater for you only ie subject matter and the way posts are put on here .. i for one enjoyed darrens description and found it quite easy to follow and if you didnt understand it a reply stating that not the stupid way you did it ... david ...
>
>
> I do not in anyway wish to be rude but after the 500th word I was zzzzzzzzzzzing a line drawing would have been nice after all a picture can cut out a 1000 words. I did live in the city of London in fact Fleet Street we to had a boilhouse - stand by gene - lifts - fluorescent light - teleprinters - fax - computers - but I did very well with wipe antennas which being in that plain love car traffic sparking, these were put out of the velux windows on a dry day, the roof was lead covered so not just a Faraday cage but loads of QRM, a drawing next time please, as I just cannot SEE what you did. Mike MBR UK..
>
>
>
>
> [Non-text portions of this message have been removed]
>

7284. Aperiodic antenna experiment: indoor solution? Picture - Drawing Please.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 14:52:22 UTC
From: Tracey Gardner
Topic: 7280 Message: 7284

Hello Pappy

Presumably the 100 ohm resistor makes it an aperiodic/broadband antenna.

Here is one definition that I found

Antenna designed to have constant impedance over a wide range of frequencies
because of the suppression of reflections within the antenna system;
includes terminated wave and rhombic antennas.

Tracey

----- Original Message -----
From: "pappy_hiram" <daveleb55@...>
To: <loopantennas@yahoogroups.com>
Sent: Thursday, March 18, 2010 2:23 PM
Subject: [loopantennas] Re: Aperiodic antenna experiment: indoor solution?
Picture - Drawing Please.

> well, Mr. Hamilton,
> I read the description too, and it sounded like a plain old loop to me,
> not sure what would make it aperiodic, unless there was more than one in
> an array? A sketch of some sort would be nice, as some of us need to "see"
> stuff rather than just read about it.
> I've gotten to the point now, after many years, that I can read a circuit
> description, and that's fine, but I don't really "get it" until I look at
> the schematic.
>
> Pappy Hiram
>
>
> --- In loopantennas@yahoogroups.com, "david" <dhamilton1@...> wrote:
>>
>> well mike i do wish to be rude .. you need to think before you open
>> that silly mouth of yours you seem to think that this group has to cater
>> for you only ie subject matter and the way posts are put on here .. i for
>> one enjoyed darrens description and found it quite easy to follow and if
>> you didnt understand it a reply stating that not the stupid way you did
>> it ... david ...
>>
>>
>> I do not in anyway wish to be rude but after the 500th word I was
>> zzzzzzzzzzzing a line drawing would have been nice after all a picture
>> can cut out a 1000 words. I did live in the city of London in fact Fleet
>> Street we to had a boilhouse - stand by gene - lifts - fluorescent
>> light - teleprinters - fax - computers - but I did very well with wipe

>> antennas which being in that plain love car traffic sparking, these were
>> put out of the velux windows on a dry day, the roof was lead covered so
>> not just a Faraday cage but loads of QRM, a drawing next time please, as
>> I just cannot SEE what you did. Mike MBR UK..
>>
>>
>>
>>
>> [Non-text portions of this message have been removed]
>>
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

7285. Re: [loopantennas] Re: Aperiodic antenna experiment: indoor solution? Picture - Drawing Please.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 15:16:11 UTC
From: Tony Magon
Topic: 7280 Message: 7285

Could not agree more - Some people find it easier to have a look at a schematic instead of reading about it

73

Tony VK2IC

On Fri, Mar 19, 2010 at 1:23 AM, pappy_hiram <daveleb55@...> wrote:

>
>
> well, Mr. Hamilton,
> I read the description too, and it sounded like a plain old loop to me, not
> sure what would make it aperiodic, unless there was more than one in an
> array? A sketch of some sort would be nice, as some of us need to "see"
> stuff rather than just read about it.
> I've gotten to the point now, after many years, that I can read a circuit
> description, and that's fine, but I don't really "get it" until I look at
> the schematic.
>
> Pappy Hiram
>
>
> --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>,
> "david" <dhamilton1@...> wrote:
> >
> > well mike i do wish to be rude .. you need to think before you open that
> > silly mouth of yours you seem to think that this group has to cater for you
> > only ie subject matter and the way posts are put on here .. i for one
> > enjoyed darrens description and found it quite easy to follow and if you
> > didnt understand it a reply stating that not the stupid way you did it ...
> > david ...
> > >
> > >
> > > I do not in anyway wish to be rude but after the 500th word I was
> > > zzzzzzzzzzzing a line drawing would have been nice after all a picture can
> > > cut out a 1000 words. I did live in the city of London in fact Fleet Street
> > > we to had a boilhouse - stand by gene - lifts - fluorescent light -
> > > teleprinters - fax - computers - but I did very well with wipe antennas
> > > which being in that plain love car traffic sparking, these were put out of
> > > the velux windows on a dry day, the roof was lead covered so not just a
> > > Faraday cage but loads of QRM, a drawing next time please, as I just cannot
> > > SEE what you did. Mike MBR UK..
> > > >
> > > >

> >
> >
> > [Non-text portions of this message have been removed]
> >
>
>
>

[Non-text portions of this message have been removed]

7286. Re: Aperiodic antenna experiment: indoor solution? Picture - Drawing

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 15:29:21 UTC
From: Darren Hennig
Topic: 7286 Message: 7286

I did not wish to start a war of wits here! ;-)

While Mike may be having a bad day [St. Paddy's day blues?], thanks for the comments David!

Mike, I'll make this shorter!
Basically, the loop is a terminated variety - one turn in this case - BNC centre connection [can be direct with wire or a very short [<5cm] run of coax off a BNC] to a wire, in my case AWG #18 stranded, insulated. wire is about 1.4m long. Then goes to a 100 ohm 1/4-1/2W non-inductive resistor. other side of resistor to another 1.4m piece of #18 guage wire, to the ground on the BNC connection.

BNC connector direct to Ramsey PR2 amp input. Hang wire loop at apex [where 100 ohm resitor is now] on a nail, off an eyelet, or similar. put a small 0.8m spreader made from plastic rod, thin dowel, or similar at middle of loop sides making a diamond shape. THat's it!

I'll do up a simple drawing or photo later very shortly.

Trick is to keep leads to AMP short, and minimize resistive losses [good solder connections], and make as planar as possible. Loop dimensions are not critical per se - longer loops will favor low bands to about where their circumference approaches 1/4 wave. Loop would be even better if circular, octagonal or hexagonal [more area per circumference]. More ideal elements would be 1/4" copper tube, or even better, 1/16" x 1" strips of brass or copper [aluminum certainly usable too] in lieu of wire.

Darren
VE6IZ

[Non-text portions of this message have been removed]

7287. Re: [loopantennas] Aperiodic antenna experiment: indoor solution? Picture - Drawing Please.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 15:41:22 UTC
From: Jim Dunstan
Topic: 7280 Message: 7287

At 02:52 PM 3/18/2010 +0000, you wrote:
>
>
>Hello Pappy
>
>Presumably the 100 ohm resistor makes it an aperiodic/broadband antenna.
>
>Here is one definition that I found
>
>Antenna designed to have constant impedance over a wide range of frequencies
>because of the suppression of reflections within the antenna system;
>includes terminated wave and rhombic antennas.
>
>Tracey

Hi,

Years ago there was an antenna product advertised in QST and other Ham periodicals sold as a broadband matching device. I don't recall the name. It was literally a sealed block with a coax input connector and a pair of terminals to which a dipole or loop could be attached .... regardless of length (longer the better). QST published an expose of the device and declared it was, in their terms, a 'fraud' and the block simply contained a 100 or 150 ohm resistor !! However, there had been many testimonials that the device worked vy well .... and it was highly recommended !!!

Putting the event in context ... it would seem the device created a special kind of aperiodic antenna !!! The customers were happy as it represented reasonable SWR on all HF Amateur bands and apparently enough radiation to meet their approval. It could of course serve 2 purposes ... in addition to being an aperiodic antenna ... one had simply to remove the antenna wire and it would become a 100 ohm dummy load hi hi.

Jim

>----- Original Message -----
>From: "pappy_hiram" <<mailto:daveleb55%40yahoo.com>daveleb55@...>
>To: <<mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com>
>Sent: Thursday, March 18, 2010 2:23 PM
>Subject: [loopantennas] Re: Aperiodic antenna experiment: indoor solution?
>Picture - Drawing Please.
>
> > well, Mr. Hamilton,
> > I read the description too, and it sounded like a plain old loop to me,

> > not sure what would make it aperiodic, unless there was more than one in
> > an array? A sketch of some sort would be nice, as some of us need to "see"
> > stuff rather than just read about it.
> > I've gotten to the point now, after many years, that I can read a circuit
> > description, and that's fine, but I don't really "get it" until I look at
> > the schematic.
> >
> > Pappy Hiram
> >

[Non-text portions of this message have been removed]

7288. Aperiodic antenna Drawing

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 16:09:41 UTC
From: Mike
Topic: 7286 Message: 7288

Now that's better and being a RAE in no way can I be a Paddy which can be a insult it itself, I do no what a T"FD is and I think you have gone down that road, then and Mr Stupid here could be wrong, that's all I required this type of responce from YOU not David, do not thank him he did you no favour Mr Stupid. MBR.

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> I did not wish to start a war of wits here! ;-)
>
> While Mike may be having a bad day [St. Paddy's day blues?], thanks for the comments David!
>
> Mike, I'll make this shorter!
> Basically, the loop is a terminated variety - one turn in this case - BNC centre connection [can be direct with wire or a very short [<5cm] run of coax off a BNC] to a wire, in my case AWG #18 stranded, insulated. wire is about 1.4m long. Then goes to a 100 ohm 1/4-1/2W non-inductive resistor. other side of resistor to another 1.4m piece of #18 guage wire, to the ground on the BNC connection.
>
> BNC connector direct to Ramsey PR2 amp input. Hang wire loop at apex [where 100 ohm resitor is now] on a nail, off an eyelet, or similar. put a small 0.8m spreader made from plastic rod, thin dowel, or similar at middle of loop sides making a diamond shape. THat's it!
>
> I'll do up a simple drawing or photo later very shortly.
>
> Trick is to keep leads to AMP short, and minimize resistive losses [good solder connections], and make as planar as possible. Loop dimensions are not critical per se - longer loops will favor low bands to about where their circumference approaches 1/4 wave. Loop would be even better if circular, octagonal or hexagonal [more area per circumference]. More ideal elements would be 1/4" copper tube, or even better, 1/16" x 1" strips of brass or copper [aluminum certainly usable too] in lieu of wire.
>
> Darren
> VE6IZ
>
>
>
>
> [Non-text portions of this message have been removed]
>

7289. Re: Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 16:13:27 UTC
From: Mike
Topic: 7280 Message: 7289

Re typo upper case should have been lower so was saying a bit like a T2FD. Mr Stupid. MBR.

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> I recently tried an aperiodic variant to a loop for general SWL/BCB receiving. My initial results have shown my prototype unit to OUTDO both my AOR WL-500 and LA390 in many respects. More on that in a few...
>
> QTH Situation: I currently live in an apartment/condo complex, 15m from the electrical room of the facility, and 25m from the boiler room. While these can be a source of significant QRM [man-made noise for you non-hams!], the biggest issue is general QRM from adjacent suites, esp. light dimmer units and such. I am at ground level, facing South. So, most transpolar signals have to travel through the complex, to get to me. No balcony/deck, so generally no outdoor antenna easily done.
>
> While my indoor loops have done a pretty decent job, the main issue with the WL-500 is that it really falls off below 3MHz and BCB is rather weak. The LA390 overcomes this, being tunable from 150kHz to over 30 MHz, but it requires band-switching, and being a desktop style, can be a bit touch to find an ideal location for minimum noise pickup from the main element. The unit can be "extended" using coax to 5m max, but even so, I find that rarely do I ever get noise below S6-S7 on my R75 in the SW bands. Very tough to dig out all but major broadcasters...
>
> After reading a bit obout aperiodic loops, and having recently aquired some Ramsey PR2 preamplifiers [1-1000+MHz, 23dB Gain, <1.5dB n.f., +18dB compression point] based on the new microwave MMIC units out of Japan [~$US60/ea, preassembled], I decided to try using one with an aperiodic loop element design.
>
> My trial antenna was surprisingly simple: 3m total AWG#18 stranded wire, cut into to elements, with a 100 ohm 1/2W non-inductive resistor bridging the two. The unterminated ends went to a BNC connector, and the input of the amp is a BNC. I hung this on an eyelet hook I was using for my WL-500 element about 1m from the window, and made a "spreader" using a small 0.85m, 3mm thick rod of plastic composite from an old kite I used to have. Two plastic clips hold the spreader to the wires to keep a diamond/square shape. Apex has the 100ohm resistor, lower apex has the AMP and connections.
>
> Not fancy, I admit, but this was to test the concept. Initial tests relative to the LA390 showed nearly equal signals [within 3dB or 1/2 S unit] to 12.2MHz, with noise levels [once the aperiodic loop was oriented in minimum noise position] at least 3-4 S units lower than the LA390 in its best minimum noise/max signal orientation. Some situations showed the AOR LA390 a bit higher in signal, but with MORE noise. Down to 1.4MHz, the two were pretty close, though the AOR's tuning ability did allow some BCB DX to come in stronger, albeit with more corresponding noise too. Could not copy Bulgaria on 5900kHz with the AOR [heard something, but too noisy, same on 9420/Greece]; Aperiodic had these licked with at least S7/8 to S9+10dB on the R75 and solid copy. Even VOR (Russia) on 12030 kHz was much cleaner

and stronger with this aperiodic.
>
> Here's what was VERY interesting: around 0500Z, I played with the aperiodic on 80m - the AOR could dig out 1-2 strong amateur stations, and the aperiodic loop easily could pull out in excess of 12, in some cases, with weaker signals copied 'under" stronger ones on the same frequency!
>
> To date, this experimental antenna is superior in general tough signal handling that anything I have used indoors. and it does not need a tuner! One could be employed on the output, and I may try this, but so far, I do not need one! AIR came in 20+ over S9 on 9425kHz, THE BEST and cleanest signal I have heard from that station ever - using the aperiodic wire loop.
>
> Given the huge disadvantages in location described above, I realize that nothing can solve everything. However, I have yet to couple this unit to my Timewave ANC1, which should clean up some residual issues, and given that in general signal/noise has improved over 20dB from what I have had in general, This will be my main indoor antenna from now on! No tuners/tweakers, etc. just a simple loop to a very good amp.
>
> During rotation tests, this unit indeed has the [apparent] cardioid type null on one side of the loop.
>
> I mention this to all who have similar issues and locational constraints: Given slightly better to much better conditions, an aperiodic loop with this amp should be very quiet, and a solid signal performer for your location, and the cost for everything is less that US$80. Certainly < US$100 with coax and such.
>
> The PR2 is preassembled, but could be made to a remote amp/loop system by removing the guts and running a power-over coax scheme.
>
> For those wanting to try coverting a whip-style untuned active unit into an aperiodic, the way to do this is to attach one end to the antenna side, and the other side to ground. Make sure that your loop is planar and terminated in around 100 ohm at the location oppsite the feed. I will probably try a more robust loop using either copper or brass strap, or thicker tubing. One can increase the low-band performance by lengthening the size of the circumference to favor lower frequencies, just remember that on the high freq. end, keep in mind that as the antenna approaches 1/4 wave it reaches an upper limit for the design. Since this unit can go well over 100MHz, it could be useful as a VHF/UHF system with appropriate element feed.
>
> Good DX!
>
> Darren Hennig,
> VE6IZ
> Edmonton Canada
>
> [Non-text portions of this message have been removed]
>

7290. Re: Aperiodic antenna experiment: indoor solution? Picture - Drawing Please.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 16:16:21 UTC
From: Mike
Topic: 7280 Message: 7290

Hello friend join the STUPID clan, and why would we the stupos need a drawing!!! nice to meet someone who understood what I was saying. Mk 1 Stupio. MBR.
--- In loopantennas@yahoogroups.com, "pappy_hiram" <daveleb55@...> wrote:
>
> well, Mr. Hamilton,
> I read the description too, and it sounded like a plain old loop to me, not sure what would make it aperiodic, unless there was more than one in an array? A sketch of some sort would be nice, as some of us need to "see" stuff rather than just read about it.
> I've gotten to the point now, after many years, that I can read a circuit description, and that's fine, but I don't really "get it" until I look at the schematic.
>
> Pappy Hiram
>
>
> --- In loopantennas@yahoogroups.com, "david" <dhamilton1@> wrote:
> >
> > well mike i do wish to be rude .. you need to think before you open that silly mouth of yours you seem to think that this group has to cater for you only ie subject matter and the way posts are put on here .. i for one enjoyed darrens description and found it quite easy to follow and if you didnt understand it a reply stating that not the stupid way you did it ... david ...
> >
> >
> > I do not in anyway wish to be rude but after the 500th word I was zzzzzzzzzzzing a line drawing would have been nice after all a picture can cut out a 1000 words. I did live in the city of London in fact Fleet Street we to had a boilhouse - stand by gene - lifts - fluorescent light - teleprinters - fax - computers - but I did very well with wipe antennas which being in that plain love car traffic sparking, these were put out of the velux windows on a dry day, the roof was lead covered so not just a Faraday cage but loads of QRM, a drawing next time please, as I just cannot SEE what you did. Mike MBR UK..
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

7291. Re: Aperiodic antenna experiment: indoor solution? Picture - Drawing Please.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 16:19:22 UTC
From: Mike
Topic: 7280 Message: 7291

Thank You Tony, 100% my words, but I still got called a Silly Mouth and Stupid. MBR.

--- In loopantennas@yahoogroups.com, Tony Magon <temagon@...> wrote:
>
> Could not agree more - Some people find it easier to have a look at a
> schematic instead of reading about it
>
> 73
>
> Tony VK2IC
>
> On Fri, Mar 19, 2010 at 1:23 AM, pappy_hiram <daveleb55@...> wrote:
>
> >
> >
> > well, Mr. Hamilton,
> > I read the description too, and it sounded like a plain old loop to me, not
> > sure what would make it aperiodic, unless there was more than one in an
> > array? A sketch of some sort would be nice, as some of us need to "see"
> > stuff rather than just read about it.
> > I've gotten to the point now, after many years, that I can read a circuit
> > description, and that's fine, but I don't really "get it" until I look at
> > the schematic.
> >
> > Pappy Hiram
> >
> >
> > --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>,
> > "david" <dhamilton1@> wrote:
> > >
> > > well mike i do wish to be rude .. you need to think before you open that
> > silly mouth of yours you seem to think that this group has to cater for you
> > only ie subject matter and the way posts are put on here .. i for one
> > enjoyed darrens description and found it quite easy to follow and if you
> > didnt understand it a reply stating that not the stupid way you did it ...
> > david ...
> > >
> > >
> > > I do not in anyway wish to be rude but after the 500th word I was
> > zzzzzzzzzzzing a line drawing would have been nice after all a picture can
> > cut out a 1000 words. I did live in the city of London in fact Fleet Street
> > we to had a boilhouse - stand by gene - lifts - fluorescent light -
> > teleprinters - fax - computers - but I did very well with wipe antennas
> > which being in that plain love car traffic sparking, these were put out of

> > the velux windows on a dry day, the roof was lead covered so not just a
> > Faraday cage but loads of QRM, a drawing next time please, as I just cannot
> > SEE what you did. Mike MBR UK..
> > >
> > >
> > >
> > >
> > > [Non-text portions of this message have been removed]
> > >
> >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

7292. Re:Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 18:47:53 UTC
From: Darren Hennig
Topic: 7280 Message: 7292

Okay all:

Pleased a few quick shots of the loop and some snaps of the PR2 manual and notes for those wanting pictures!

Photo file is called Aperiodic loop

Darren
VE6IZ

[Non-text portions of this message have been removed]

7293. GOOD BYE

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 18:51:22 UTC
From: Mike
Topic: 7293 Message: 7293

Nice knowing you but I now need to leave this group. Michael {Mr Silly Mouth}

7294. Re: [loopantennas] Re:Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 19:12:48 UTC
From: Sam Morgan
Topic: 7280 Message: 7294

Darren Hennig wrote:
> Okay all:
>
> Pleased a few quick shots of the loop and some snaps of the PR2 manual and notes for those wanting pictures!
>
> Photo file is called Aperiodic loop
>
reference:
Aperiodic loop notes #2
some jotted comments

is it really single directional like that shows?
or bi directional??

--
GB & 73
K5OAI
Sam Morgan

7295. RE: [loopantennas] Re:Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-18 20:19:36 UTC
From: Notareal
Topic: 7280 Message: 7295

Thanks Darren of the pictures !
One picture tells more than thousand words !
Although I know one guy in my office who tends to speak more than thousand pictures !
Even sometimes it feels like that.
BR

> To: loopantennas@yahoogroups.com
> From: dhennig2@...
> Date: Thu, 18 Mar 2010 12:47:53 -0600
> Subject: [loopantennas] Re:Aperiodic antenna experiment: indoor solution?
>
> Okay all:
>
> Pleased a few quick shots of the loop and some snaps of the PR2 manual and notes for those wanting pictures!
>
> Photo file is called Aperiodic loop
>
> Darren
> VE6IZ
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

_____
Hotmail: Trusted email with Microsoft?s powerful SPAM protection.

https://signup.live.com/signup.aspx?id=60969

[Non-text portions of this message have been removed]

7296. Re: GOOD BYE

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-19 04:26:28 UTC
From: phones414
Topic: 7293 Message: 7296

Fine by me - someone really is having a bad day...

Darren

--- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@...> wrote:
>
> Nice knowing you but I now need to leave this group. Michael {Mr Silly Mouth}
>

7297. Re:Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-19 14:36:14 UTC
From: i2ndt
Topic: 7280 Message: 7297

Such an antenna was described in RadCom in November 1982. The antenna was manufactured by C&S Antennas Ltd and was used as part of a broadside array for monitoring purposes...I guess! Copy of the article on request to my direct e-mail: NOT HERE! Thanks.

I2NDT Claudio

--- In loopantennas@yahoogroups.com, Notareal <not_a_real@...> wrote:
>
>
> Thanks Darren of the pictures !
> One picture tells more than thousand words !
> Although I know one guy in my office who tends to speak more than thousand pictures !
> Even sometimes it feels like that.
> BR
>
>
> > To: loopantennas@yahoogroups.com
> > From: dhennig2@...
> > Date: Thu, 18 Mar 2010 12:47:53 -0600
> > Subject: [loopantennas] Re:Aperiodic antenna experiment: indoor solution?
> >
> > Okay all:
> >
> > Pleased a few quick shots of the loop and some snaps of the PR2 manual and notes for those wanting pictures!
> >
> > Photo file is called Aperiodic loop
> >
> > Darren
> > VE6IZ
> >
> > [Non-text portions of this message have been removed]
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.

Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
>
> ---
> Hotmail: Trusted email with Microsoft's powerful SPAM protection.
> https://signup.live.com/signup.aspx?id=60969
>
> [Non-text portions of this message have been removed]
>

7298. "base loading" a full wave loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-19 15:00:01 UTC
From: david feldman
Topic: 7298 Message: 7298

I've got two 20M full-wave wire loops up and running.

I'd like to use them on 30 and 17M (in lieu of building more loops); this is due to a severe space limitation in my tiny suburban antenna farm.

The approach I'm considering is to put a small amount of inductance at the feedpoint of the two loop wires where they enter the (4:1 LDG) balun) to reach 30M band, and do the same thing with a small amount of capacitance to reach the 17M band. Relays at the feedpoint (bias-tee before the balun) would be used to select C-, L- or absent loading.

In the past, I've used an online tool to calculate estimated inductance to shorten a loaded quarter-wave vertical and it's worked well.

Short of cut-and-try experimentation or trying to use modeling tool, is there a recommended way to calculate the estimated lumped values to do this?

Thanks,

Dave
wb0gaz@...

_____
The New Busy is not the old busy. Search, chat and e-mail from your inbox.
http://www.windowslive.com/campaign/thenewbusy?ocid=PID27925::T:WLMTAGL:ON:WL:en-US:WM_HMP:032010_3

7299. Re: GOOD BYE

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-19 16:37:38 UTC
From: alienrelics
Topic: 7293 Message: 7299

Wow... got the digest this morning, found a tempest in a teapot, then found the problem solved itself.

Steve Greenfield
Your friendly neighborhood moderator

--- In loopantennas@yahoogroups.com, "phones414" <dhennig2@...> wrote:
>
> Fine by me - someone really is having a bad day...
>
> Darren
>
> --- In loopantennas@yahoogroups.com, "Mike" <michaelrae65@> wrote:
> >
> > Nice knowing you but I now need to leave this group. Michael {Mr Silly Mouth}
> >
>

7300. Re: [loopantennas] "base loading" a full wave loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-19 18:40:36 UTC
From: M HOLDEN
Topic: 7298 Message: 7300

Hi Dave. Are these present loops horizontal or vertical ? Why not just erect the largest practical sized loop, add some medium impedance feeder and tune up in the shack. Alternatively, run coaxial cable from the shack to an auto ATU at the feed point of the loop. You will be able to work several bands, including 15-12-10 and 6 metres. Non resonance is not illegal !
The 300 ohm feeder here can be strapped and fed against earth in the shack end for 160 and 80 metres. Have a look at the W4RNL "Cebik" site for further inspiration. His legacy lives on.
Regards, Mike, G4HOL

--- On Fri, 19/3/10, david feldman <wb0gaz@...> wrote:

From: david feldman <wb0gaz@hotmail.com>
Subject: [loopantennas] "base loading" a full wave loop antenna?
To: loopantennas@yahoogroups.com
Date: Friday, 19 March, 2010, 15:00

I've got two 20M full-wave wire loops up and running.

I'd like to use them on 30 and 17M (in lieu of building more loops); this is due to a severe space limitation in my tiny suburban antenna farm.

The approach I'm considering is to put a small amount of inductance at the feedpoint of the two loop wires where they enter the (4:1 LDG) balun) to reach 30M band, and do the same thing with a small amount of capacitance to reach the 17M band. Relays at the feedpoint (bias-tee before the balun) would be used to select C-, L- or absent loading.

In the past, I've used an online tool to calculate estimated inductance to shorten a loaded quarter-wave vertical and it's worked well.

Short of cut-and-try experimentation or trying to use modeling tool, is there a recommended way to calculate the estimated lumped values to do this?

Thanks,

Dave

wb0gaz@hotmail. com

_____ _____ _____ _____ _____ _____ _

The New Busy is not the old busy. Search, chat and e-mail from your inbox.

http://www.windowsl ive.com/campaign /thenewbusy? ocid=PID27925: :T:WLMTAGL: ON:WL:en-US:WM_HMP: 032010_3

[Non-text portions of this message have been removed]

7301. 2M Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-19 20:03:12 UTC
From: Bill McGraw
Topic: 7301 Message: 7301

In the photos by Roberts 50000 dated 4/1/06 shows a 2M Loop and I wonder if this is legit or an April Fool's joke? I would think possible, yes, but would not work at less than a mile.

Bill McGraw, KF5FJZ, new license, no rig
"Somewhere South of Chicago"
Greenville, Mississippi

7302. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-19 23:49:10 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7302

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Shielded Loop Aerials Rev 0.pdf
Uploaded by : chris3trask <christrask@...>
Description : Mastering the Art of Shielded Loop Aerials

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Shielded%20Loop%20Aerials%20Rev%200.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7303. Re: [loopantennas] Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-20 02:18:57 UTC
From: Andy
Topic: 7280 Message: 7303

> During rotation tests, this unit indeed has the [apparent] cardioid type
> null on one side of the loop.

This puzzles me.

If I understood your description correctly, you hung it so the loop is vertical. It's also symmetrical ... except that the connection is not balanced, one side is shield ("grounded"). Except for that one fact, I don't see how the loop could have an omni-directional pattern in the horizontal plane.

If it is because of that ground connection, then it will be highly dependent on your external connections and stray coupling to earth, through the preamp's power supply and the receiver. Highly variable. In other words, the feedline, preamp, power supply, receiver, etc. are receiving significant signal too and are part of the antenna!

It looks like you did some research on this, or based it on something you read. Yes?

Regards,
Andy

7304. Re: Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-20 03:15:38 UTC
From: phones414
Topic: 7280 Message: 7304

Yes, Andy.

The feed line and radio are NOT part of the antenna. Cannot be since the output of the amp goes to the radio, the amp itself is attached to the loop.

The power supply cable is through a full-wave bridge and voltage regulator [my supply is 12VAC] Note the ramsey schematic included in the photo section.

You are assuming common mode reception here. My run of RG174 coax for the trial test is only 8'. This is also indoors, and it is very unlikely.

However, ANY coax going to the amp off the loop would contribute and ruin the performance somewhat since the unbalanced nature of this terminated loop would force common mode current in the line prior the amp. My amp is connected directly at the loop feed.

Yes, it IS vertical. One side is at the ground side, one at the centre, and both connect via the 100-ohm resistor termiation at the apex of this loop.

THe omni pattern is part of the loop's performance, the other is a standard loop figure 8. Most terminated loops like this inherently have a combination pattern, which arises from two closely spaced IN phase monopoles [which the legs of the loop technically are], and the loop itself which acts like a loop, albeit with a lumped impedance.

The impedance at the termination is to provide some isolation of the sides of the loop and to reduce impedance swings which would occur in a "normal" loop. maybe Chris Trask can comment and provide better info that I?

All I can say is that this amplified aperiodic loop is quiet, has good signal gain, better overall indoor performance than my tuned commercial loops, broad bandwidth, and it WORKS.

Darren VE6IZ

--- In loopantennas@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> > During rotation tests, this unit indeed has the [apparent] cardioid type
> > null on one side of the loop.
>
> This puzzles me.
>
> If I understood your description correctly, you hung it so the loop is
> vertical. It's also symmetrical ... except that the connection is not
> balanced, one side is shield ("grounded"). Except for that one fact, I
> don't see how the loop could have an omni-directional pattern in the
> horizontal plane.
>
> If it is because of that ground connection, then it will be highly dependent
> on your external connections and stray coupling to earth, through the

> preamp's power supply and the receiver. Highly variable. In other words,
> the feedline, preamp, power supply, receiver, etc. are receiving significant
> signal too and are part of the antenna!
>
> It looks like you did some research on this, or based it on something you
> read. Yes?
>
> Regards,
> Andy
>

7305. Re: Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-20 05:48:07 UTC
From: phones414
Topic: 7280 Message: 7305

Andy:

Yes, I DID a LOT of reading, experimentation, and understanding this - while no radio engineer or expert per se, I have 30+ years in the hobby, and 15 as an advanced amateur - no I am no know-it-all, but I think I have a bit of understanding here...

You're waaaayyy overanalyzing the antenna, IMO. First off, the loop has a varying response dependant on orientation. If my system was susceptable to common mode issues, this would undoubtedly swamp the antenna system and reduce or eliminate altogether the loop's signal response.

Further, using the SAME cable to the radio, with my tuned commercial loops, I get significantly more noise. if the cable to the radio were the cause of signal pickup, it would behave similarly in all cases.

Disconnecting the amp/loop yields very poor signal, and more noise if left unterminated. Unplugging the amp as connected results in NO signal.

Unhooking one end of the loop deliberately, it also performs far worse than as described when setup as a terminated wire loop - almost no signal, some with the centre connected, none with the ground only.

I think that sometimes, folks overanalyze to understand something and they just create a quandry. For about $2 or less in wire, and a 100-ohm resistor, you can try this for yourself, assuming a 50-ohm unbalanced decent amp is available.

If not, try [if your rig has an internal preamp] connecting the loop directly to a radio, and run the preamp(s). It's harder to rotate for best S/N, but will prove the design.

I am not insulted, and understand that this type of antenna is a bit hard to get one's head around - believe me - I recall reading the 1994 ARRL book on aperiodic receiving loops and it had almost nothing to say other than a simple diagram and 1/2 paragraph with no details.

I have been semi-interested in these since. However, I have experimented with many recieve antennas, and while others work well, this one REALLY does fantastic given a sub-floor, noisy and weak signal environment to begin with - I suspect if I can set up a comparable unit outdoors, it'll be fantastic! I finally, since having this new Ramsey PR2 amp, a decent 50-ohm amp with enough gain, decent noise figure, and low IMD enough to finally give this thing a go, and it worked - even better than I had initially hoped.

The initial tests I did was with a 4m hexagonal loop done on one wall of the room. It was very good, but not as low noise, due to the location - not being able to null [the noise null is rather sharp with this loop I am using now] as well, due to the fixed nature of this first trial loop. AM BCB was stronger with the larger loop - expected.

I posted this information mainly to assist those poor souls such as myself, who have been experimenting with antennas to minimize noise, maximize signal, in a small, restricted space.

Good DX,

Darren
VE6IZ

--- In loopantennas@yahoogroups.com, "phones414" <dhennig2@...> wrote:
>
> Yes, Andy.
>
> The feed line and radio are NOT part of the antenna. Cannot be since the output of the amp goes to the radio, the amp itself is attached to the loop.
>
> The power supply cable is through a full-wave bridge and voltage regulator [my supply is 12VAC] Note the ramsey schematic included in the photo section.
>
> You are assuming common mode reception here. My run of RG174 coax for the trial test is only 8'. This is also indoors, and it is very unlikely.
>
> However, ANY coax going to the amp off the loop would contribute and ruin the performance somewhat since the unbalanced nature of this terminated loop would force common mode current in the line prior the amp. My amp is connected directly at the loop feed.
>
> Yes, it IS vertical. One side is at the ground side, one at the centre, and both connect via the 100-ohm resistor termiation at the apex of this loop.
>
> THe omni pattern is part of the loop's performance, the other is a standard loop figure 8. Most terminated loops like this inherently have a combination pattern, which arises from two closely spaced IN phase monopoles [which the legs of the loop technically are], and the loop itself which acts like a loop, albeit with a lumped impedance.
>
> The impedance at the termination is to provide some isolation of the sides of the loop and to reduce impedance swings which would occur in a "normal" loop. maybe Chris Trask can comment and provide better info that I?
>
> All I can say is that this amplified aperiodic loop is quiet, has good signal gain, better overall indoor performance than my tuned commercial loops, broad bandwidth, and it WORKS.
>
> Darren VE6IZ
>
>
>
> --- In loopantennas@yahoogroups.com, Andy <ai.egrps@> wrote:
> >
> > > During rotation tests, this unit indeed has the [apparent] cardioid type
> > > null on one side of the loop.
> >
> > This puzzles me.
> >
> > If I understood your description correctly, you hung it so the loop is
> > vertical. It's also symmetrical ... except that the connection is not
> > balanced, one side is shield ("grounded"). Except for that one fact, I

> > don't see how the loop could have an omni-directional pattern in the
> > horizontal plane.
> >
> > If it is because of that ground connection, then it will be highly dependent
> > on your external connections and stray coupling to earth, through the
> > preamp's power supply and the receiver. Highly variable. In other words,
> > the feedline, preamp, power supply, receiver, etc. are receiving significant
> > signal too and are part of the antenna!
> >
> > It looks like you did some research on this, or based it on something you
> > read. Yes?
> >
> > Regards,
> > Andy
> >
>

7306. Re: [loopantennas] Re: Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-20 16:11:14 UTC
From: Andy
Topic: 7280 Message: 7306

> The feed line and radio are NOT part of the antenna. Cannot be since the
> output of the amp goes to the radio, the amp itself is attached to the
> loop.

That is an incorrect statement. The preamp is attached not only to the loop, but also to its power source, and to its output cable to your receiver. All these wires also pick up signal, which is electrically connected to one side of the loop, and they combine with the signal picked up by the loop.

Put another way, the loop is connected through a wire to your receiver, and through a diode to a wire to the preamp's power supply, and from the receiver to whatever else it is connected to, including its power source. All these things are part of your antenna, whether you want them to be or not.

Consider a loop with no connections to it, except some tiny battery powered receiver at its feedpoint with nothing else connected to it. Now touch the loop. You have now altered the antenna, and it will receive differently, because signals being received by your body, are connected to the loop too. You have become part of the antenna. And it's the same whether you touch the physical loop itself, or a wire connected to the loop.

I think you need to either balance the loop, or isolate it (xfmr), to eliminate these effects.

> You are assuming common mode reception here.

Effectively yes.

> My run of RG174 coax for the trial test is only 8'. This is also indoors,
> and it is very unlikely.

It makes no difference how long it is. The fact is that you made a connection to something else. It could be a 1" wire making that connection.

Eight feet compared to a ~three foot diameter loop, and a lossy one at that, is not insignificant.

Indoors or out, makes little difference. If anything, indoors is worse because there are so many nearby things to couple to.

> THe omni pattern is part of the loop's performance, the other is a
> standard loop figure 8.

Eh??

> Most terminated loops like this inherently have a combination pattern,
> which arises from two closely spaced IN phase monopoles [which the legs of
> the loop technically are], and the loop itself which acts like a loop,
> albeit with a lumped impedance.

Fine, I believe you that a terminated loop might have a uni-directional pattern, in the direction toward or away from the terminating resistor. (Similar to how rhombic and beverage antennas do.)

But hung vertically like this, the loop itself is symmetrical in both horizontal axes, so I can see nothing that would cause it to have a cardioid pattern.

Except that you've unbalanced the loop by adding a bunch of wires to one side of it. So if you in fact measure some uni-directionality, I think it is probably because of those connections to non-loop antenna elements. If the loop were isolated from them, it wouldn't be cardioid in the horizontal plane.

> All I can say is that this amplified aperiodic loop is quiet, has good
> signal gain, better overall indoor performance than my tuned commercial
> loops, broad bandwidth, and it WORKS.

And in the end, that is what matters! Enjoy it!

Regards,
Andy

7307. Re: Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-21 05:40:15 UTC
From: Darren Hennig
Topic: 7280 Message: 7307

Andy:

As much as it's fun debating this issue, there's no signifcant common mode operation with this unit. If there were, I'd see some signal coming off the unit unpowered, and I am not. Not at HF.

It IS highly probable that SOME and it's tiny... signal may be contributing from the coax, but given the loop's location and the fact that then you're implying that ANY unbalanced antenna is forcing common mode issues in all circumstances, which is an overgeneralization. I added a choke balun [current choke] to the output, and did saem with the power cord - no change in performance that I can tell.

You're right! So long as it does the trick! I am going to build an outdoor version powering the unit via coax from the shack in the near future. I suspect this will perform even better. Care will be done to avoid common mode issues that I KNOW may occur on longer outdoor runs of coax.

Darren
VE6IZ

[Non-text portions of this message have been removed]

7308. Re: Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-21 06:54:35 UTC
From: Darren Hennig
Topic: 7280 Message: 7308

Andy,

time to refresh your antenna theory, my man!

Let's just say that you are wrong on all counts. Sorry, tried to make this act similar in common mode in many ways and it is not. So let's leave it at that. [I love it when folks who do not understand things try to posture and make idiots out of themselves...]

A balun won't be any good for this loop - it is deliberately terminated and unbalanced by design. and anyway, so what? according to you, anything connected to this thing, balanced or no, is an antenna. Give it up please. I am tired of explaining to folks who are posturing as know-it-alls. [and I am not saying I am, but enough RF elmer thinking already!]

Because YOU cannot see it having a cardioid pattern, it is not my fault, sir. Take a closely spaced dual monopole in phase - this is approx [though close in the far field] an omni pattern. yes? Good. now add this to a standard loop behavior, also present somewhat since the terminating resistor partially isolates the legs, thus, my understanding is that it can still have some out of phase behavior to it, and when added to the monopole behavior, you get a cardioid. Toroid plus sphere [in 3D] is a fat cardioid like pattern. Get ye back to physics class! ;-)

It is NOT a lossy loop either. it is DELIBERATELY made to run as a terminated, small loop to yield more uniform Z over a large raneg in NON-resonant fashion. when fed into a good, broadband amp - it acts as you're seeing. Do NOT let the simplicity of the test loop fool you - it may seem counter intuitive somewhat, but I would not have wasted all this time explaining this bloddy thing to everyone here if I thought it was simply a small loop adding to some coax as a makeshift wannabe homebrew nothing antenna! I have better things to do with my time, and I suppose many here do too. If you do not believe me, make one and see.

Sorry, but your posts remind me of some things I see on other hobby related sites even though I may be misreading your intentions. asking is better than telling in this case, cause you do NOT know what you're saying - you THINK so, because that's what you know. I've been trying to analyze this thing coming on 10 years before making this simple one, and I have done everything possible to test, isolate, and prevent the things you have said. the thing works the same. So, I left it as is.

I am done now, Try one if it suits you, don't if you don't - is it perfect? no, just a potentially good solution for some SWLers in tough signal areas.

Darren

[Non-text portions of this message have been removed]

7309. Wanted vacuum relay/switch

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-21 16:02:48 UTC
From: richard
Topic: 7309 Message: 7309

Hi all
I'm looking for a low cost vacuum relay / switch I only need 1 pole normally open.
Not more than 3" (75 mm) long, preferably in the EU. Out side of the EU is OK if below Customs
duty level.
I've been googling for a few hours, I've seen some really silly prices.
Its needed for switching in a capacitor on my 4 mtr dia mag loop I use on 80 mtrs so I can use it on
160 mtrs as well.
I did think of trying one of the larger reed switches , but I think the capacitance maybe too high
when open.
I'd like to be able to keep this antenna capable of handling 400 W if possible, so when the switch
is open somewhere in the region of 5 KV across it.
TIA

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7310. Re: Wanted vacuum relay/switch

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-21 19:09:24 UTC
From: John
Topic: 7309 Message: 7310

Hi Richard,

I have stock of DowKey Microwave 401-2308 Relays, HF 500W - with SMA connectors which are new old stock taken from redundant spares. If any use to you, email me off list and I will ask my Son to mail you one, providing he can cope with my stock system, I am in India. If you wish I can email pdf data.

Regards to all
John G6KJK

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> Hi all
> I'm looking for a low cost vacuum relay / switch I only need 1 pole normally open.
> Not more than 3" (75 mm) long, preferably in the EU. Out side of the EU is OK if below Customs
> duty level.
> I've been googling for a few hours, I've seen some really silly prices.
> Its needed for switching in a capacitor on my 4 mtr dia mag loop I use on 80 mtrs so I can use it on
> 160 mtrs as well.
> I did think of trying one of the larger reed switches , but I think the capacitance maybe too high
> when open.
> I'd like to be able to keep this antenna capable of handling 400 W if possible, so when the switch
> is open somewhere in the region of 5 KV across it.
> TIA
>
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7311. making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-22 08:57:38 UTC
From: ozzy_1kw
Topic: 7311 Message: 7311

What do i need to kmow please? Yes im a cb person but like experimenting.

TY Rob

7312. Re: [loopantennas] making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-22 17:18:39 UTC
From: Jim Dunstan
Topic: 7311 Message: 7312

At 08:57 AM 3/22/2010 +0000, you wrote:
>
>
>What do i need to kmow please? Yes im a cb person but like experimenting.
>
>TY Rob

You don't need to know a lot. A full size loop for 27mhz is 37.22 ft in circumference .... 9.3 ft per side if you form it into a square. Cut the wire in the middle of the bottom side and connect the end of standard coax cable. Connect the other end of the coax cable to your CB radio and it will work like gang busters. All you need to do is devise a method of holding the wire in a more or less square configuration and mount it up as high as you can get it .... there, done.

Jim

7313. Re: [loopantennas] making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-22 17:21:22 UTC
From: richard
Topic: 7311 Message: 7313

On Mon, 22 Mar 2010 08:57:38 -0000
"ozzy_1kw" <ozzy_1kw@...> wrote:

> What do i need to kmow please? Yes im a cb person but like experimenting.
>
> TY Rob
>
Hi
looking at your e-mail address, do you intend to transmit into it and how much power ?
and why experiment with an antenna with an efficiency less than that you can readily purchase at CB shops ect.

Inductance (uH) 1.704
Capacitance (pF) 20.4
XL = XC (ohms) 289.1
Distributed C (pF) 6.7
Tuning capacitance (pF) 13.7
Main loop diameter (m) 0.796
Feeding loop diameter (m) 0.159
Radiation resistance (ohms) 0.514
Loss resistance (ohms) 0.038
Parallel resistance (kohms) 76
Efficiency (%) 93.0
Compared to ideal loop (dB) -0.31
Loaded Q 261
Bandwidth -3dB (kHz) 103.3
Capcitor rms voltage (V) 2749

Thats with 2.5 mtrs of 28 mm Copper water pipe bent into a circle with a 20 pF capacitor connected
across the open end. Fed with another smaller loop of say 2.5 mm wire at the opposite end to the
capacitor.
And after all that effort of bending the 3/4 " copper pipe you will have an antenna with less gain
than a 1/2 wave dipole.
45 degree 28mm solder bends are available and then you can make it octagonal.

have fun
--
Best wishes

Richard Bown

##
Registered Linux User 36561

OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
###

7314. RE: [loopantennas] making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-22 20:28:11 UTC
From: Chris Harris
Topic: 7311 Message: 7314

I experimented last year with an antenna like of roughly these dimensions. I used an alloy bicycle wheel as the element. It worked quite well in 15 through 10m and was usable on 20.

Regards, Chris

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of richard
Sent: Tuesday, 23 March 2010 5:21 a.m.
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] making a loop for 27MHz cb

On Mon, 22 Mar 2010 08:57:38 -0000
"ozzy_1kw" <ozzy_1kw@yahoo. <mailto:ozzy_1kw%40yahoo.com.au> com.au>
wrote:

> What do i need to kmow please? Yes im a cb person but like experimenting.
>
> TY Rob
>
Hi
looking at your e-mail address, do you intend to transmit into it and how much power ?
and why experiment with an antenna with an efficiency less than that you can readily
purchase at CB shops ect.

Inductance (uH) 1.704
Capacitance (pF) 20.4
XL = XC (ohms) 289.1
Distributed C (pF) 6.7
Tuning capacitance (pF) 13.7
Main loop diameter (m) 0.796
Feeding loop diameter (m) 0.159
Radiation resistance (ohms) 0.514
Loss resistance (ohms) 0.038
Parallel resistance (kohms) 76
Efficiency (%) 93.0
Compared to ideal loop (dB) -0.31
Loaded Q 261
Bandwidth -3dB (kHz) 103.3
Capcitor rms voltage (V) 2749

Thats with 2.5 mtrs of 28 mm Copper water pipe bent into a circle with a 20 pF capacitor connected
across the open end. Fed with another smaller loop of say 2.5 mm wire at the opposite end to the
capacitor.
And after all that effort of bending the 3/4 " copper pipe you will have an antenna with less gain
than a 1/2 wave dipole.
45 degree 28mm solder bends are available and then you can make it octagonal.

have fun
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

[Non-text portions of this message have been removed]

7315. Re: 2M Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-22 21:23:33 UTC
From: alienrelics
Topic: 7301 Message: 7315

--- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:
>
> In the photos by Roberts 50000 dated 4/1/06 shows a 2M Loop and I wonder if this is legit or an April Fool's joke? I would think possible, yes, but would not work at less than a mile.
>
> Bill McGraw, KF5FJZ, new license, no rig
> "Somewhere South of Chicago"
> Greenville, Mississippi
>

Todd Roberts is having problems with his email not showing up on the list, so I'm forwarding his reply:

Hi Bill,
Yes the 2M loop works very well. I took some pictures of it to show others how easy it is to build one. I built mine in an afternoon. I compared it with a friend using a homemade hand-held 3-element quad beam out in the yard and the loop worked better with lower noise than the beam did on a distant repeater, both antennas held about 5 feet above ground level. The beam might work better higher up in the air but at 5 feet above ground the loop worked much better. It would make an excellent antenna for a handie talkie.

To use it with a repeater I tuned the loop for best SWR at the
transmit frequency and it still works fine on receive although the SWR is not as low on the receive frequency. The loop is a fairly narrow band antenna on transmit. You will need to retune it when going from one repeater to another. It is also very directional with sharp nulls off to the side.

The loop uses a gimmick capacitor at the top gap of the loop for tuning and it did not get warm at 25 watts. I used an MFJ-259B to tune the loop at the transmit frequency. I still have the loop and it still works fine. The loop is an excellent portable transmit antenna for 2 meters when it is built and tuned properly.

73 Todd WD4NGG

7316. Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-23 03:20:30 UTC
From: ozzy_1kw
Topic: 7311 Message: 7316

50W into it.and i love radio i like experimenting, with future intentions of becoming a amateur. BUT unlike most new hams id like to know something about it instead of studying questions parrot fashion.

Cheers Rob

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Mon, 22 Mar 2010 08:57:38 -0000
> "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> > What do i need to kmow please? Yes im a cb person but like experimenting.
> >
> > TY Rob
> >
> Hi
> looking at your e-mail address, do you intend to transmit into it and how much power ?
> and why experiment with an antenna with an efficiency less than that you can readily
> purchase at CB shops ect.
>
>
> Inductance (uH) 1.704
> Capacitance (pF) 20.4
> XL = XC (ohms) 289.1
> Distributed C (pF) 6.7
> Tuning capacitance (pF) 13.7
> Main loop diameter (m) 0.796
> Feeding loop diameter (m) 0.159
> Radiation resistance (ohms) 0.514
> Loss resistance (ohms) 0.038
> Parallel resistance (kohms) 76
> Efficiency (%) 93.0
> Compared to ideal loop (dB) -0.31
> Loaded Q 261
> Bandwidth -3dB (kHz) 103.3
> Capcitor rms voltage (V) 2749
>
> Thats with 2.5 mtrs of 28 mm Copper water pipe bent into a circle with a 20 pF capacitor connected
> across the open end. Fed with another smaller loop of say 2.5 mm wire at the opposite end to the
> capacitor.
> And after all that effort of bending the 3/4 " copper pipe you will have an antenna with less gain
> than a 1/2 wave dipole.

> 45 degree 28mm solder bends are available and then you can make it octagonal.
>
> have fun
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7317. Re: Aperiodic antenna Drawing

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-23 07:45:16 UTC
From: xtemporize
Topic: 7286 Message: 7317

I bought one of those "fold-up laundry baskets" for the spring wire thinking to use it for loop material, in the way that the Sony loop is made. I have not tried yet to see how solderable it is.
I also found an old spool of "fish tape" used in telecom work for inserting in wire conduits, but I don't think I will use it after all: while it's heavier and will support a larger loop than the basket's spring wire, the "fish tape" wire is, I think, dangerous if say, some child struck it with a ball and the thing came apart and lashed out.
Aperiodic loops, meaning non-resonant, of course: has anyone bought the Ramsey loop kit? I wonder how many turns Ramsey uses on their ferrite stick frame. What kind of amplifier? If anyone has bought this kit, I offer to buy a copy of the manual from you, for a price worth your while. Ramsey does not sell any manuals with schematic information intact. (The only exception, a book collection of Ramsey project schematics, published a few years ago.)
Say also- i scrounged up some dozens of feet of 2 conductor twisted pair shielded wire, used in telephony work at T1 transmission rate. I am thinking of trying it as "twinax" for completely shielded transmission line in a long run thru noisey area. No, I would NOT use it for transmtting! Any comment?
Thanks- Hue Miller / Newport, Oregon

7318. Re: [loopantennas] making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-23 10:14:47 UTC
From: richard
Topic: 7311 Message: 7318

On Tue, 23 Mar 2010 08:28:11 +1200
"Chris Harris" <chris.harris@...> wrote:

> I experimented last year with an antenna like of roughly these
> dimensions. I used an alloy bicycle wheel as the element. It worked
> quite well in 15 through 10m and was usable on 20.
>
> Regards, Chris
>

Hi Chris
yes that sorta size is ideal for camping /portable operation. If you use one of the pop up tents
that are now available and very popular with the people that go to music festivals, you could take
817 ,pop up tent which flat pack down to about 1 mtr diameter. the loop could be packed in the same
package as the tent.
You could be set up portable in minutes, hang the loop on the nearest bush or tree.

Richard g8jvm
>
> -----Original Message-----
> From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
> On Behalf Of richard
> Sent: Tuesday, 23 March 2010 5:21 a.m.
> To: loopantennas@yahoogroups.com
> Subject: Re: [loopantennas] making a loop for 27MHz cb
>
>
>
>
> On Mon, 22 Mar 2010 08:57:38 -0000
> "ozzy_1kw" <ozzy_1kw@yahoo. <mailto:ozzy_1kw%40yahoo.com.au> com.au>
> wrote:
>
> > What do i need to kmow please? Yes im a cb person but like
> experimenting.
> >
> > TY Rob
> >
> Hi
> looking at your e-mail address, do you intend to transmit into it and
> how much power ?
> and why experiment with an antenna with an efficiency less than that you
> can readily

> purchase at CB shops ect.
>
> Inductance (uH) 1.704
> Capacitance (pF) 20.4
> XL = XC (ohms) 289.1
> Distributed C (pF) 6.7
> Tuning capacitance (pF) 13.7
> Main loop diameter (m) 0.796
> Feeding loop diameter (m) 0.159
> Radiation resistance (ohms) 0.514
> Loss resistance (ohms) 0.038
> Parallel resistance (kohms) 76
> Efficiency (%) 93.0
> Compared to ideal loop (dB) -0.31
> Loaded Q 261
> Bandwidth -3dB (kHz) 103.3
> Capcitor rms voltage (V) 2749
>
> Thats with 2.5 mtrs of 28 mm Copper water pipe bent into a circle with a
> 20 pF capacitor connected
> across the open end. Fed with another smaller loop of say 2.5 mm wire at
> the opposite end to the
> capacitor.
> And after all that effort of bending the 3/4 " copper pipe you will have
> an antenna with less gain
> than a 1/2 wave dipole.
> 45 degree 28mm solder bends are available and then you can make it
> octagonal.
>
> have fun

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7319. Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-23 19:31:35 UTC
From: aisea6
Topic: 7311 Message: 7319

Since you like to experiment, learn the theory of antennas especially the formular for a dipole and the current and voltage distribution.
Now turn that to practice by making your first wire dipole.
You shall need an swr meter, or better still an antenna analyser.
There's stacks of information on the net and I am sure you will enjoy it once you start experimenting.

cul.

Aisea

--- In loopantennas@yahoogroups.com, "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> What do i need to kmow please? Yes im a cb person but like experimenting.
>
> TY Rob
>

7320. Test

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-23 20:40:26 UTC
From: toddroberts2001@aol.com
Topic: 335 Message: 7320

This is a test posting.

7321. Loop Experiments ☐ Antennas for the MW band DXer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-24 00:58:44 UTC
From: sarmento2k
Topic: 7321 Message: 7321

Hi

Just published an article about an air core loop antenna for MW, with photos of the final product.

After some research I have completed this loop antenna with good practical results.

The article is written in English, not Google translation.

http://www.sarmento.eng.br

This is the first article of a series of different loops I have assembled in order to test different concepts of this kind of antennas, next one, will be about portable ferrite loops for MW, let me say, with not so common dimensions. But it worked very fine too.

:-)

Comments are much appreciated .

Regards,

Sarmento Campos - Rio de Janeiro - Brasil

7322. Re: [loopantennas] Test

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-24 02:00:12 UTC
From: MD3381@AOL.COM
Topic: 335 Message: 7322

your test worked
Mike

In a message dated 3/23/2010 4:40:44 P.M. Eastern Daylight Time,
toddroberts2001@... writes:

This is a test posting.

[Non-text portions of this message have been removed]

7323. Re: Aperiodic antenna Drawing

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-24 03:42:24 UTC
From: Darren Hennig
Topic: 7286 Message: 7323

Hue:

The Ramsey "signal magent", I believe you are referring too, is an amplified tuned ferrite loop antenna and uses some form of RF amp using active [transistor] components. I have the kit manual I downloaded off their site, but it only shows positioning of components and no schematic per se. It appears, from what I gather looking at this, to be a standard type of active antenna system using a ferrite loop tuned with a variable to achieve reception. Nothing overly fancy, but it is an interesting approach. Upper f is 15 MHz, so if you listen to the 19m, 16m, and 13m SW bands during solar maxima, you'll be out of luck without a mod of some kind...

For less money, the PR2 can be had, and this is the amp I used for my Aperiodic loop. It's simple, and easy to setup. If this is an indoor application, even better, as the connections can be kept shorter, and the location can be optimized for your best S/N. Your Twinax cable - is it 25 or 90 ohm? any idea of the impedance? You can possibly hook it out from a loop to your radio. I am not sure. I personally like RG174 for indoor work, as it is not as lossy as specs suggest at 10MHz and below, especially. It is not as well shielded as RG8 or Belden cables, but for short runs works fine. You can also clamp some RF ferrite to the cable to reduce/eliminate common-mode noise too.

The loop can be virtually anything from wire to rod/tubing. My next loop, after speaking with Steve here offline, is going to be a copper tube version around 90cm dia. I am going to try it in a circle. If this works even better than my wire loop, which I expect it should slightly, then I'll work on an outdoor version that can be mounted several meters away from my shack to minimize noise issues. I still get SOME noise, esp. when my immediate neighbour in our complex runs a drill or blender, but the levels, due ot the more unidirectional characteristics of this loop, can be nulled out better than using my bi-directional amplified tuned commercial loops in general. Noise levels seem to be at least 15-20dB on average below my other indoor options. I am also getting much better transpolar DX off backs of beams to the ME and African services of DW, RSI, etc. Sweden came in on 9360kHz at over S9 - this is Horby transmitting to Africa/ME - I'm getting their "backside" over the pole. One of my main lobes off this unit seems to be around 030°T, just about ideal for ME and polar DX from Asia, and Europe. Seeing this alot in the mornings, something never able to do as routinely indoors using my AOR loops.

Being able to use this untuned is really nice, as it allows me to "band hop" around to catch new DX or just "twiddle" my tuning knob on the R75 to find something new or coming in better than average.

If you get an aperiodic running, please let us know how you make out! These are very easy to make [loop-wise], and are fun projects!

Good DX,

Darren
VE6IZ

[Non-text portions of this message have been removed]

7324. Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-24 02:57:58 UTC
From: ozzy_1kw
Topic: 7311 Message: 7324

Im looking into dipoles now as suggested,current & voltage is confusing as i thought they both flowed inside the wire not above it.

I have a swr meter but not a analyser.

I LIKE the idea of the wheel rim loop antenna cause we get around a lot and it would be priceless for portable.

Cheers Rob

--- In loopantennas@yahoogroups.com, "aisea6" <aisea@...> wrote:
>
> Since you like to experiment, learn the theory of antennas especially the formular for a dipole and the current and voltage distribution.
> Now turn that to practice by making your first wire dipole.
> You shall need an swr meter, or better still an antenna analyser.
> There's stacks of information on the net and I am sure you will enjoy it once you start experimenting.
>
> cul.
>
> Aisea
>
> --- In loopantennas@yahoogroups.com, "ozzy_1kw" <ozzy_1kw@> wrote:
> >
> > What do i need to kmow please? Yes im a cb person but like experimenting.
> >
> > TY Rob
> >
>

7325. Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-24 06:57:30 UTC
From: ozzy_1kw
Topic: 7311 Message: 7325

When you transmit through an antenna,what actually travels through space to the other station,voltage or current ? And how does it leave the antenna wire,what pushes it away out into space?
Cheers Rob

--- In loopantennas@yahoogroups.com, "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> Im looking into dipoles now as suggested,current & voltage is confusing as i thought they both flowed inside the wire not above it.
>
> I have a swr meter but not a analyser.
>
> I LIKE the idea of the wheel rim loop antenna cause we get around a lot and it would be priceless for portable.
>
> Cheers Rob
>
>
>
>
>
> --- In loopantennas@yahoogroups.com, "aisea6" <aisea@> wrote:
> >
> > Since you like to experiment, learn the theory of antennas especially the formular for a dipole and the current and voltage distribution.
> > Now turn that to practice by making your first wire dipole.
> > You shall need an swr meter, or better still an antenna analyser.
> > There's stacks of information on the net and I am sure you will enjoy it once you start experimenting.
> >
> > cul.
> >
> > Aisea
> >
> > --- In loopantennas@yahoogroups.com, "ozzy_1kw" <ozzy_1kw@> wrote:
> > >
> > > What do i need to kmow please? Yes im a cb person but like experimenting.
> > >
> > > TY Rob
> > >
> >
>

7326. Re: [loopantennas] Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-24 13:58:58 UTC
From: richard
Topic: 7311 Message: 7326

On Wed, 24 Mar 2010 06:57:30 -0000
"ozzy_1kw" <ozzy_1kw@...> wrote:

> When you transmit through an antenna,what actually travels through space to the other
> station,voltage or current ? And how does it leave the antenna wire,what pushes it away out into
> space? Cheers Rob
>
>
>

Hi
Google OHMS LAW you should realise what the answer is very quickly, that's one you need to learn and
know parrot fashion.
If you are going to spend some money buy either the ARRL handbook, published each year or the RSGB
handbook,
I'm sure there is an Australian version as well. Read the sections on theory, then move on to
antennas and propagation.
I know said you dont want learn parrot fashion as new Hams do, but I suggest you find your nearest
club and get the info on what foundation courses there are for entry level in Aus.
You have to learn some theory, then you will understand what you are being advised and how to
implement it.
If you dont want to contact your nearest club, find out what the entry levels are , get the syllabus
start learning then take what ever entry exams there are.
In the UK the foundation exam is handled by Amateur clubs and is incredibly easy to pass, you then
have access to most of the Ham bands with low power.
The same system will probably operate where you or something very similar.
good luck

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7327. Re: [loopantennas] Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-24 10:30:47 UTC
From: Wim Rensen
Topic: 7311 Message: 7327

Hello Ozzy_1kw and others,

For a small loop antenna you could try this (non-magnetic) loop out of coax.

- http://www.antennex.com/hws/ws0201/nonmag.htm

I made this morning one of these myself to use for SWL out of about 2 meters of coax (that's all what I had laying around right now) and used it for an SWL-antenna with a MLB (RF systems) instead of a 7:1 autotransformer (figure 5). I taped it on the window (my wife is not at home now so... it's gone before she comes at home) It's a unbelieveble antenna. I normally used a magloop but now I don't know. I experiment some more with it to find out.

I listen now to HFDL with it at 11 and 17 mhz and I can see aeroplanes all over Europe (I live in The Netherlands) with a minimum of noise.

With the magloop (about 80 cm in diameter) I normaly can see aeroplanes 4.000 km west, east and south of my QTH. North is a bit of a problem. That's no more than about 2.000 km.
Let's see what the Grey Line brings.

Btw: that magloop is made of a bicyclerim.

73's
19DIG1963

2010/3/24 ozzy_1kw <ozzy_1kw@...>

>
>
> When you transmit through an antenna,what actually travels through space to
> the other station,voltage or current ? And how does it leave the antenna
> wire,what pushes it away out into space?
> Cheers Rob
>
> --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>,
> "ozzy_1kw" <ozzy_1kw@...> wrote:
> >
> > Im looking into dipoles now as suggested,current & voltage is confusing
> as i thought they both flowed inside the wire not above it.
> >
> > I have a swr meter but not a analyser.
> >
> > I LIKE the idea of the wheel rim loop antenna cause we get around a lot
> and it would be priceless for portable.
> >
> > Cheers Rob

> >
> >
> >
> >
> >
> > --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>,
> "aisea6" <aisea@> wrote:
> > >
> > > Since you like to experiment, learn the theory of antennas especially
> the formular for a dipole and the current and voltage distribution.
> > > Now turn that to practice by making your first wire dipole.
> > > You shall need an swr meter, or better still an antenna analyser.
> > > There's stacks of information on the net and I am sure you will enjoy
> it once you start experimenting.
> > >
> > > cul.
> > >
> > > Aisea
> > >
> > > --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>,
> "ozzy_1kw" <ozzy_1kw@> wrote:
> > > >
> > > > What do i need to kmow please? Yes im a cb person but like
> experimenting.
> > > >
> > > > TY Rob
> > > >
> > >
> >
>
>
>

[Non-text portions of this message have been removed]

7328. T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-25 20:10:28 UTC
From: Jim Dunstan
Topic: 7311 Message: 7328

The tilted T2FD has been described as the forgotten antenna. It has characteristics of a dipole as well as a loop. It is terminated with a non-inductive resistor opposite the feed point. It is more compact in length than a dipole and professes to be very quiet on receive and broadband , at least a 5:1 frequency ratio. From what I have read it's present use is limited to a broadband quiet SW receiving antenna .... although I understand the US Navy conducted long term HF communications trials and concluded it was more effective than individual wire antennas for HF frequencies in the HF spectrum (a myth ??). If the trial is correct then the antenna must have some sort of gain .... since there would be a starting loss due to the termination.

It sounds like an ideal Amateur radio antenna ... yet I have no experience with it ... nor do I know anyone who has used one. I notice ICOM sells an all band antenna that appears to be a T2FD ... the AH-710 .... again no info on it not even in Eham reviews.

Anyone know anything about this antenna ?

Jim, VE3CI

7329. Re: [loopantennas] T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-25 21:21:16 UTC
From: M HOLDEN
Topic: 7311 Message: 7329

It's a loop that makes up for its lack of circumference with a resistor. To me, it is likely to be a good choice for anyone short of space. Otherwise, use more wire and don't turn transmitter power into heat losses. Copper beats carbon hands down.
Regards,Mike G4HOL

--- On Thu, 25/3/10, Jim Dunstan <jimdunstan@...> wrote:

From: Jim Dunstan <jimdunstan@...>
Subject: [loopantennas] T2FD as a transmitting antenna
To: loopantennas@yahoogroups.com
Date: Thursday, 25 March, 2010, 20:10

The tilted T2FD has been described as the forgotten antenna. It has

characteristics of a dipole as well as a loop. It is terminated with a

non-inductive resistor opposite the feed point. It is more compact in

length than a dipole and professes to be very quiet on receive and

broadband , at least a 5:1 frequency ratio. From what I have read it's

present use is limited to a broadband quiet SW receiving antenna ....

although I understand the US Navy conducted long term HF communications

trials and concluded it was more effective than individual wire antennas

for HF frequencies in the HF spectrum (a myth ??). If the trial is correct

then the antenna must have some sort of gain .... since there would be a

starting loss due to the termination.

It sounds like an ideal Amateur radio antenna ... yet I have no experience

with it ... nor do I know anyone who has used one. I notice ICOM sells an

all band antenna that appears to be a T2FD ... the AH-710 .... again no

info on it not even in Eham reviews.

Anyone know anything about this antenna ?

Jim, VE3CI

[Non-text portions of this message have been removed]

7330. Fw: Re: [loopantennas] T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-25 21:33:16 UTC
From: M HOLDEN
Topic: 7330 Message: 7330

--- On Thu, 25/3/10, M HOLDEN <mholden909@...> wrote:
I've just Googled "T2FD" and found many pages of info in several languages. Most comments are complimentary. Mike, G4HOL
From: M HOLDEN <mholden909@btinternet.com>
Subject: Re: [loopantennas] T2FD as a transmitting antenna
To: loopantennas@yahoogroups.com
Date: Thursday, 25 March, 2010, 21:21

It's a loop that makes up for its lack of circumference with a resistor. To me, it is likely to be a good choice for anyone short of space. Otherwise, use more wire and don't turn transmitter power into heat losses. Copper beats carbon hands down.

Regards,Mike G4HOL

--- On Thu, 25/3/10, Jim Dunstan <jimdunstan@rogers. com> wrote:

From: Jim Dunstan <jimdunstan@rogers. com>

Subject: [loopantennas] T2FD as a transmitting antenna

To: loopantennas@ yahoogroups. com

Date: Thursday, 25 March, 2010, 20:10

The tilted T2FD has been described as the forgotten antenna. It has

characteristics of a dipole as well as a loop. It is terminated with a

non-inductive resistor opposite the feed point. It is more compact in

length than a dipole and professes to be very quiet on receive and

broadband , at least a 5:1 frequency ratio. From what I have read it's

present use is limited to a broadband quiet SW receiving antenna ....

although I understand the US Navy conducted long term HF communications

trials and concluded it was more effective than individual wire antennas

for HF frequencies in the HF spectrum (a myth ??). If the trial is correct

then the antenna must have some sort of gain .... since there would be a

starting loss due to the termination.

It sounds like an ideal Amateur radio antenna ... yet I have no experience

with it ... nor do I know anyone who has used one. I notice ICOM sells an

all band antenna that appears to be a T2FD ... the AH-710 .... again no info on it not even in Eham reviews.

Anyone know anything about this antenna ?

Jim, VE3CI

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7331. T2FD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-25 22:03:36 UTC
From: Doug Kniffen
Topic: 7331 Message: 7331

----- Original Message -----
From: <loopantennas@yahoogroups.com>
To: <loopantennas@yahoogroups.com>
Sent: Thursday, March 25, 2010 4:37 PM
Subject: [loopantennas] Digest Number 1590
>
> The tilted T2FD has been described as the forgotten antenna.
>
> Anyone know anything about this antenna ?

What has been forgotten is the noise control benefits of using a relatively low resistive termination. I'm using a T2FD, full size on 5Mhz, mounted inverted "V" style to recieve WWV (all frequencies) for asteriod occultation observations. Tried more than a dozen different antennas to solve the noise problem, T2FD worked much better than all. Doesn't fade out like physically small antennas sometimes do and it just doesn't pick up ever more noise like other full sized antennas. Even works better than the built in ferrite on AM bcb.

Doug Kniffen

[Non-text portions of this message have been removed]

7332. Re: [loopantennas] T2FD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-25 22:14:37 UTC
From: Paul V Birke PEng
Topic: 7331 Message: 7332

From: Doug Kniffen <dkniffen@...>
To: loopantennas@yahoogroups.com
Sent: Thu, March 25, 2010 6:03:36 PM
Subject: [loopantennas] T2FD

----- Original Message -----
From: <loopantennas@ yahoogroups. com>
To: <loopantennas@ yahoogroups. com>
Sent: Thursday, March 25, 2010 4:37 PM
Subject: [loopantennas] Digest Number 1590
>
> The tilted T2FD has been described as the forgotten antenna.
>
> Anyone know anything about this antenna ?

What has been forgotten is the noise control benefits of using a relatively low resistive termination. I'm using a T2FD, full size on 5Mhz, mounted inverted "V" style to recieve WWV (all frequencies) for asteriod occultation observations. Tried more than a dozen different antennas to solve the noise problem, T2FD worked much better than all. Doesn't fade out like physically small antennas sometimes do and it just doesn't pick up ever more noise like other full sized antennas. Even works better than the built in ferrite on AM bcb.

Doug Kniffen

thanks Doug
extremely valuable information!
best wishes
Paul VE3PVB

[Non-text portions of this message have been removed]

7333. Re:Fw: Re: [loopantennas] T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-25 22:56:41 UTC
From: Darren Hennig
Topic: 7330 Message: 7333

Terminated antennas are not necessarily lossy - look at terminated beverages! Does one dump a whole pile of wattage into the resisting termination? No, not really. Otherwise, they would not be used.

The K9AYs I've heard can be run as transmitting loops as well, and I recall vaguely an article using a 900 ohm terminated loop [10' dia.] for TX/RX on 160m not too long ago...

The terminations are to control the impedance to a degree, and regulate the current on the legs of the antenna. since an ideal termination is non-inductive/capacitive, it acts as a pure [or close to pure] lumped impedance to work WITHIN the antenna system, not as a dummy load.

Considering the simplicity of the T2FD in many ways, why not try one out? The only big question is how much RF does go into the resistor, and that will affect choice of wattage.

Folks have to STOP considering resistive elements in an atenna system as a pure dummy load only, and as a part of the whole!

Darren VE6IZ

[Non-text portions of this message have been removed]

7334. Re: Fw: Re: [loopantennas] T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-25 23:16:34 UTC
From: Paul V Birke PEng
Topic: 7330 Message: 7334

excellent !!!!!!!!!
it was thought to be ~ 50% loss but it responds as a system to launch the em wave
of course!
always learning here {;<)))))))))
73 Paul VE3PVB

PS wonder what the em simulations say about the loss in the 600 ohm non inductive
resistance ~ 50% OR MUCH LESS???!!!???

From: Darren Hennig <dhennig2@...>
To: loopantennas@yahoogroups.com
Sent: Thu, March 25, 2010 6:56:41 PM
Subject: Re:Fw: Re: [loopantennas] T2FD as a transmitting antenna

Terminated antennas are not necessarily lossy - look at terminated beverages! Does one dump a whole pile of wattage into the resisting termination? No, not really. Otherwise, they would not be used.

The K9AYs I've heard can be run as transmitting loops as well, and I recall vaguely an article using a 900 ohm terminated loop [10' dia.] for TX/RX on 160m not too long ago...

The terminations are to control the impedance to a degree, and regulate the current on the legs of the antenna. since an ideal termination is non-inductive/ capacitive, it acts as a pure [or close to pure] lumped impedance to work WITHIN the antenna system, not as a dummy load.

Considering the simplicity of the T2FD in many ways, why not try one out? The only big question is how much RF does go into the resistor, and that will affect choice of wattage.

Folks have to STOP considering resistive elements in an atenna system as a pure dummy load only, and as a part of the whole!

Darren VE6IZ

[Non-text portions of this message have been removed]

7335. Fw: Re: [loopantennas] T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-25 23:38:19 UTC
From: phones414
Topic: 7330 Message: 7335

Greetings, Paul!

As I understand it so far, terminated antennae also operate in a blend of transmission line modes as well as bonafide loops. Thus, standard RF analysis need consider the TL modes of operation.

No expert, here, but learning! ;-)

73 and good DX!

Darren VE6IZ

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> excellent !!!!!!!!!
> it was thought to be ~ 50% loss but it responds as a system to launch the em wave
> of course!
> always learning here {;<)))))))))
> 73 Paul VE3PVB
>
> PS wonder what the em simulations say about the loss in the 600 ohm non inductive resistance ~ 50% OR MUCH LESS???!!!???
>
>
>
>
>
> _____
> From: Darren Hennig <dhennig2@...>
> To: loopantennas@yahoogroups.com
> Sent: Thu, March 25, 2010 6:56:41 PM
> Subject: Re:Fw: Re: [loopantennas] T2FD as a transmitting antenna
>
>
> Terminated antennas are not necessarily lossy - look at terminated beverages! Does one dump a whole pile of wattage into the resisting termination? No, not really. Otherwise, they would not be used.
>
> The K9AYs I've heard can be run as transmitting loops as well, and I recall vaguely an article using a 900 ohm terminated loop [10' dia.] for TX/RX on 160m not too long ago...
>
> The terminations are to control the impedance to a degree, and regulate the current on the legs of the antenna. since an ideal termination is non-inductive/ capacitive, it acts as a pure [or close to pure] lumped impedance to work WITHIN the antenna system, not as a dummy load.
>

> Considering the simplicity of the T2FD in many ways, why not try one out? The only big question is how much RF does go into the resistor, and that will affect choice of wattage.
>
> Folks have to STOP considering resistive elements in an atenna system as a pure dummy load only, and as a part of the whole!
>
> Darren VE6IZ
>
> [Non-text portions of this message have been removed]
>

7336. Re:Fw: Re: [loopantennas] T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-26 00:36:31 UTC
From: Jim Dunstan
Topic: 7330 Message: 7336

At 04:56 PM 3/25/2010 -0600, you wrote:
>
>
>Terminated antennas are not necessarily lossy - look at terminated
>beverages! Does one dump a whole pile of wattage into the resisting
>termination? No, not really. Otherwise, they would not be used.
>
>The K9AYs I've heard can be run as transmitting loops as well, and I
>recall vaguely an article using a 900 ohm terminated loop [10' dia.] for
>TX/RX on 160m not too long ago...
>
>The terminations are to control the impedance to a degree, and regulate
>the current on the legs of the antenna. since an ideal termination is
>non-inductive/capacitive, it acts as a pure [or close to pure] lumped
>impedance to work WITHIN the antenna system, not as a dummy load.
>
>Considering the simplicity of the T2FD in many ways, why not try one out?
>The only big question is how much RF does go into the resistor, and that
>will affect choice of wattage.
>
>Folks have to STOP considering resistive elements in an atenna system as a
>pure dummy load only, and as a part of the whole!
>
>Darren VE6IZ

Hi Darren,

Many years ago when I was a young fellow ... I worked in an Arctic research station and we had a large terminated rhombic antenna pointed more or less south (where else could it point hi hi) From time to time I would bring a small QRP rig (made from tubes ... e.g. before transistors!) into the station and would work a fellow in a research station in the Antarctic with my 2 watts.

the official commercial use of the antenna was for pulsed transmissions from 2 to 30 mhz. for the purpose of sounding the ionosphere. To this day I have never experienced any other antenna as effective .... even though there no doubt would be some loss in the termination resistor. It sticks in my mind that the termination resistor in the Rhombic was in the 600 ohm range .... which would seem about right given the antenna was fed with 600 ohm parallel feed line.

I agree .... It is not accurate to say, "copper beats carbon every time" in antenna construction .... hi hi

Jim, VE3CI

7337. Re:Fw: Re: [loopantennas] T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-26 02:07:38 UTC
From: phones414
Topic: 7330 Message: 7337

WOW!!! Transpolar on 2 watts! Awesome...

That must have been some antenna to do that well. Thanks for piping in!

Darren

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 04:56 PM 3/25/2010 -0600, you wrote:
> >
> >
> >Terminated antennas are not necessarily lossy - look at terminated
> >beverages! Does one dump a whole pile of wattage into the resisting
> >termination? No, not really. Otherwise, they would not be used.
> >
> >The K9AYs I've heard can be run as transmitting loops as well, and I
> >recall vaguely an article using a 900 ohm terminated loop [10' dia.] for
> >TX/RX on 160m not too long ago...
> >
> >The terminations are to control the impedance to a degree, and regulate
> >the current on the legs of the antenna. since an ideal termination is
> >non-inductive/capacitive, it acts as a pure [or close to pure] lumped
> >impedance to work WITHIN the antenna system, not as a dummy load.
> >
> >Considering the simplicity of the T2FD in many ways, why not try one out?
> >The only big question is how much RF does go into the resistor, and that
> >will affect choice of wattage.
> >
> >Folks have to STOP considering resistive elements in an atenna system as a
> >pure dummy load only, and as a part of the whole!
> >
> >Darren VE6IZ
>
>
> Hi Darren,
>
> Many years ago when I was a young fellow ... I worked in an Arctic research
> station and we had a large terminated rhombic antenna pointed more or less
> south (where else could it point hi hi) From time to time I would bring a
> small QRP rig (made from tubes ... e.g. before transistors!) into the
> station and would work a fellow in a research station in the Antarctic with
> my 2 watts.
>
> the official commercial use of the antenna was for pulsed transmissions
> from 2 to 30 mhz. for the purpose of sounding the ionosphere. To this day
> I have never experienced any other antenna as effective .... even though

> there no doubt would be some loss in the termination resistor. It sticks
> in my mind that the termination resistor in the Rhombic was in the 600 ohm
> range .... which would seem about right given the antenna was fed with 600
> ohm parallel feed line.
>
> I agree .... It is not accurate to say, "copper beats carbon every
> time" in antenna construction .... hi hi
>
> Jim, VE3CI
>

7338. Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-26 12:20:35 UTC
From: jrtow3rd@bellsouth.net
Topic: 7311 Message: 7338

First, my use is SWLing - receive-only. I used a homebrew TTFD for several years - and compared it with my 145 ft lw matched via a pi-network to my various receivers, which was my standard over the years. Also available was an Alpha Delta Sloper. It and the TTFD were fed by RG-8X, the latter matched via a 9:1 BALUN and terminated with a 450 Ohm carbon composition resistance (Four 1.8 kOhm 1 W resistors in parallel.). The Sloper picked up nearl as much noise as the lw, just not as much signal - but no tuner tweaking was needed. The TTFD was the quietest - and didn't seem to have the severe fades the lw had - or noise pickup and rapid signal drop-off the sloper had. No tuner tweaking, either.

That tuner tweaking changed - I couldn't stand it - I refed it with 450 Ohm ladder line - and built a balanced tuner/matcher for the antenna, locating it at the window where the line came in. Too much trouble - the care of a balanced high impedance transmission line is difficult to contend with when you've become accustomed to coax. The time frame was too long, but it sure seemed that the balanced line fed had the good wide frequency range, low noise, but stronger signals than the coax fed version - could have been my 9: BALUN. Sadly, the feedline ended up in a pile of leaves I was muching. My antennas have been down for years.

RF Systems sells a receive-only TTFD that is 45 ft long and fed with 50 Ohm coax ~$400 at Universal. The low noise reception, combined with wide bandwidth, are alluring. At worst, the termination resistance absorbs half your signal - received or transmitted. Not that big a deal for a hands-free wide band antenna - with both vertical and horizontal E-wave components. Size the termination, from 360-500 Ohms dependent on conductor size/spacing, to dissipate at least 50% of your transmitter key down RMS RF output power for CW/SSB - higher for 100% duty cycle, like RTTY. A good 9:1 to 11:1 BALUN, with proper power handling capability, is required - or 450 Ohm ladder line and a good balanced tuner. Go coax!

John

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> It's a loop that makes up for its lack of circumference with a resistor. To me, it is likely to be a good choice for anyone short of space. Otherwise, use more wire and don't turn transmitter power into heat losses. Copper beats carbon hands down.
> Regards,Mike G4HOL
>
> --- On Thu, 25/3/10, Jim Dunstan <jimdunstan@...> wrote:
>
> From: Jim Dunstan <jimdunstan@...>
> Subject: [loopantennas] T2FD as a transmitting antenna
> To: loopantennas@yahoogroups.com
> Date: Thursday, 25 March, 2010, 20:10
>
>
>
>

>
>
>
> Â
>
>
>
>
>
>
>
>
>
>
>
>
> The tilted T2FD has been described as the forgotten antenna. It has
>
> characteristics of a dipole as well as a loop. It is terminated with a
>
> non-inductive resistor opposite the feed point. It is more compact in
>
> length than a dipole and professes to be very quiet on receive and
>
> broadband , at least a 5:1 frequency ratio. From what I have read it's
>
> present use is limited to a broadband quiet SW receiving antenna ....
>
> although I understand the US Navy conducted long term HF communications
>
> trials and concluded it was more effective than individual wire antennas
>
> for HF frequencies in the HF spectrum (a myth ??). If the trial is correct
>
> then the antenna must have some sort of gain .... since there would be a
>
> starting loss due to the termination.
>
>
>
> It sounds like an ideal Amateur radio antenna ... yet I have no experience
>
> with it ... nor do I know anyone who has used one. I notice ICOM sells an
>
> all band antenna that appears to be a T2FD ... the AH-710 .... again no
>
> info on it not even in Eham reviews.
>
>
>
> Anyone know anything about this antenna ?

>
>
>
> Jim, VE3CI
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7339. Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-26 12:26:18 UTC
From: wild_bill_yonder
Topic: 7311 Message: 7339

Last fall I came into posession of the Barker and Williamson T2FD from a SK estate. I found it to be a good, quiet antenna on Rx. For some reason I never keyed up into it beyond taking swr measurement. I did, however, search online and found that L.B. Cebik W4RNL/SK did some extensive testing on it. It is a so-so radiator, less output than a dipole. Its main advantage is in the fact that it's very broadband, making it popular with ALE fans, but there are other antennas that can give good Tx on most of the ham bands. But where other antennas usually require an ATU, the T2FD does not, and with ALE you want fast switching between bands and most automatic ATU's are too slow for that use. As far as Rx goes though, I've had up an 80m OCF dipole, a G5RV and a 135' doublet in the same location. The T2FD has much lower noise than all of those. After I move to a new QTH I may have it up as a dedicated Rx antenna.

Bill W2NVD

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
>
> The tilted T2FD has been described as the forgotten antenna. It has
> characteristics of a dipole as well as a loop. It is terminated with a
> non-inductive resistor opposite the feed point. It is more compact in
> length than a dipole and professes to be very quiet on receive and
> broadband , at least a 5:1 frequency ratio. From what I have read it's
> present use is limited to a broadband quiet SW receiving antenna ....
> although I understand the US Navy conducted long term HF communications
> trials and concluded it was more effective than individual wire antennas
> for HF frequencies in the HF spectrum (a myth ??). If the trial is correct
> then the antenna must have some sort of gain .... since there would be a
> starting loss due to the termination.
>
> It sounds like an ideal Amateur radio antenna ... yet I have no experience
> with it ... nor do I know anyone who has used one. I notice ICOM sells an
> all band antenna that appears to be a T2FD ... the AH-710 .... again no
> info on it not even in Eham reviews.
>
> Anyone know anything about this antenna ?
>
> Jim, VE3CI
>

7340. Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-26 16:16:36 UTC
From: k9jfk
Topic: 7311 Message: 7340

This antenna has been modeled a number of times. Its main virtues are size and the ability to transmit on any hf frequency. Main con is it's not very efficient. Not really a problem if you have watts to waste.

If I remember right, the efficiency is below 50%.

73 - jim - k9jfk

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
>
> The tilted T2FD has been described as the forgotten antenna. It has
> characteristics of a dipole as well as a loop. It is terminated with a
> non-inductive resistor opposite the feed point.
> Anyone know anything about this antenna ?
>
> Jim, VE3CI
>

7341. Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-27 16:16:12 UTC
From: tenorman1952
Topic: 7311 Message: 7341

--- In loopantennas@yahoogroups.com, "k9jfk" <k9jfk@...> wrote:
>
> This antenna has been modeled a number of times. Its main virtues are size and the ability to transmit on any hf frequency. Main con is it's not very efficient. Not really a problem if you have watts to waste.
>
> If I remember right, the efficiency is below 50%.
>
> 73 - jim - k9jfk

Yes, very low efficiency, so low we made no contacts with this antenna last Field Day. Nor did we hear anyone. A waste of wire.

But it had great SWR readings!

73
Paul
AE5JU

7342. [loopantennas] Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-27 16:58:12 UTC
From: Chris Smolinski
Topic: 7311 Message: 7342

>--- In loopantennas@yahoogroups.com, "k9jfk" <k9jfk@...> wrote:
>>
>> This antenna has been modeled a number of times. Its main virtues
>>are size and the ability to transmit on any hf frequency. Main con
>>is it's not very efficient. Not really a problem if you have watts
>>to waste.
>>
>> If I remember right, the efficiency is below 50%.
>>
>> 73 - jim - k9jfk
>
>
>Yes, very low efficiency, so low we made no contacts with this
>antenna last Field Day. Nor did we hear anyone. A waste of wire.
>
>But it had great SWR readings!
>
>73
>Paul
>AE5JU
>

I use a 132 ft T2FD as my primary receiving antenna. I also have
several dipoles, one dedicated to each band of interest. The signal
levels on the T2FD are lower than the dipoles (as expected) but the
signal to noise ratio is higher. As a result, I pretty much just use
the T2FD for receiving, it is that much better.

--

Chris Smolinski
Black Cat Systems
http://www.blackcatsystems.com

7343. Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-27 17:52:38 UTC
From: Darren Hennig
Topic: 7311 Message: 7343

Efficiency of a GOOD design on a T2FD is at best 80-85% with only 15% going to the termination. The 50% figure has been bandied about in ham circles for years, and is somewhat due to the original tester designing the unit wiht minimum SWR in mind only.

Darren

[Non-text portions of this message have been removed]

7344. Re: [loopantennas] Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-27 18:09:51 UTC
From: Paul V Birke PEng
Topic: 7311 Message: 7344

excellent Darren !!!, I had kinda thought the answer may lay in this direction

BTW I now immediately determine the typical efficiency is about sqrt(50*85)= 65%
(a engineering prediction method taught to me by Prof Michel Poloujadoff of U of Paris that is typically leading to a good estimate (of whatever))
LOW= 50%
HIGH = 85%
Michel's general formula is the geometric mean = sqrt(LOW*HIGH)

65% now being the likely working efficiency for any reasonable implementation of this design

best wishes
Paul VE3PVB

From: Darren Hennig <dhennig2@...>
To: loopantennas@yahoogroups.com
Sent: Sat, March 27, 2010 1:52:38 PM
Subject: [loopantennas] Re: T2FD as a transmitting antenna

Efficiency of a GOOD design on a T2FD is at best 80-85% with only 15% going to the termination. The 50% figure has been bandied about in ham circles for years, and is somewhat due to the original tester designing the unit wiht minimum SWR in mind only.

Darren

[Non-text portions of this message have been removed]

7345. Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-28 01:05:01 UTC
From: Darren Hennig
Topic: 7311 Message: 7345

People use short verticals that are <50% efficient too, if I recall. So, the T2FD is not so bad a tradeoff in general, even if less than 80%.

[Non-text portions of this message have been removed]

7346. Re: Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-27 17:22:09 UTC
From: grayrobertc
Topic: 7280 Message: 7346

Darren!

I'm a total newbie! I tried this aperiodic loop without the preamp...but I don't get enough signal into my portable Sony 7600GR. Near windows, it's pretty much like using the whip. I'm afraid if I get the preamp, it might overload a little portable like this...since I believe the portables are much more sensitive than the table-top rigs. I recall that preamp gave a gain of 26 dB or so, but there's no gain control knob! What do you think will happen in my situation?

Thanks,
Robert

--- In loopantennas@yahoogroups.com, "Darren Hennig" <dhennig2@...> wrote:
>
> I recently tried an aperiodic variant to a loop for general SWL/BCB receiving. My initial results have shown my prototype unit to OUTDO both my AOR WL-500 and LA390 in many respects. More on that in a few...

7347. Balun for LF magloop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-28 18:13:53 UTC
From: Daniele
Topic: 7347 Message: 7347

Hi all,
I'm new to the LF and just starting to play with an homebrew tuned magloop and my small portable (Tecsun PL-600).
I managed to enable (by means of the soldering iron :-)) the external antenna jack also for MF and LF on PL-600 (normally it only works in HF). Now I can connect the pick-up turn of my magloop directly to the radio but I know it would be better to try to keep it balanced by means of a balun. Here my problem: magloop simulation (with rjeloop3.exe) tells the antenna has an impedance of between 500 and 2500 ohms (on the frequencies it covers, from 280KHz up to 1000KHz). On the other hand, I don't think the receiver have a 50ohm input. In fact, it is designed typically for HF random wires and has a JFET input buffer stage that should ensure an high impedance. Given these conditions, does it still make sense to build a balun? If yes, how could it be designed in terms of number of turns (primary side and secondary side), etc.?
Many thanks for any feedback.
Reg's
Daniele

7348. Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-28 18:45:24 UTC
From: k9jfk
Topic: 7311 Message: 7348

Cebik, W4RNL(sk), modeled this antenna in two different articles.

Modeling the T2FD, and
Notes on the Terminated Wide-Band "Folded Dipole"

These articles are available at

http://www.cebik.com

for free by just registering. Every antenna has a good use, depending on the circumstances. Don't try and reinvent the wheel, though. Do your research to avoid unnecessary expense and wasted time and effort.

In the case of the T2FD, the design has been around a long time. The first chart in the second article "Notes on the ..." shows there is a difference of at least 3db, to the more often 6db, between it and the reference antenna... same length doublet, open wire transmission lines, and antenna tuner. So what does that tell me?

100 watts in with a 3db loss = 50 watts
100 watts in with a 6db loss = 25 watts

If I don't want to use an antenna tuner and open wire line, or can't, then those losses must be acceptable.

73 - Jim - K9JFK

7349. Re: T2FD as RECEIVING antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-29 00:01:09 UTC
From: xtemporize
Topic: 7311 Message: 7349

What accounts for the frequently reported result of "better S/NR,
do you suppose? -Hue Miller

7350. Re: [loopantennas] Re: T2FD as RECEIVING antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-29 04:19:01 UTC
From: Richard (Rick) Karlquist
Topic: 7311 Message: 7350

xtemporize wrote:
>
>
>
> What accounts for the frequently reported result of "better S/NR,
> do you suppose? -Hue Miller
>

If you have 2 antennas with the same S/N ratio, but different
gain, it is fairly easy to get fooled into thinking the
one with less gain "sounds better," is "quieter" or has better
S/N. What you need to do is put an attenuator on the higher
gain antenna to lower its gain down to the level of the other
antenna. After doing this, the perceived difference will often
disappear. The reason for this phenomenon has to do with the
AGC characteristics of receivers. Anyway, this is why I don't
put a whole lot of stock in anecdotal reports.

Rick N6RK

7351. Re: [loopantennas] Re: T2FD as RECEIVING antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-29 09:47:25 UTC
From: M HOLDEN
Topic: 7311 Message: 7351

Any balanced loop has a low noise performance compared with other systems as the positve going noise peaks on one side are cancelled by the negative going noise peaks on the other (at any instant). Putting a resistor half way round can't change that property.
Regards, Mike G4HOL

--- On Mon, 29/3/10, xtemporize <kargo_cult@...> wrote:

From: xtemporize <kargo_cult@msn.com>
Subject: [loopantennas] Re: T2FD as RECEIVING antenna
To: loopantennas@yahoogroups.com
Date: Monday, 29 March, 2010, 1:01

What accounts for the frequently reported result of "better S/NR,

do you suppose? -Hue Miller

[Non-text portions of this message have been removed]

7352. Re: T2FD as RECEIVING antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-29 16:54:54 UTC
From: Doug Kniffen
Topic: 7311 Message: 7352

> 3a. Re: T2FD as RECEIVING antenna
> Posted by: "xtemporize" kargo_cult@... xtemporize
> Date: Sun Mar 28, 2010 5:01 pm ((PDT))
>
>
> What accounts for the frequently reported result of "better S/NR,
> do you suppose? -Hue Miller

What kind of noise? That's what makes the difference. Resistive termination (T2FD) works better than anything else when the noise is off frequency (front end overload), and that's more of a problem than many realize. Wire length and desired frequency determine impedance and matching a resistive termination to that impedance will cause greater signal loss to off frequency noise than than desired frequency signal.

Doesn't matter how efficient an antenna may or may not be. You've got to get the off frequency noise low enough for the tuner to reject, without decreasing the desired signal too much. You can do that with a big antenna that has resistive termination.

Physically small antennas are fine for transmitting and while they may cut down receive noise they also cut down desired signal received. More metal in the air equals more desired signal received. Regardless of what all the books say; transmit and receive are not reciprocal in practice. It may be hard to recognize that unless you've tried some backyard radio astronomy because ionospheric variations can easily overwhelm any performance differences between the biggest and smallest antennas used for terrestrial work.

Doug Kniffen

7353. Re: T2FD as RECEIVING antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-30 00:11:58 UTC
From: Darren Hennig
Topic: 7311 Message: 7353

The only thing not fully investigated by Cebik is the effect of Resistor and he focused on optimizing SWR only. There may be a range of R's that may trade off amount of power going to load.

FYI for all, remember that a short vertical is <50% efficient, so this is not a totally unfounded tradeoff, given the bandwidth and simplicity. I have seen other reports stating a GOOD T2FD with slightly different layout is closer to 85% efficient in it's best band. I need to see if I can find this again...

Darren

[Non-text portions of this message have been removed]

7354. Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-30 04:36:01 UTC
From: ozzy_1kw
Topic: 7311 Message: 7354

how do i determine the size of the coaxial coupling loop to the size of the main loop. The coax loop from the transmitter to the main loop is incredibly small .is there a formula? I want 27MHz information to start with please.

Cheers Rob

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Wed, 24 Mar 2010 06:57:30 -0000
> "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> > When you transmit through an antenna,what actually travels through space to the other
> > station,voltage or current ? And how does it leave the antenna wire,what pushes it away out into
> > space? Cheers Rob
> >
> >
> >
>
> Hi
> Google OHMS LAW you should realise what the answer is very quickly, that's one you need to learn and
> know parrot fashion.
> If you are going to spend some money buy either the ARRL handbook, published each year or the RSGB
> handbook,
> I'm sure there is an Australian version as well. Read the sections on theory, then move on to
> antennas and propagation.
> I know said you dont want learn parrot fashion as new Hams do, but I suggest you find your nearest
> club and get the info on what foundation courses there are for entry level in Aus.
> You have to learn some theory, then you will understand what you are being advised and how to
> implement it.
> If you dont want to contact your nearest club, find out what the entry levels are , get the syllabus
> start learning then take what ever entry exams there are.
> In the UK the foundation exam is handled by Amateur clubs and is incredibly easy to pass, you then
> have access to most of the Ham bands with low power.
> The same system will probably operate where you or something very similar.
> good luck
>
> --

> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7355. Re: [loopantennas] Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-30 11:29:41 UTC
From: richard
Topic: 7311 Message: 7355

```
On Tue, 30 Mar 2010 04:36:01 -0000
"ozzy_1kw" <ozzy_1kw@...> wrote:

> how do i determine the size of the coaxial coupling loop to the size of the main loop.
The coax
> loop from the transmitter to the main loop is incredibly small .is there a formula? I
want 27MHz
> information to start with please.
>
> Cheers Rob
>

In my previous mails I sent you a link for a spreadsheet program from a Finnish amateur,for
calculating the loop sizes, that's if your using a mag loop , and not a halfwave loop,
On small loop you may be better off delta with a delta match,
just google mag loop delta match , ( good for both types of loop)
and it that all fails start with about 250 mm and trim for best return loss.

--
Best wishes

Richard Bown

##########################################################################################
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##########################################################################################
```

7356. Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-30 15:26:32 UTC
From: Darren Hennig
Topic: 7311 Message: 7356

The coupling loop is in general between 1/5-1/4 the diameter of the main loop. 1/5, or 20%, should be ideal.

Darren

[Non-text portions of this message have been removed]

7357. (no subject)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 02:08:21 UTC
From: Bill McGraw
Topic: 7357 Message: 7357

Ignore any fake email I was in London. I'm rebuilding my address book slowly, lost it and 2 days of email if you sent me any. Got hijacked.

Bill McGraw, KF5FJZ
"Somewhere South of Chicago"
Greenville, Mississippi

7358. Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 06:09:31 UTC
From: ozzy_1kw
Topic: 7311 Message: 7358

TY Darren, i know where to start now.

Richard i didnt receive a link is it possible i could trouble you to resend it please?

Although im only cb i absolutely love how a bit of wire can pull signals out of the air.

Its a fascination that ive got to learn how and why. Low power antennas dont worry me cause im learning how they work.

My friends have yagis etc and i can get on air with a 28" loop LOL.

Cheers and TY everyone for the help.

Cheers Rob

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Tue, 30 Mar 2010 04:36:01 -0000
> "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> > how do i determine the size of the coaxial coupling loop to the size of the main loop. The coax
> > loop from the transmitter to the main loop is incredibly small .is there a formula? I want 27MHz
> > information to start with please.
> >
> > Cheers Rob
> >
>
> In my previous mails I sent you a link for a spreadsheet program from a Finnish amateur,for
> calculating the loop sizes, that's if your using a mag loop , and not a halfwave loop,
> On small loop you may be better off delta with a delta match,
> just google mag loop delta match , (good for both types of loop)
> and it that all fails start with about 250 mm and trim for best return loss.
>
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7359. RE: Hello Chris

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 09:16:28 UTC
From: Chris Harris
Topic: 7359 Message: 7359

Hi Rob

Think of the capacitor and the loop (inductor) as being in series not parallel. They exchange energy. The cap discharges into the loop and the inductance keeps the current flowing after the cap has discharged as the magnetic field generated by the current in the loop collapses. Repeat in the opposite direction.
Some of the collapsing magnetic field generates an electric field in free space. When that electric field collapses it generates a new magnetic field in free space etc each way at 26,500,000 time a second. (on the NZ CB calling frequency anyway)
That is the magic. Those free space fields are your radio wave and propagating away from your loop at the speed of light.
As a ham you get to play with this magic.

I never calculate the size of the feeder loop other than to make it about quarter the size of the main loop and then shrink it until I can match to the radio without an antenna tuner.

What you are talking about below with the 6" wire connected to the loop and feed line is a gamma match. I've never liked them because they upset the balance and require an additional capacitor to make them work properly.

I'll send this to the group as someone might have something useful to say about gamma matches to dispel my prejudice.

Cheers, Chris zl3cjh

-----Original Message-----
From: Robby N Jones [mailto:ozzy_1kw@...]
Sent: Sunday, 28 March 2010 5:43 p.m.
To: Chris Harris
Subject: Re: Hello Chris

Hi Chris,
Firstly TY for responding. I understand from doing online studies that the wheel ,split ,in parrallel with the capacitor makes a tuned circuit and i appreciate its very low power transmit cause of the capacitor spacing that breaks down .

But what i dont understand is how do you calculate the small loop of feedline opposite the capacitor or bottom of loop?

From what ive seen the small loop is very small.some ive seen have a wire from the coax that grounds to the rim 6" or so around. This is where im baffled.Does the small loop electrically contact the loop or is

it inductively coupled?

I LOVE Radio and im going to become a ham shortly,but lots of new hams here just get copies to the exam questions and learn them parrott fashion,whereas id like to actually know some of it from study and actual hands on.

cheers and TY Rob

From: Chris Harris <chris.harris@...>
To: ozzy_1kw <ozzy_1kw@...>
Sent: Wed, 24 March, 2010 8:01:10 PM
Subject: RE: Hello Chris

Hi Robby, it was just a mag loop with a one fifth circumference pickup loop of 2mm copper wire hooked up to the coax feeder and a split rotor variable cap on the cut in the wheel.

Magloop4.exe:

S. Shape of loop ... CIRCLE W. Watts RF power input
4.00
P. Perimeter, metres 2.500 H. Height, metres .....
2.00
C. Conductor dia, mm 30.00 R. Soil type: S,L,A,H,D
F. Frequency, MHz .. 26.450 Low resistance: 30.00
ohm-metres

Electrical length of perimeter 0.221 wavelengths
Diameter of equivalent circle 0.796 metres for same enclosed
area
Loop current opposite tune capacitor 2.77 rms amps
Tuning capacitor setting 17.99 picofarads for resonance
Voltage across tuning capacitor 870 peak RF volts
Inductively coupled ground loss 0.98 percent of Tx output
power
Capacitance coupled ground loss 0.08 .. ..
Loss in loop conductor resistance 5.45 .. ..
Radiating efficiency 93.49 percent

3-dB receiving bandwidth 124.2 kilo-Hz with matched
receiver
Transmitting bandwidth 43.9 kilo-Hz between SWR=2:1
points
Coupling loop diameter 0.169 metres, to match 50 ohms
coax

Loss relative to ideal antenna 0.3 decibels = 0.0 S-units
Path = 800 km: S-meter reading "S"= 6.0 1 hop, darkness, F-layer
8000 km: .. .. "S"= 0.0 3 hops, daylight ..

Vary Freq with keys 1,2 Perim 3,4 Diam 5,6 Height 7,8 Soil ohms
9,0

The tuning was very fiddly and the band was dead, so it didn't get developed much. As for unwanted RF in the house there was plenty because I had it propped up within reach for tuning. Also note the 870 peak RF volts. Certainly makes flies jump off when you PTT :-) When I ran it on higher power the cap arced so strictly QRP. I might reresurect it with a beefed up cap and a servo on the roof now that the bands are opening.

If the oz ham exam is as easy as the NZ one you could do a quick cram and exam and get legal or do you like the outlaw image ;-)

Cheers, Chris

> -----Original Message-----
> From: notify@yahoogroups.com [mailto:notify@yahoogroups.com]
> On Behalf Of ozzy_1kw
> Sent: Wednesday, 24 March 2010 2:52 p.m.
> To: Chris Harris
> Subject: Hello Chris
>
>
> Im interrested in your bicycle wheel antenna as its extremely
> portable and a fun thing to build and learn from.
>
> Do you have a circuit or plans i could follow please. I can
> follow simple electric circuits.
>
> Will the coax bring unwanted rf into my house?
> TY in Advance.. Cheers Robby.
>

[Non-text portions of this message have been removed]

7360. Re: Hello Chris

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 08:59:33 UTC
From: ozzy_1kw
Topic: 7359 Message: 7360

Yea,i think ive got it. They discharge into each other and the radio resupplies the energy to restart the oscillation. The bi product is an electric field that is how the antenna radiates.

I can understand that,but what im having trouble grasping is the small coaxial loop.With that small a loop surely it would see a dead short at the transmitter end. a 6" length of wire cant have too much resistance to balance ohms law??? Or is the feed loop being reinforced by the collapsing magnetic field of the main loop ?

Cheers Rob

--- In loopantennas@yahoogroups.com, "Chris Harris" <chris.harris@...> wrote:
>
> Hi Rob
>
> Think of the capacitor and the loop (inductor) as being in series not
> parallel. They exchange energy. The cap discharges into the loop and the
> inductance keeps the current flowing after the cap has discharged as the
> magnetic field generated by the current in the loop collapses. Repeat in
> the opposite direction.
> Some of the collapsing magnetic field generates an electric field in
> free space. When that electric field collapses it generates a new
> magnetic field in free space etc each way at 26,500,000 time a second.
> (on the NZ CB calling frequency anyway)
> That is the magic. Those free space fields are your radio wave and
> propagating away from your loop at the speed of light.
> As a ham you get to play with this magic.
>
> I never calculate the size of the feeder loop other than to make it
> about quarter the size of the main loop and then shrink it until I can
> match to the radio without an antenna tuner.
>
> What you are talking about below with the 6" wire connected to the loop
> and feed line is a gamma match. I've never liked them because they upset
> the balance and require an additional capacitor to make them work
> properly.
>
> I'll send this to the group as someone might have something useful to
> say about gamma matches to dispel my prejudice.
>
> Cheers, Chris zl3cjh
>
> -----Original Message-----
> From: Robby N Jones [mailto:ozzy_1kw@...]
> Sent: Sunday, 28 March 2010 5:43 p.m.
> To: Chris Harris

> Subject: Re: Hello Chris
>
>
> Hi Chris,
> Firstly TY for responding. I understand from doing online studies that
> the wheel ,split ,in parrallel with the capacitor makes a tuned circuit
> and i appreciate its very low power transmit cause of the capacitor
> spacing that breaks down .
>
> But what i dont understand is how do you calculate the small loop of
> feedline opposite the capacitor or bottom of loop?
>
> From what ive seen the small loop is very small.some ive seen have a
> wire from the coax that grounds to the rim 6" or so around. This is
> where im baffled.Does the small loop electrically contact the loop or is
> it inductively coupled?
>
> I LOVE Radio and im going to become a ham shortly,but lots of new hams
> here just get copies to the exam questions and learn them parrott
> fashion,whereas id like to actually know some of it from study and
> actual hands on.
>
> cheers and TY Rob
>
>
>
>
>
> _____
>
> From: Chris Harris <chris.harris@...>
> To: ozzy_1kw <ozzy_1kw@...>
> Sent: Wed, 24 March, 2010 8:01:10 PM
> Subject: RE: Hello Chris
>
> Hi Robby, it was just a mag loop with a one fifth circumference pickup
> loop of 2mm copper wire hooked up to the coax feeder and a split rotor
> variable cap on the cut in the wheel.
>
> Magloop4.exe:
>
> S. Shape of loop ... CIRCLE W. Watts RF power input
> 4.00
> P. Perimeter, metres 2.500 H. Height, metres .....
> 2.00
> C. Conductor dia, mm 30.00 R. Soil type: S,L,A,H,D
> F. Frequency, MHz .. 26.450 Low resistance: 30.00
> ohm-metres
>
> Electrical length of perimeter 0.221 wavelengths

> Diameter of equivalent circle 0.796 metres for same enclosed
> area
> Loop current opposite tune capacitor 2.77 rms amps
> Tuning capacitor setting 17.99 picofarads for resonance
> Voltage across tuning capacitor 870 peak RF volts
> Inductively coupled ground loss 0.98 percent of Tx output
> power
> Capacitance coupled ground loss 0.08 .. ..
> Loss in loop conductor resistance 5.45 .. ..
> Radiating efficiency 93.49 percent
>
> 3-dB receiving bandwidth 124.2 kilo-Hz with matched
> receiver
> Transmitting bandwidth 43.9 kilo-Hz between SWR=2:1
> points
> Coupling loop diameter 0.169 metres, to match 50 ohms
> coax
>
> Loss relative to ideal antenna 0.3 decibels = 0.0 S-units
> Path = 800 km: S-meter reading "S"= 6.0 1 hop, darkness, F-layer
> 8000 km: .. .. "S"= 0.0 3 hops, daylight ..
>
> Vary Freq with keys 1,2 Perim 3,4 Diam 5,6 Height 7,8 Soil ohms
> 9,0
>
> The tuning was very fiddly and the band was dead, so it didn't get
> developed much. As for unwanted RF in the house there was plenty because
> I had it propped up within reach for tuning. Also note the 870 peak RF
> volts. Certainly makes flies jump off when you PTT :-) When I ran it on
> higher power the cap arced so strictly QRP. I might reresurect it with a
> beefed up cap and a servo on the roof now that the bands are opening.
>
> If the oz ham exam is as easy as the NZ one you could do a quick cram
> and exam and get legal or do you like the outlaw image ;-)
>
> Cheers, Chris
>
> > -----Original Message-----
> > From: notify@yahoogroups.com [mailto:notify@yahoogroups.com]
> > On Behalf Of ozzy_1kw
> > Sent: Wednesday, 24 March 2010 2:52 p.m.
> > To: Chris Harris
> > Subject: Hello Chris
> >
> >
> > Im interrested in your bicycle wheel antenna as its extremely
> > portable and a fun thing to build and learn from.
> >
> > Do you have a circuit or plans i could follow please. I can
> > follow simple electric circuits.

> >
> > Will the coax bring unwanted rf into my house?
> > TY in Advance.. Cheers Robby.
> >
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7361. Re: [loopantennas] Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 09:35:27 UTC
From: richard
Topic: 7311 Message: 7361

On Wed, 31 Mar 2010 06:09:31 -0000
"ozzy_1kw" <ozzy_1kw@...> wrote:

> TY Darren, i know where to start now.
>
> Richard i didnt receive a link is it possible i could trouble you to resend it please?
>
> Although im only cb i absolutely love how a bit of wire can pull signals out of the air.
>
> Its a fascination that ive got to learn how and why. Low power antennas dont worry me cause im
> learning how they work.
>
> My friends have yagis etc and i can get on air with a 28" loop LOL.
>
> Cheers and TY everyone for the help.
>
> Cheers Rob
>
>

Yer tis Rob
use the link for the excel file, download it, make a copy so you have write permissions and run it
is excel. Only change the figures in the left hand column.
ie. where it says 3.5 Mhz , change to 27

http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm

Have fun

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7362. Re: [loopantennas] Re: Hello Chris

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 09:41:09 UTC
From: M HOLDEN
Topic: 7359 Message: 7362

That is a good point Ozzy. I think because of the perceived short circuit many new amateurs are uneasy about loops. Yet they somehow accept a folded dipole more readily. What is a short circuit to direct current can be a good radiator of R.F. Once amateurs can get their heads round that idea, the loop concept opens up (into a group like this!) and the possibilities manifest themselves. Good luck, Mike G4HOL

--- On Wed, 31/3/10, ozzy_1kw <ozzy_1kw@...> wrote:

From: ozzy_1kw <ozzy_1kw@...>
Subject: [loopantennas] Re: Hello Chris
To: loopantennas@yahoogroups.com
Date: Wednesday, 31 March, 2010, 9:59

Yea,i think ive got it. They discharge into each other and the radio resupplies the energy to restart the oscillation. The bi product is an electric field that is how the antenna radiates.

I can understand that,but what im having trouble grasping is the small coaxial loop.With that small a loop surely it would see a dead short at the transmitter end. a 6" length of wire cant have too much resistance to balance ohms law??? Or is the feed loop being reinforced by the collapsing magnetic field of the main loop ?

Cheers Rob

--- In loopantennas@ yahoogroups. com, "Chris Harris" <chris.harris@ ...> wrote:

>

> Hi Rob

>

> Think of the capacitor and the loop (inductor) as being in series not

> parallel. They exchange energy. The cap discharges into the loop and the

> inductance keeps the current flowing after the cap has discharged as the

> magnetic field generated by the current in the loop collapses. Repeat in

> the opposite direction.

> Some of the collapsing magnetic field generates an electric field in

> free space. When that electric field collapses it generates a new

> magnetic field in free space etc each way at 26,500,000 time a second.

> (on the NZ CB calling frequency anyway)

> That is the magic. Those free space fields are your radio wave and

> propagating away from your loop at the speed of light.

> As a ham you get to play with this magic.

>

> I never calculate the size of the feeder loop other than to make it

> about quarter the size of the main loop and then shrink it until I can

> match to the radio without an antenna tuner.

>

> What you are talking about below with the 6" wire connected to the loop

> and feed line is a gamma match. I've never liked them because they upset

> the balance and require an additional capacitor to make them work

> properly.

>

> I'll send this to the group as someone might have something useful to

> say about gamma matches to dispel my prejudice.

>

> Cheers, Chris zl3cjh

>

> -----Original Message-----

> From: Robby N Jones [mailto:ozzy_ 1kw@...]

> Sent: Sunday, 28 March 2010 5:43 p.m.

> To: Chris Harris

> Subject: Re: Hello Chris

>

>

> Hi Chris,

> Firstly TY for responding. I understand from doing online studies that

> the wheel ,split ,in parrallel with the capacitor makes a tuned circuit

> and i appreciate its very low power transmit cause of the capacitor

> spacing that breaks down .
>
> But what i dont understand is how do you calculate the small loop of
> feedline opposite the capacitor or bottom of loop?
>
> From what ive seen the small loop is very small.some ive seen have a
> wire from the coax that grounds to the rim 6" or so around. This is
> where im baffled.Does the small loop electrically contact the loop or is
> it inductively coupled?
>
> I LOVE Radio and im going to become a ham shortly,but lots of new hams
> here just get copies to the exam questions and learn them parrott
> fashion,whereas id like to actually know some of it from study and
> actual hands on.
>
> cheers and TY Rob
>
>
>
>
>
> _____
>
> From: Chris Harris <chris.harris@ ...>
> To: ozzy_1kw <ozzy_1kw@.. .>
> Sent: Wed, 24 March, 2010 8:01:10 PM
> Subject: RE: Hello Chris
>
> Hi Robby, it was just a mag loop with a one fifth circumference pickup

> loop of 2mm copper wire hooked up to the coax feeder and a split rotor

> variable cap on the cut in the wheel.

>

> Magloop4.exe:

>

> S. Shape of loop ... CIRCLE W. Watts RF power input

> 4.00

> P. Perimeter, metres 2.500 H. Height, metres .....

> 2.00

> C. Conductor dia, mm 30.00 R. Soil type: S,L,A,H,D

> F. Frequency, MHz .. 26.450 Low resistance: 30.00

> ohm-metres

>

> Electrical length of perimeter 0.221 wavelengths

> Diameter of equivalent circle 0.796 metres for same enclosed

> area

> Loop current opposite tune capacitor 2.77 rms amps

> Tuning capacitor setting 17.99 picofarads for resonance

> Voltage across tuning capacitor 870 peak RF volts

> Inductively coupled ground loss 0.98 percent of Tx output

> power

> Capacitance coupled ground loss 0.08 .. ..

> Loss in loop conductor resistance 5.45 .. ..

> Radiating efficiency 93.49 percent

>

> 3-dB receiving bandwidth 124.2 kilo-Hz with matched

> receiver

> Transmitting bandwidth 43.9 kilo-Hz between SWR=2:1

> points

> Coupling loop diameter 0.169 metres, to match 50 ohms

> coax

>

> Loss relative to ideal antenna 0.3 decibels = 0.0 S-units

> Path = 800 km: S-meter reading "S"= 6.0 1 hop, darkness, F-layer

> 8000 km: .. .. "S"= 0.0 3 hops, daylight ..

>

> Vary Freq with keys 1,2 Perim 3,4 Diam 5,6 Height 7,8 Soil ohms

> 9,0

>

> The tuning was very fiddly and the band was dead, so it didn't get

> developed much. As for unwanted RF in the house there was plenty because

> I had it propped up within reach for tuning. Also note the 870 peak RF

> volts. Certainly makes flies jump off when you PTT :-) When I ran it on

> higher power the cap arced so strictly QRP. I might reresurect it with a

> beefed up cap and a servo on the roof now that the bands are opening.

>

> If the oz ham exam is as easy as the NZ one you could do a quick cram

> and exam and get legal or do you like the outlaw image ;-)

>

> Cheers, Chris

>

> > -----Original Message-----

> > From: notify@yahoogroups. com [mailto:notify@yahoogroups. com]

> > On Behalf Of ozzy_1kw

> > Sent: Wednesday, 24 March 2010 2:52 p.m.

> > To: Chris Harris

> > Subject: Hello Chris

> >

> >

> > Im interrested in your bicycle wheel antenna as its extremely

> > portable and a fun thing to build and learn from.

> >

> > Do you have a circuit or plans i could follow please. I can

> > follow simple electric circuits.

> >

> > Will the coax bring unwanted rf into my house?

> > TY in Advance.. Cheers Robby.

> >

>

>

>

>

>

>

>

>

> [Non-text portions of this message have been removed]

>

[Non-text portions of this message have been removed]

7363. Re: Hello Chris

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 17:28:54 UTC
From: pappy_hiram
Topic: 7359 Message: 7363

think of it in terms of resistance applies to DC circuits, and Impedance applies to AC (or RF) circuits. At resonance, the tiny loop is not a short circuit on the resonant frequency, because it is inductively coupled to the larger loop. DC resistance would be in the milliohms, but the impedance would be much higher. Optimum impedance is around 50-75 ohms. Pruning the length of the loop will eventually find the resonant length for the frequency you are on, and match the output impedance of your transmitter.
The theory is one thing, but until you try it and get it to work, that's when the theory becomes "real."
Have fun with it!
Good luck,

Pappy Hiram

--- In loopantennas@yahoogroups.com, "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> Yea,i think ive got it. They discharge into each other and the radio resupplies the energy to restart the oscillation. The bi product is an electric field that is how the antenna radiates.
>
> I can understand that,but what im having trouble grasping is the small coaxial loop.With that small a loop surely it would see a dead short at the transmitter end. a 6" length of wire cant have too much resistance to balance ohms law??? Or is the feed loop being reinforced by the collapsing magnetic field of the main loop ?
>
> Cheers Rob
>
>
>
> --- In loopantennas@yahoogroups.com, "Chris Harris" <chris.harris@> wrote:
> >
> > Hi Rob
> >
> > Think of the capacitor and the loop (inductor) as being in series not
> > parallel. They exchange energy. The cap discharges into the loop and the
> > inductance keeps the current flowing after the cap has discharged as the
> > magnetic field generated by the current in the loop collapses. Repeat in
> > the opposite direction.
> > Some of the collapsing magnetic field generates an electric field in
> > free space. When that electric field collapses it generates a new
> > magnetic field in free space etc each way at 26,500,000 time a second.
> > (on the NZ CB calling frequency anyway)
> > That is the magic. Those free space fields are your radio wave and
> > propagating away from your loop at the speed of light.
> > As a ham you get to play with this magic.
> >

> > I never calculate the size of the feeder loop other than to make it
> > about quarter the size of the main loop and then shrink it until I can
> > match to the radio without an antenna tuner.
> >
> > What you are talking about below with the 6" wire connected to the loop
> > and feed line is a gamma match. I've never liked them because they upset
> > the balance and require an additional capacitor to make them work
> > properly.
> >
> > I'll send this to the group as someone might have something useful to
> > say about gamma matches to dispel my prejudice.
> >
> > Cheers, Chris zl3cjh
> >
> > -----Original Message-----
> > From: Robby N Jones [mailto:ozzy_1kw@]
> > Sent: Sunday, 28 March 2010 5:43 p.m.
> > To: Chris Harris
> > Subject: Re: Hello Chris
> >
> >
> > Hi Chris,
> > Firstly TY for responding. I understand from doing online studies that
> > the wheel ,split ,in parrallel with the capacitor makes a tuned circuit
> > and i appreciate its very low power transmit cause of the capacitor
> > spacing that breaks down .
> >
> > But what i dont understand is how do you calculate the small loop of
> > feedline opposite the capacitor or bottom of loop?
> >
> > From what ive seen the small loop is very small.some ive seen have a
> > wire from the coax that grounds to the rim 6" or so around. This is
> > where im baffled.Does the small loop electrically contact the loop or is
> > it inductively coupled?
> >
> > I LOVE Radio and im going to become a ham shortly,but lots of new hams
> > here just get copies to the exam questions and learn them parrott
> > fashion,whereas id like to actually know some of it from study and
> > actual hands on.
> >
> > cheers and TY Rob
> >
> >
> >
> >
> >
> > _____
> >
> > From: Chris Harris <chris.harris@>
> > To: ozzy_1kw <ozzy_1kw@>

> > Sent: Wed, 24 March, 2010 8:01:10 PM
> > Subject: RE: Hello Chris
> >
> > Hi Robby, it was just a mag loop with a one fifth circumference pickup
> > loop of 2mm copper wire hooked up to the coax feeder and a split rotor
> > variable cap on the cut in the wheel.
> >
> > Magloop4.exe:
> >
> > S. Shape of loop ... CIRCLE W. Watts RF power input
> > 4.00
> > P. Perimeter, metres 2.500 H. Height, metres .....
> > 2.00
> > C. Conductor dia, mm 30.00 R. Soil type: S,L,A,H,D
> > F. Frequency, MHz .. 26.450 Low resistance: 30.00
> > ohm-metres
> >
> > Electrical length of perimeter 0.221 wavelengths
> > Diameter of equivalent circle 0.796 metres for same enclosed
> > area
> > Loop current opposite tune capacitor 2.77 rms amps
> > Tuning capacitor setting 17.99 picofarads for resonance
> > Voltage across tuning capacitor 870 peak RF volts
> > Inductively coupled ground loss 0.98 percent of Tx output
> > power
> > Capacitance coupled ground loss 0.08 .. ..
> > Loss in loop conductor resistance 5.45 .. ..
> > Radiating efficiency 93.49 percent
> >
> > 3-dB receiving bandwidth 124.2 kilo-Hz with matched
> > receiver
> > Transmitting bandwidth 43.9 kilo-Hz between SWR=2:1
> > points
> > Coupling loop diameter 0.169 metres, to match 50 ohms
> > coax
> >
> > Loss relative to ideal antenna 0.3 decibels = 0.0 S-units
> > Path = 800 km: S-meter reading "S"= 6.0 1 hop, darkness, F-layer
> > 8000 km: .. .. "S"= 0.0 3 hops, daylight ..
> >
> > Vary Freq with keys 1,2 Perim 3,4 Diam 5,6 Height 7,8 Soil ohms
> > 9,0
> >
> > The tuning was very fiddly and the band was dead, so it didn't get
> > developed much. As for unwanted RF in the house there was plenty because
> > I had it propped up within reach for tuning. Also note the 870 peak RF
> > volts. Certainly makes flies jump off when you PTT :-) When I ran it on
> > higher power the cap arced so strictly QRP. I might reresurect it with a
> > beefed up cap and a servo on the roof now that the bands are opening.
> >

> > If the oz ham exam is as easy as the NZ one you could do a quick cram
> > and exam and get legal or do you like the outlaw image ;-)
> >
> > Cheers, Chris
> >
> > > -----Original Message-----
> > > From: notify@yahoogroups.com [mailto:notify@yahoogroups.com]
> > > On Behalf Of ozzy_1kw
> > > Sent: Wednesday, 24 March 2010 2:52 p.m.
> > > To: Chris Harris
> > > Subject: Hello Chris
> > >
> > >
> > > Im interrested in your bicycle wheel antenna as its extremely
> > > portable and a fun thing to build and learn from.
> > >
> > > Do you have a circuit or plans i could follow please. I can
> > > follow simple electric circuits.
> > >
> > > Will the coax bring unwanted rf into my house?
> > > TY in Advance.. Cheers Robby.
> > >
> >
> >
> >
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

7365. Equipment for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 17:54:08 UTC
From: neilbellgroups
Topic: 7365 Message: 7365

Now that I have my Ham Radio license I am about to purchase a new all-band Ham Radio Transceiver and they cost $$$$. As a result I will be selling the following:

1. Like new Perseus SDR, with all original items cost new was $1,200

2. Quantum Phaser cost new was $135 + S/H includes power supply

3. Quantum QX Loop 2.0 cost new was $199 + H/S includes power supply

Please make any offers via e-mail and not the group list. These will go on e-bay on April 6 if not sold here. My e-bay rating is 100% positive! e-bay user name is neilbell.

This equipment is in mint condition and performs perfectly. Make me an offer.

Neil Bell

7366. RE: [loopantennas] Replicating the ALA330s

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 20:44:28 UTC
From: Chris Harris
Topic: 7364 Message: 7366

poor conductivity, weight, rust, difficult to work, magnetic interaction

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of inacit
Sent: Thursday, 1 April 2010 7:10 a.m.
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Replicating the ALA330s

Hello everyone,

I would like replicate the welbrook ALA330s and have a few questions;

- I'm thinking of using 1/2 inch solid wrought iron to build the 1
metre diameter loop instead coppper or aluminum, any downside to
this? hollow, solid?

- Are there any schematics or photos for the electronics available
online? I found a few posts stating there were pictures posted in
this group but I have not been able to find them.

- Mast material, should I use an non conductive/ferrous antenna mast
to hold the loop? does it matter?

- RG8x coax ok or LMR400 for a 20 foot lead in?

Thank You all for any advice you can provice..

Cheers,
JM

[Non-text portions of this message have been removed]

7367. Re: [loopantennas] Replicating the ALA330s

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-03-31 19:51:12 UTC
From: Don
Topic: 7364 Message: 7367

Wrought iron is not a very good conductor, not to mention the rust. But a 10' 4" x 1/2" thick iron loop would be very heavy to support and keep from blowing over. I would assume you already have this material laying around, but aluminum tube is a much better idea. I would use a wood dowel or PVC pipe for a stub mast then whatever below that, even if you don't use a rotator. Works for me. Just about any coax will work especially if there is an amp at the antenna. RG8 or LMR400 is probably overkill. Google Burhans loop amp for a start. Wellbrook has a patent so you probably won't find that.

Don
Upland, CA
LFL1010

On 31-Mar-10 12:10, inacit wrote:
> Hello everyone,
>
> I would like replicate the welbrook ALA330s and have a few questions;
>
> - I'm thinking of using 1/2 inch solid wrought iron to build the 1
> metre diameter loop instead coppper or aluminum, any downside to
> this? hollow, solid?
>
> - Are there any schematics or photos for the electronics available
> online? I found a few posts stating there were pictures posted in
> this group but I have not been able to find them.
>
> - Mast material, should I use an non conductive/ferrous antenna mast
> to hold the loop? does it matter?
>
> - RG8x coax ok or LMR400 for a 20 foot lead in?
>
> Thank You all for any advice you can provice..
>
> Cheers,
> JM
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than

uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.791 / Virus Database: 271.1.1/2781 - Release Date: 03/30/10 23:32:00
>
>

7368. Re: making a loop for 27MHz cb

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-01 06:39:20 UTC
From: ozzy_1kw
Topic: 7311 Message: 7368

TY Richard,ty for the link all good now .

Cheers Rob

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Wed, 31 Mar 2010 06:09:31 -0000
> "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> > TY Darren, i know where to start now.
> >
> > Richard i didnt receive a link is it possible i could trouble you to resend it please?
> >
> > Although im only cb i absolutely love how a bit of wire can pull signals out of the
air.
> >
> > Its a fascination that ive got to learn how and why. Low power antennas dont worry me
cause im
> > learning how they work.
> >
> > My friends have yagis etc and i can get on air with a 28" loop LOL.
> >
> > Cheers and TY everyone for the help.
> >
> > Cheers Rob
> >
> >
>
>
> Yer tis Rob
> use the link for the excel file, download it, make a copy so you have write permissions
and run it
> is excel. Only change the figures in the left hand column.
> ie. where it says 3.5 Mhz , change to 27
>
> http://www.saunalahti.fi/hohtola/ham/magnetic-loop-for-80m/magnetic-loop-for-80m.htm
>
> Have fun
>
> --
> Best wishes
>
> Richard Bown
>
> ##

> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7369. Loop Capacitance

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-01 07:11:43 UTC
From: ozzy_1kw
Topic: 7369 Message: 7369

If the tuning is done by the small loop for best swr then for a single band hf cb i can put the exact capacitance required or is the tuning too sharp to cover the entire cb band??

what is the purpose for the variable capacitor ,is it multiband usage ?

TY Rob

PS, i see on youtube the guy that sells loops.his appear to be upside down with the tuning capacitor on the bottom that he tunes with his thumb. is there any issues feeding it from the top and running the coax down the side of the loop ?

Cheers Rob

7370. Re: [loopantennas] Loop Capacitance

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-01 09:55:10 UTC
From: richard
Topic: 7369 Message: 7370

On Thu, 01 Apr 2010 07:11:43 -0000
"ozzy_1kw" <ozzy_1kw@...> wrote:

>
>
> If the tuning is done by the small loop for best swr then for a single band hf cb i can put the
> exact capacitance required or is the tuning too sharp to cover the entire cb band??
>
> what is the purpose for the variable capacitor ,is it multiband usage ?
>
> TY Rob
>
>
> PS, i see on youtube the guy that sells loops.his appear to be upside down with the tuning
> capacitor on the bottom that he tunes with his thumb. is there any issues feeding it from the top
> and running the coax down the side of the loop ?
>
> Cheers Rob
>
Rob
If you would bother to use the spreadsheet program of OH7SV, you would see that on a loop diameter
roughly the same as a bike wheel, the 3dB point is about 50 KHz, whats that 4 CB channels ?

Come on you should know that you will never learn anything if you don't try.
Use the spreadsheet that I've now sent you twice.
All you have to do is alter the value in the left hand column, that's frequency , length of the
loop, the conductor diameter(how thick it is) and how much power you are going to put in it.

Results
Inductance (uH) 1.580
Capacitance (pF) 21.2
XL = XC (ohms) 273.0
Distributed C (pF) 5.4
Tuning capacitance (pF) 15.8
Main loop diameter (m) 0.637
Feeding loop diameter (m) 0.127
Radiation resistance (ohms) 0.227
Loss resistance (ohms) 0.067
Parallel resistance (kohms) 127
Efficiency (%) 77.2

Compared to ideal loop (dB) -1.12
Loaded Q 465
Bandwidth -3dB (kHz) 59.2
Capcitor rms voltage (V) 2519

Thats what you get roughly for what you are using.

If you can't get enough decimal places in the left hand column you can change the cell properties,
details of how to do this are in the "help" column in EXCEL and Open office.

If you really want to become a Ham you will have to learn some basic theory
Google is your friend.
If you go to your local club you will probably get given a ARRL or RSGB Handbook where someone has
bought a new one , and doesn't want the old one.
The process of learning is not asking questions to which you have already been given the answer.
but being able to understand what's in front of you.

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7371. Further info for Rob

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-01 10:31:15 UTC
From: richard
Topic: 7371 Message: 7371

Hi Rob & others

In case you had difficulty finding the information on how to get a Ham licence in Australia,
here are some notes and links.

The amateur Foundation licence. Holders of the Foundation licence can only use a transmitter that
has been manufactured commercially, can only use voice, on either SSB, AM or FM or morse using a
manually operated morse key, and not more than 10 watts output power on SSB, AM, FM or CW. Bands
permitted are the 80, 40, 15 and 10 metre bands as well as the 2 metre band and the band 430 to 450
MHz, subject to necessary bandwidth restriction

http://www.wia.org.au/licences/foundation/about/

http://www.wia.org.au/licences/foundation/foundationmanual/

The exam is very simple, and I suspect there is some practical work to be done, that again is very
easy.
http://www.wia.org.au/licences/foundation/trialexam/

http://www.wia.org.au/licences/foundation/learningorganisers/

You may consider 10 W to be a waste of time, not enough power. Not so with decent antennas.
10W on HF will get you world wide through sunspot maxima and 10W on VHF goes a long way at times.
I've worked 1000 kms when I've forgotten to switch the linear on, so it can be done.
--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7372. RE: [loopantennas] Loop Capacitance

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-01 11:50:57 UTC
From: Chris Harris
Topic: 7369 Message: 7372

All my loops have fed from the top and tune at the tune at the bottom as the cap is heavy and the feed is not. The feed loop is untuned and the line runs down the centre line of the support pole, keeping everything symmetrical as reasonably possible although I wonder how much the feed loop being unbalanced upsets the symmetry due to capacitive interaction.

Any thoughts on this anyone?

I think you will want to tune the capacitance of your 11m loop as it will be tuning over ~1.2% and you can expect a Q in the 100s if the thing is well built and if it isn't it won't work.....

For you're frequency, a simple DIY variable capacitor should be pretty easy to conjure up as you only need 20pF or so. I have seen cute designs using water pipe or copper sheet or PCB laminate.

C

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of ozzy_1kw
Sent: Thursday, 1 April 2010 7:12 p.m.
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Loop Capacitance

If the tuning is done by the small loop for best swr then for a single band hf cb i can put the exact capacitance required or is the tuning too sharp to cover the entire cb band??

what is the purpose for the variable capacitor ,is it multiband usage ?

TY Rob

PS, i see on youtube the guy that sells loops.his appear to be upside down with the tuning capacitor on the bottom that he tunes with his thumb. is there any issues feeding it from the top and running the coax down the side of the loop ?

Cheers Rob

[Non-text portions of this message have been removed]

7373. Re: Replicating the ALA330s

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-01 19:54:47 UTC
From: gmcjetpilot
Topic: 7364 Message: 7373

First if this is to learn, great.
If this is to save money, bad idea, cheaper to buy it.
You will still need a rotor, controller, coaxial and mast to mount any directional loop....

It is an active or amplified magnetic loop. There are many circuits on the web. The "trick" is they run the DC voltage down the coaxial with the signal.... that is not hard to do, but I am making my own and will have dedicated power to the active circuit at the base of the loop. I just run a phone-line sized two conductor cable next to and with the coaxial. You are running coax, what is two more small gauge wire cable. We are talking about very small current at low voltage.

One trick Wellbrook does, is wide band, with no tuning! How they do that, I don't know. I think it's cool but can cause some issues the wellbrook is known for, and that is bleed from high powered MW (AM BCB stations) into the SW. They make some versions that attenuate MW altogether to concentrate on the upper band. I am making mine tunable. It is a simple controller that varies power to the active electronics at the base of the loop. It tunes a Vari-capacitor, varactor, a solid state version of an air-capacitor.

The loop should be non-ferrite (not iron), copper best, aluminum good. What I am doing is using PVC and running some Litz wire inside it. Done and done, very small loss in bandwidth v copper pipe. Another cheap and good option is make a square loop out of copper water pipe. A loop does not have to be a hoop, although a hoop is cool looking. I would use a 1 meter dia Hoop-loop like wellbrook if I could find one. The best I found was an aluminum hula hoop, used by professional performers. They are about $60 bucks each. A plastic hula hoop with wire in it would be good for indoors, but I think they are too light duty. You can make a wood frame like hub and (8) spokes (octagon) and run a wire around it. This might be good for a BIG 2 meter loop. You get into big loops with copper water pipe it will get too big to handle. If you have room and no neighbors to complain, make it bigger.

By the time you track down all the parts, buy them (with shipping since Radio Shack has nothing anymore and they charge silly prices for parts), it will cost you almost as much as if you bought the Wellbrook to start with. You know the wellbrook will work. If the goal is to save money forget it. If you want the challenge and willing to accept it will not be as good as the store bought, go for it.

To out perform the Wellbrook you need a BIGGER loop.... and that can be done, but than it gets to be something you will mount from and near the ground in a back yard, preferably with out obstacles nearby. This large "sculpture" will be pretty obvious to look at. My home owner by-laws only allow a 1 meter antenna dish.... so a 1 meter loop will do the trick. I am sure they might still complain.

Cheers

RG-58 or LM195 is fine for SWL receiver antenna ... 50 ohms.

--- In loopantennas@yahoogroups.com, "inacit" <inaciot@...> wrote:
>

> Hello everyone,
>
> I would like replicate the welbrook ALA330s and have a few questions;
>
> - I'm thinking of using 1/2 inch solid wrought iron to build the 1
> metre diameter loop instead coppper or aluminum, any downside to
> this? hollow, solid?
>
> - Are there any schematics or photos for the electronics available
> online? I found a few posts stating there were pictures posted in
> this group but I have not been able to find them.
>
> - Mast material, should I use an non conductive/ferrous antenna mast
> to hold the loop? does it matter?
>
> - RG8x coax ok or LMR400 for a 20 foot lead in?
>
> Thank You all for any advice you can provice..
>
> Cheers,
> JM
>

7374. Gamma matching

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-01 20:46:52 UTC
From: aisea6
Topic: 7374 Message: 7374

Some one mentioned not wanting to use it as it'll create an unbalance feed.
Try using two one each side.
I had used two on the dipole portion of a home built 3 element beam, it's about 39 inches spaced at 3 to 4 inches withwithout capacitors. Feed it using a quarter wave section using rg59 then mate it to the rg58 feeder.
Also I had a homemade swr bridge and a Realisitc 23 channel TRC47 cb. I didn't have access to Internet. A friend from Australia had sent the designs which I simply copied it.

Cul.

Aisea (3d2aa)

7375. Re: Further info for Rob

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-02 01:53:00 UTC
From: ozzy_1kw
Topic: 7371 Message: 7375

Yes i did use the spreadsheet and i put in 2.5 m length of copper. that gave me a capacitance of 8pf at 27.355 ,but being new to experimenting i forgot to look at the bandwidth,therefore my question.

But i can understand now i need a variable capacitor,and im googling making capacitors.

Re the Ham licence,yes im going there in due course. Ive contacted my local club and they meet the last weekend of every month,except this one cause of easter.

But ive only just started as a cb'er too and i want to enjoy this part of radio while i experiment and learn. Eventually when i get my ham ticket ill actually know most of what im talking about.

I am gratefull to the group for my guidance,its only by asking that ill learn where to find answers,yes theres google but being totally new its hard to understand if google has pointed me to what i actually was asking LOL.

Cheers and TY .. Rob

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
>
> Hi Rob & others
>
> In case you had difficulty finding the information on how to get a Ham licence in Australia,
> here are some notes and links.
>
> The amateur Foundation licence. Holders of the Foundation licence can only use a transmitter that
> has been manufactured commercially, can only use voice, on either SSB, AM or FM or morse using a
> manually operated morse key, and not more than 10 watts output power on SSB, AM, FM or CW. Bands
> permitted are the 80, 40, 15 and 10 metre bands as well as the 2 metre band and the band 430 to 450
> MHz, subject to necessary bandwidth restriction
>
> http://www.wia.org.au/licences/foundation/about/
>
> http://www.wia.org.au/licences/foundation/foundationmanual/
>
> The exam is very simple, and I suspect there is some practical work to be done, that again is very
> easy.
> http://www.wia.org.au/licences/foundation/trialexam/

>
> http://www.wia.org.au/licences/foundation/learningorganisers/
>
> You may consider 10 W to be a waste of time, not enough power. Not so with decent antennas.
> 10W on HF will get you world wide through sunspot maxima and 10W on VHF goes a long way at times.
> I've worked 1000 kms when I've forgotten to switch the linear on, so it can be done.
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7376. Re: [loopantennas] Gamma matching

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-02 04:29:35 UTC
From: dw9hvz
Topic: 7374 Message: 7376

hi aisea, if you still have the design, can you send me a copy of it.? most antenna modellers on the net only designs the length and spacing of elements, but dont have info on gamma matching. thanks

--- On Thu, 4/1/10, aisea6 <aisea@...> wrote:

From: aisea6 <aisea@...>
Subject: [loopantennas] Gamma matching
To: loopantennas@yahoogroups.com
Date: Thursday, 1 April, 2010, 1:46 PM

Some one mentioned not wanting to use it as it'll create an unbalance feed.
Try using two one each side.
I had used two on the dipole portion of a home built 3 element beam, it's about 39 inches spaced at 3 to 4 inches withwithout capacitors. Feed it using a quarter wave section using rg59 then mate it to the rg58 feeder.
Also I had a homemade swr bridge and a Realisitc 23 channel TRC47 cb. I didn't have access to Internet. A friend from Australia had sent the designs which I simply copied it.

Cul.

Aisea (3d2aa)

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Open emails faster. Yahoo! recommends that you upgrade your browser to the new Internet Explorer 8 optimized for Yahoo! Get it here!
http://downloads.yahoo.com/sg/internetexplorer/

[Non-text portions of this message have been removed]

7377. Re: [loopantennas] Re: Further info for Rob

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-02 09:33:37 UTC
From: richard
Topic: 7371 Message: 7377

On Fri, 02 Apr 2010 01:53:00 -0000
"ozzy_1kw" <ozzy_1kw@...> wrote:

> Yes i did use the spreadsheet and i put in 2.5 m length of copper. that gave me a capacitance of
> 8pf at 27.355 ,but being new to experimenting i forgot to look at the bandwidth,therefore my
> question.
>
> But i can understand now i need a variable capacitor,and im googling making capacitors.
>
> Re the Ham licence,yes im going there in due course. Ive contacted my local club and they meet
> the last weekend of every month,except this one cause of easter.
>
> But ive only just started as a cb'er too and i want to enjoy this part of radio while i
> experiment and learn. Eventually when i get my ham ticket ill actually know most of what im
> talking about.
>
> I am gratefull to the group for my guidance,its only by asking that ill learn where to find
> answers,yes theres google but being totally new its hard to understand if google has pointed me
> to what i actually was asking LOL.
>
> Cheers and TY .. Rob
>
>
>

OK Rob
A word of advise
If your interested in Ham Radio get out of CB.
You will pick up some awful habits which will make having a QSO difficult and you will be judged by
the local Hams as a nerd.
For example , you don't say to the station your working if he is weak and not very readable that he
is in the back of the box, you give a proper report like 4 by 1.

This may sound a harsh but you will find the etiquette used by CBers is not appreciated on the Ham
bands.

So your best bet is not to pick up the bad habits in the first place.
Right as for making capacitors, the easiest route there is to buy one on e-bay, you could make one
out of two discs and alter the distance between them, I'm not sure what the physically largest coin
is in Aus., I have used old British pennies as they were over 1" in diameter, drill a hole through
the center and solder to a piece of M4 brass studding. making sure each is electrically isolated
from them.
But what I think you should do is get a larger variable cap , say 100 pF and tune that loop from
27 MHz to 14 MHz, that will cover Four Ham bands , 14 MHz, 18 MHz, 21 MHz, 24 MHz.
It looks like the Aus foundation licence doesn't allow use of 14 MHz, but does 21 MHz,
Your 10 W will get you some long distances on that band, as it is already starting to open.

Get yourself a radio that you can listen on those bands, and get down to the club at the end of the
month.

You will also be allowed to use 80 mtrs, 3.5 MHz , that should cover all of AUS & NZ.

To avoid using large antenna you can use a mag loop for that band, make it about 2 mtrs in diameter, and with right variable capacitor you should be able to tune between 3.5 MHz and 7 MHz.

Once you have got you teeth into Ham radio, you will not want to go any where near CB.

If as I suspect the Aus foundation licence is very similar to the UK one , you should be able to
get one in a few weeks , then you can really start to play with loops.

Apologies to the others in the group if this is a bit OT

Good luck &
Best wishes

Richard Bown

###
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
###

7378. Re: Further info for Rob

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-02 09:58:12 UTC
From: ozzy_1kw
Topic: 7371 Message: 7378

our local club has classes and testing officers and i believe theres a few classes of licence to entice newcomers through the ranks.

Cb Talk? no i use plain english and ill learn the correct terms in the classes.

No shortage of equipment here,everyone and their dog owns a ham set and theyre relatively cheap too but ill buy one thats not played with through the club so oi get a good one. Cheers Rob

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Fri, 02 Apr 2010 01:53:00 -0000
> "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> > Yes i did use the spreadsheet and i put in 2.5 m length of copper. that gave me a capacitance of
> > 8pf at 27.355 ,but being new to experimenting i forgot to look at the bandwidth,therefore my
> > question.
> >
> > But i can understand now i need a variable capacitor,and im googling making capacitors.
> >
> > Re the Ham licence,yes im going there in due course. Ive contacted my local club and they meet
> > the last weekend of every month,except this one cause of easter.
> >
> > But ive only just started as a cb'er too and i want to enjoy this part of radio while i
> > experiment and learn. Eventually when i get my ham ticket ill actually know most of what im
> > talking about.
> >
> > I am gratefull to the group for my guidance,its only by asking that ill learn where to find
> > answers,yes theres google but being totally new its hard to understand if google has pointed me
> > to what i actually was asking LOL.
> >
> > Cheers and TY .. Rob
> >
> >
> >
>
> OK Rob
> A word of advise
> If your interested in Ham Radio get out of CB.
> You will pick up some awful habits which will make having a QSO difficult and you will be

judged by
> the local Hams as a nerd.
> For example , you don't say to the station your working if he is weak and not very readable that he
> is in the back of the box, you give a proper report like 4 by 1.
>
> This may sound a harsh but you will find the etiquette used by CBers is not appreciated on the Ham
> bands.
>
> So your best bet is not to pick up the bad habits in the first place.
> Right as for making capacitors, the easiest route there is to buy one on e-bay, you could make one
> out of two discs and alter the distance between them, I'm not sure what the physically largest coin
> is in Aus., I have used old British pennies as they were over 1" in diameter, drill a hole through
> the center and solder to a piece of M4 brass studding. making sure each is electrically isolated
> from them.
> But what I think you should do is get a larger variable cap , say 100 pF and tune that loop from
> 27 MHz to 14 MHz, that will cover Four Ham bands , 14 MHz, 18 MHz, 21 MHz, 24 MHz.
> It looks like the Aus foundation licence doesn't allow use of 14 MHz, but does 21 MHz,
> Your 10 W will get you some long distances on that band, as it is already starting to open.
>
> Get yourself a radio that you can listen on those bands, and get down to the club at the end of the
> month.
>
> You will also be allowed to use 80 mtrs, 3.5 MHz , that should cover all of AUS & NZ.
>
> To avoid using large antenna you can use a mag loop for that band, make it about 2 mtrs in
> diameter, and with right variable capacitor you should be able to tune between 3.5 MHz and 7 MHz.
>
> Once you have got you teeth into Ham radio, you will not want to go any where near CB.
>
> If as I suspect the Aus foundation licence is very similar to the UK one , you should be able to
> get one in a few weeks , then you can really start to play with loops.
>
> Apologies to the others in the group if this is a bit OT
>
>
> Good luck &
> Best wishes
>
> Richard Bown

>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##
>

7379. Re: [loopantennas] Re: Further info for Rob

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-02 11:43:02 UTC
From: richard
Topic: 7371 Message: 7379

On Fri, 02 Apr 2010 09:58:12 -0000
"ozzy_1kw" <ozzy_1kw@...> wrote:

> our local club has classes and testing officers and i believe theres a few classes of licence to
> entice newcomers through the ranks.
>
> Cb Talk? no i use plain english and ill learn the correct terms in the classes.
>
> No shortage of equipment here,everyone and their dog owns a ham set and theyre relatively cheap
> too but ill buy one thats not played with through the club so oi get a good one. Cheers Rob
>
>
>

Yes be very careful to get something thats unmodified.
There should be a few TS 830 or TS 530 around, they are hybrids, valve PAs, but have the advantage
they are easy to repair. Some of the newer transceivers can be a pig to work on.

As at first you will be restricted to 10 W , experimenting with loop antennas can be done very
cheaply, you won't have to worry about high voltages across the capacitor, so you can use off the
shelve surplus items.
Out of interest which town/city are you in ?

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7380. Re: Further info for Rob

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-02 11:54:07 UTC
From: ozzy_1kw
Topic: 7371 Message: 7380

Brisbane City.

Cheers Rob

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> On Fri, 02 Apr 2010 09:58:12 -0000
> "ozzy_1kw" <ozzy_1kw@...> wrote:
>
> > our local club has classes and testing officers and i believe theres a few classes of licence to
> > entice newcomers through the ranks.
> >
> > Cb Talk? no i use plain english and ill learn the correct terms in the classes.
> >
> > No shortage of equipment here,everyone and their dog owns a ham set and theyre relatively cheap
> > too but ill buy one thats not played with through the club so oi get a good one. Cheers Rob
> >
> >
> >
>
> Yes be very careful to get something thats unmodified.
> There should be a few TS 830 or TS 530 around, they are hybrids, valve PAs, but have the advantage
> they are easy to repair. Some of the newer transceivers can be a pig to work on.
>
> As at first you will be restricted to 10 W , experimenting with loop antennas can be done very
> cheaply, you won't have to worry about high voltages across the capacitor, so you can use off the
> shelve surplus items.
> Out of interest which town/city are you in ?
>
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
> ##

>

7381. Re: [loopantennas] Re: Further info for Rob

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-02 12:12:00 UTC
From: richard
Topic: 7371 Message: 7381

```
On Fri, 02 Apr 2010 11:54:07 -0000
"ozzy_1kw" <ozzy_1kw@...> wrote:

> Brisbane City.
>
> Cheers Rob
>
>
>
>
> -

OK thanks
--
Best wishes

Richard Bown

##########################################################################################
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##########################################################################################
```

7382. Re: T2FD as a transmitting antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-05 04:36:41 UTC
From: Irv F
Topic: 7311 Message: 7382

I ran a B&W (I forget the model number - was is something
like 370-15?). It was great on both TX and RX. It was great
to switch bands with ease. I used it on 80 thru 10 meters.
We compared it with a half-wave dipole anf the dipole was
usually a bit better, but only by an s-unit which is
negligible in my books. The balun blew and I went to an
inverted vee fed with open wire although it would not have
been difficult to build a new balun. Overall, I was very
pleased with the B&W version of the T2FD. Incidentally, at
different times I ran it horizontally, tilted, and in an
inverted-Vee configuration with no noticeable change in
erformance.

Irv VE6BP

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
>
> The tilted T2FD has been described as the forgotten antenna. It has
> characteristics of a dipole as well as a loop. It is terminated with a
> non-inductive resistor opposite the feed point. It is more compact in
> length than a dipole and professes to be very quiet on receive and
> broadband , at least a 5:1 frequency ratio. From what I have read it's
> present use is limited to a broadband quiet SW receiving antenna ....
> although I understand the US Navy conducted long term HF communications
> trials and concluded it was more effective than individual wire antennas
> for HF frequencies in the HF spectrum (a myth ??). If the trial is correct
> then the antenna must have some sort of gain .... since there would be a
> starting loss due to the termination.
>
> It sounds like an ideal Amateur radio antenna ... yet I have no experience
> with it ... nor do I know anyone who has used one. I notice ICOM sells an
> all band antenna that appears to be a T2FD ... the AH-710 .... again no
> info on it not even in Eham reviews.
>
> Anyone know anything about this antenna ?
>
> Jim, VE3CI
>

7383. Re: [loopantennas] Insulated wire loop under roof tiles

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-10 21:50:10 UTC
From: ZephyrNYC
Topic: 7243 Message: 7383

WA0TKM,

How'd it work out for you? I plan on installing a stealth antenna on the
roof of a 7-story apartment building soon. Suggestions?

Frank

Join the largest Yaesu FT-857 group on Yahoo at
http://groups.yahoo.com/group/FT-857/ , or send an email to
FT-857-subscribe@yahoogroups.com .

On Tue, Mar 2, 2010 at 18:54, M HOLDEN <mholden909@...> wrote:

>
>
> My shack is on the (USA) second floor with no short path to earth. Under
> the carpet I have laid overlapping aluminium foil widths and one leg of my
> desk is compressing down on a piece of chrome plated brass plate, in contact
> with the aluminium surface about 7x4 inches, with a drilled hole and solder
> tag connected. A short length of braid goes from there to the earthy wingnut
> on the back of my tuner unit. I have no idea what an 8 foot square plate, 8
> feet above true ground exhibits by way of capacitance to earth, but this
> idea gives me a fair artificial earth. This is used in conjunction with a
> large wire loop, resonant in the 5 MHz band.
> That took me from Cornwall UK to Long Island NY last night on 5371.5 kHz,
> with just 100W. I suggest that an auto tuner on the end of a piece of coax
> cable coupled to a large wire loop of 283Ft (thin wire OK) would do you
> proud. Baluns will not change in ratio as your band changes find differing
> impedances flicking from band to band. I have tried a 4:1 balun in the past
> but it warmed up with 100W transmission, and hated the bands above 20M.
> Wires under the tiles will be close to house borne interference, TV timebase
> racket etc. Good luck Bill. 73 de Mike, G4HOL
>
> --- On Tue, 2/3/10, billcurd <yahoo@... <yahoo%40billcurd.com>>
> wrote:
>
> From: billcurd <yahoo@... <yahoo%40billcurd.com>>
> Subject: [loopantennas] Insulated wire loop under roof tiles
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Date: Tuesday, 2 March, 2010, 5:17
>
>
>
>
> I'd like to put up a multi-band HF loop antenna (preferably covering
> 80m-10m transmission, and full 3-30 MHz reception) but have some constraints

> and would appreciate any advice. I have a Kenwood TS-50 and AT-50 in my
> second story home office.
>
> The exterior walls are stucco over ungrounded chicken wire and the office
> has a lot of RF noisy computer equipment. Attempts at HF reception with an
> indoor antenna have been extremely poor. Because of the RF noise, the
> chicken wire, and AT-50 not having a balanced output, I'm thinking of
> running coax through the wall to a balun outside on the edge of the roof.
>
> No quality ground is available (just poor conducting desert soil down one
> floor).
>
> The XYL wouldn't approve of wires along the fence line or in the yard.
>
> So, I'm thinking of laying (hiding) insulated stranded copper electrical
> wire directly under the tiles of my roof to roughly form a rectangle. Just
> below the ridge line, down the slope, and along the bottom tiles. With a
> couple of small jogs and circumference of approximately 40m.
>
> Would it work?
>
> Any voltage or current dangers to the house (I haven't seen anything about
> voltage and current patterns in a loop antenna)?
>
> Capacitance problems laying directly on roof?
>
> Impedance ratio for the balun?
>
> Any better ideas than 14AWG insulated stranded copper wire?
>
> If I used cable that was 2-conductor - admittedly spaced very close
> together, what if I connected it as a double loop totaling 80m?
>
> Or with other cable, even 3 loops or more?
>
> BTW, my other choice is something small on top of my patio roof (I'm
> thinking of putting a 2m/440 Jpole there). A Tek-tenna? Remember: no ground
> handy. I have a manual MJF antenna tuner that handles balanced line but
> would prefer automatic tuning.
>
> Between the HOA and XYL, anything has to be pretty small or hidden. Thank
> you in advance for any feedback.
>
> 73s
>
> WA0TKM
>
> [Non-text portions of this message have been removed]
>
>

>

[Non-text portions of this message have been removed]

7384. Re: [loopantennas] Insulated wire loop under roof tiles

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-10 22:42:28 UTC
From: M HOLDEN
Topic: 7243 Message: 7384

It works well. Use the largest amount of wire (any guage) to enclose the largest area possible and feed it with an auto atu at the wire feed point. Run coax back to the operating position in your shack. As I read things, you will do well from 40 to 10 metres and have a reasonably quiet receive noise level. 80 metres will work "after a fashion" but will not be as good as the other bands. Try working the grey line Dx on 40. Should be good ! Regards, Mike G4HOL

--- On Sat, 10/4/10, ZephyrNYC <ZephyrNYC@...> wrote:

From: ZephyrNYC <ZephyrNYC@...>
Subject: Re: [loopantennas] Insulated wire loop under roof tiles
To: loopantennas@yahoogroups.com
Date: Saturday, 10 April, 2010, 22:50

WA0TKM,

How'd it work out for you? I plan on installing a stealth antenna on the roof of a 7-story apartment building soon. Suggestions?

Frank

Join the largest Yaesu FT-857 group on Yahoo at http://groups.yahoo.com/group/FT-857/ , or send an email to FT-857-subscribe@yahoogroups.com .

On Tue, Mar 2, 2010 at 18:54, M HOLDEN <mholden909@...> wrote:

>
>
> My shack is on the (USA) second floor with no short path to earth. Under
> the carpet I have laid overlapping aluminium foil widths and one leg of my
> desk is compressing down on a piece of chrome plated brass plate, in contact
> with the aluminium surface about 7x4 inches, with a drilled hole and solder
> tag connected. A short length of braid goes from there to the earthy wingnut
> on the back of my tuner unit. I have no idea what an 8 foot square plate, 8
> feet above true ground exhibits by way of capacitance to earth, but this
> idea gives me a fair artificial earth. This is used in conjunction with a
> large wire loop, resonant in the 5 MHz band.
> That took me from Cornwall UK to Long Island NY last night on 5371.5 kHz,
> with just 100W. I suggest that an auto tuner on the end of a piece of coax
> cable coupled to a large wire loop of 283Ft (thin wire OK) would do you
> proud. Baluns will not change in ratio as your band changes find differing
> impedances flicking from band to band. I have tried a 4:1 balun in the past
> but it warmed up with 100W transmission, and hated the bands above 20M.
> Wires under the tiles will be close to house borne interference, TV timebase
> racket etc. Good luck Bill. 73 de Mike, G4HOL
>

> --- On Tue, 2/3/10, billcurd <yahoo@... <yahoo%40billcurd.com>>
> wrote:
>
> From: billcurd <yahoo@... <yahoo%40billcurd.com>>
> Subject: [loopantennas] Insulated wire loop under roof tiles
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Date: Tuesday, 2 March, 2010, 5:17
>
>
>
>
> I'd like to put up a multi-band HF loop antenna (preferably covering
> 80m-10m transmission, and full 3-30 MHz reception) but have some constraints
> and would appreciate any advice. I have a Kenwood TS-50 and AT-50 in my
> second story home office.
>
> The exterior walls are stucco over ungrounded chicken wire and the office
> has a lot of RF noisy computer equipment. Attempts at HF reception with an
> indoor antenna have been extremely poor. Because of the RF noise, the
> chicken wire, and AT-50 not having a balanced output, I'm thinking of
> running coax through the wall to a balun outside on the edge of the roof.
>
> No quality ground is available (just poor conducting desert soil down one
> floor).
>
> The XYL wouldn't approve of wires along the fence line or in the yard.
>
> So, I'm thinking of laying (hiding) insulated stranded copper electrical
> wire directly under the tiles of my roof to roughly form a rectangle. Just
> below the ridge line, down the slope, and along the bottom tiles. With a
> couple of small jogs and circumference of approximately 40m.
>
> Would it work?
>
> Any voltage or current dangers to the house (I haven't seen anything about
> voltage and current patterns in a loop antenna)?
>
> Capacitance problems laying directly on roof?
>
> Impedance ratio for the balun?
>
> Any better ideas than 14AWG insulated stranded copper wire?
>
> If I used cable that was 2-conductor - admittedly spaced very close
> together, what if I connected it as a double loop totaling 80m?
>
> Or with other cable, even 3 loops or more?
>
> BTW, my other choice is something small on top of my patio roof (I'm
> thinking of putting a 2m/440 Jpole there). A Tek-tenna? Remember: no ground

> handy. I have a manual MJF antenna tuner that handles balanced line but
> would prefer automatic tuning.
>
> Between the HOA and XYL, anything has to be pretty small or hidden. Thank
> you in advance for any feedback.
>
> 73s
>
> WA0TKM
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

7385. Re:Aperiodic antenna experiment: indoor solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 08:22:08 UTC
From: i2ndt
Topic: 7280 Message: 7385

I have found another design for a similar antenna:

http://www.shelbrook.com/~ve7ca/Ant160.htm

Scroll down to approx the middle of the long page...

Dest DX
de
i2NDT Claudio

--- In loopantennas@yahoogroups.com, "i2ndt" <i2ndt@...> wrote:
>
> Such an antenna was described in RadCom in November 1982. The antenna was manufactured by C&S Antennas Ltd and was used as part of a broadside array for monitoring purposes...I guess! Copy of the article on request to my direct e-mail: NOT HERE! Thanks.
>
> I2NDT Claudio
>
> --- In loopantennas@yahoogroups.com, Notareal <not_a_real@> wrote:
> >
> >
> > Thanks Darren of the pictures !
> > One picture tells more than thousand words !
> > Although I know one guy in my office who tends to speak more than thousand pictures !
> > Even sometimes it feels like that.
> > BR
> >
> >
> > > To: loopantennas@yahoogroups.com
> > > From: dhennig2@
> > > Date: Thu, 18 Mar 2010 12:47:53 -0600
> > > Subject: [loopantennas] Re:Aperiodic antenna experiment: indoor solution?
> > >
> > > Okay all:
> > >
> > > Pleased a few quick shots of the loop and some snaps of the PR2 manual and notes for those wanting pictures!
> > >
> > > Photo file is called Aperiodic loop
> > >
> > > Darren
> > > VE6IZ
> > >
> > > [Non-text portions of this message have been removed]
> > >
> > >

> > >
> > > ------------------------------------
> > >
> > > If you've got links, post them in the Links section!
> > > http://groups.yahoo.com/group/loopantennas/links
> > >
> > > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > > http://groups.yahoo.com/group/loopantennas/files
> > >
> > > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > >
> > > And please trim all this when replying!Yahoo! Groups Links
> > >
> > >
> > >
> >
> > ____
> > Hotmail: Trusted email with Microsoft's powerful SPAM protection.
> > https://signup.live.com/signup.aspx?id=60969
> >
> > [Non-text portions of this message have been removed]
> >
>

7386. best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 21:03:51 UTC
From: ZephyrNYC
Topic: 7386 Message: 7386

Greetings,

I plan on installing a stealth horizontal loop on the roof just above my 7th floor rental apartment for an 857D, but I need some tips from the experts (YOU). The plan is to go up and install insulated wire all around the exterior walls of the roof. I should've measured it the first time I went up to the roof a few days ago, but I didn't. (It was cold, windy, and brisk that morning; and the rising sun and gorgeous city view distracted me ;) The walls are at least 120 feet in perimeter. This wire would not be visible from the roof of our building unless someone were to lean out over the edge of the roof, or climb up my metal fire escape, which is how I gain access to the roof. Just below the top of one or more of the 4 exterior walls, there is a small "lip" under which I could attempt to slightly conceal small gauge wire if I so desire.

IIRC, insulated copper braid is the best wire for this application. Where are the best places to purchase quality insulated wire (chain and online stores)? I just got off the phone with Home Depot and they sell insulated copper braid that is approximately 1/2 inch in diameter that costs $2.27/foot. Obviously, I can go with a smaller gauge to save money and increase concealment. What is the best way to mount or stick the wire to the exterior walls? Lots of duct tape (less obvious especially if I spray paint or purchase it to match the exterior walls' color, but more risk of detaching)? A number of little brackets and screws (too obvious, but much less chance of detaching)? Brackets and masonry or concrete cement/glue (non-metallic glue)? The Home Depot person recommended as the best method using metal pipe straps screwed into the masonry/concrete exterior walls. I told him that I can't use metal straps because the wire is to be used as an antenna. I also want to avoid creating permanent holes as much as possible. If I do create holes for the straps, I'd be sure to repair them before I move out at the end of the lease. He did say that Home Depot sells plastic pipe straps that cost 69 cents for a pack of 5. For plastic, he recommends one bracket for every 16 or 18" of large diameter wire. However, this would require the use of metallic screws. How much RFI would such metallic screws create? Obviously I want to avoid creating RFI.

Would this type of antenna require a 1:1 or 4:1 balun in order to use an autotuner? If I remember correctly, this type of antenna goes with a 1:1. Thanks.

73,
Frank

"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yaesu FT-857 group on Yahoo at
http://groups.yahoo.com/group/FT-857/ , or send an email to
FT-857-subscribe@yahoogroups.com .

[Non-text portions of this message have been removed]

7387. Re: [loopantennas] best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 22:05:04 UTC
From: M HOLDEN
Topic: 7386 Message: 7387

Hi Frank
Lightweight wire needs less support and will not change your transmissions to a lower level than thicker wire. For the last five years here I have been using a suspended wire loop made from 1mm ptfe (TEFLON) insulated stranded wire. Results are good. If the wire isn't flapping about in the breeze, I think you can use sticky pads with fold over aluminium clips to secure the wire. You may have to prime the wall surfaces so that the pads will stick." Evo Stik " or any adhesive used for holding down worktop sheets should do the trick. Feed the ends of the wire loop into an auto tuner and run coax back to your rig. Baluns should be placed under birds nests as they can get quite warm. This way you will be doing your bit for nature. I'm just kidding ! (Forget baluns in the auto tuner configuration) The wire loop will radiate effectively on 40m to 10m and possibly on 60m too. The braid you were thinking about is overkill. (How thick is 10 amp fuse wire ?) Because the wire loop is balanced on all frequencies, the prospect of RFI is small.
Good luck mate, de Mike G4HOL
--- On Mon, 12/4/10, ZephyrNYC <ZephyrNYC@...> wrote:

From: ZephyrNYC <ZephyrNYC@...>
Subject: [loopantennas] best places to buy wire for rooftop horizontal loop
To:
Date: Monday, 12 April, 2010, 22:03

Greetings,

I plan on installing a stealth horizontal loop on the roof just above my 7th

floor rental apartment for an 857D, but I need some tips from the experts

(YOU). The plan is to go up and install insulated wire all around the

exterior walls of the roof. I should've measured it the first time I went

up to the roof a few days ago, but I didn't. (It was cold, windy, and brisk

that morning; and the rising sun and gorgeous city view distracted me ;)

The walls are at least 120 feet in perimeter. This wire would not be

visible from the roof of our building unless someone were to lean out over

the edge of the roof, or climb up my metal fire escape, which is how I gain

access to the roof. Just below the top of one or more of the 4 exterior

walls, there is a small "lip" under which I could attempt to slightly

conceal small gauge wire if I so desire.

IIRC, insulated copper braid is the best wire for this application. Where

are the best places to purchase quality insulated wire (chain and online stores)? I just got off the phone with Home Depot and they sell insulated copper braid that is approximately 1/2 inch in diameter that costs $2.27/foot. Obviously, I can go with a smaller gauge to save money and increase concealment. What is the best way to mount or stick the wire to the exterior walls? Lots of duct tape (less obvious especially if I spray paint or purchase it to match the exterior walls' color, but more risk of detaching)? A number of little brackets and screws (too obvious, but much less chance of detaching)? Brackets and masonry or concrete cement/glue (non-metallic glue)? The Home Depot person recommended as the best method using metal pipe straps screwed into the masonry/concrete exterior walls. I told him that I can't use metal straps because the wire is to be used as an antenna. I also want to avoid creating permanent holes as much as possible. If I do create holes for the straps, I'd be sure to repair them before I move out at the end of the lease. He did say that Home Depot sells plastic pipe straps that cost 69 cents for a pack of 5. For plastic, he recommends one bracket for every 16 or 18" of large diameter wire. However, this would require the use of metallic screws. How much RFI would such metallic screws create? Obviously I want to avoid creating RFI.

Would this type of antenna require a 1:1 or 4:1 balun in order to use an autotuner? If I remember correctly, this type of antenna goes with a 1:1.

Thanks.

73,

Frank

"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yaesu FT-857 group on Yahoo at

http://groups. yahoo.com/ group/FT- 857/ , or send an email to

FT-857-subscribe@ yahoogroups. com .

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7388. Re: [loopantennas] best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 21:24:14 UTC
From: Gary Scott
Topic: 7386 Message: 7388

Have a look-see here http://www.thewireman.com/

Gary W4GNS

Greetings,

I plan on installing a stealth horizontal loop on the roof just above my 7th floor rental apartment for an 857D, but I need some tips from the experts (YOU). The plan is to go up and install insulated wire all around the exterior walls of the roof. I should've measured it the first time I went up to the roof a few days ago, but I didn't. (It was cold, windy, and brisk that morning; and the rising sun and gorgeous city view distracted me ;) The walls are at least 120 feet in perimeter. This wire would not be visible from the roof of our building unless someone were to lean out over the edge of the roof, or climb up my metal fire escape, which is how I gain access to the roof. Just below the top of one or more of the 4 exterior walls, there is a small "lip" under which I could attempt to slightly conceal small gauge wire if I so desire.

IIRC, insulated copper braid is the best wire for this application. Where are the best places to purchase quality insulated wire (chain and online stores)? I just got off the phone with Home Depot and they sell insulated copper braid that is approximately 1/2 inch in diameter that costs $2.27/foot. Obviously, I can go with a smaller gauge to save money and increase concealment. What is the best way to mount or stick the wire to the exterior walls? Lots of duct tape (less obvious especially if I spray paint or purchase it to match the exterior walls' color, but more risk of detaching)? A number of little brackets and screws (too obvious, but much less chance of detaching)? Brackets and masonry or concrete cement/glue (non-metallic glue)? The Home Depot person recommended as the best method using metal pipe straps screwed into the masonry/concrete exterior walls. I told him that I can't use metal straps because the wire is to be used as an antenna. I also want to avoid creating permanent holes as much as possible. If I do create holes for the straps, I'd be sure to repair them before I move out at the end of the lease. He did say that Home Depot sells plastic pipe straps that cost 69 cents for a pack of 5. For plastic, he recommends one bracket for every 16 or 18" of large diameter wire. However, this would require the use of metallic screws. How much RFI would such metallic screws create? Obviously I want to avoid creating RFI.

Would this type of antenna require a 1:1 or 4:1 balun in order to use an autotuner? If I remember correctly, this type of antenna goes with a 1:1. Thanks.

73,
Frank

"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yaesu FT-857 group on Yahoo at http://groups.yahoo.com/group/FT-857/ , or send an email to FT-857-subscribe@yahoogroups.com .

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7389. Re: [loopantennas] best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 22:43:21 UTC
From: Rick Karlquist
Topic: 7386 Message: 7389

ZephyrNYC wrote:
> Greetings,
>
> I plan on installing a stealth horizontal loop on the roof just above my
> 7th
> floor rental apartment for an 857D, but I need some tips from the experts

Why have you chosen a loop instead of a dipole (or a bent dipole)?
FYI, a full wave loop will want to radiate straight up (and down).

Rick N6RK

7390. Re: [loopantennas] best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 22:49:41 UTC
From: M HOLDEN
Topic: 7386 Message: 7390

Interesting Company Gary. Glad to see that VF is quoted in the spec of the advertised twin cables. That info is hard to find sometimes on this side of the pond. Mike G4HOL

--- On Mon, 12/4/10, Gary Scott <countyhunterw4gns@gmail.com> wrote:

From: Gary Scott <countyhunterw4gns@...>
Subject: Re: [loopantennas] best places to buy wire for rooftop horizontal loop
To: loopantennas@yahoogroups.com
Date: Monday, 12 April, 2010, 22:24

Have a look-see here http://www.thewirem an.com/

Gary W4GNS

Greetings,

I plan on installing a stealth horizontal loop on the roof just above my 7th

floor rental apartment for an 857D, but I need some tips from the experts

(YOU). The plan is to go up and install insulated wire all around the

exterior walls of the roof. I should've measured it the first time I went

up to the roof a few days ago, but I didn't. (It was cold, windy, and brisk

that morning; and the rising sun and gorgeous city view distracted me ;)

The walls are at least 120 feet in perimeter. This wire would not be

visible from the roof of our building unless someone were to lean out over

the edge of the roof, or climb up my metal fire escape, which is how I gain

access to the roof. Just below the top of one or more of the 4 exterior

walls, there is a small "lip" under which I could attempt to slightly

conceal small gauge wire if I so desire.

IIRC, insulated copper braid is the best wire for this application. Where

are the best places to purchase quality insulated wire (chain and online

stores)? I just got off the phone with Home Depot and they sell insulated

copper braid that is approximately 1/2 inch in diameter that costs

$2.27/foot. Obviously, I can go with a smaller gauge to save money and

increase concealment. What is the best way to mount or stick the wire to the exterior walls? Lots of duct tape (less obvious especially if I spray paint or purchase it to match the exterior walls' color, but more risk of detaching)? A number of little brackets and screws (too obvious, but much less chance of detaching)? Brackets and masonry or concrete cement/glue (non-metallic glue)? The Home Depot person recommended as the best method using metal pipe straps screwed into the masonry/concrete exterior walls. I told him that I can't use metal straps because the wire is to be used as an antenna. I also want to avoid creating permanent holes as much as possible. If I do create holes for the straps, I'd be sure to repair them before I move out at the end of the lease. He did say that Home Depot sells plastic pipe straps that cost 69 cents for a pack of 5. For plastic, he recommends one bracket for every 16 or 18" of large diameter wire. However, this would require the use of metallic screws. How much RFI would such metallic screws create? Obviously I want to avoid creating RFI.

Would this type of antenna require a 1:1 or 4:1 balun in order to use an autotuner? If I remember correctly, this type of antenna goes with a 1:1.

Thanks.

73,

Frank

"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yaesu FT-857 group on Yahoo at

http://groups. yahoo.com/ group/FT- 857/ , or send an email to

FT-857-subscribe@ yahoogroups. com .

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7391. Re: [loopantennas] best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 23:01:19 UTC
From: ZephyrNYC
Topic: 7386 Message: 7391

Rick,

I intend to experiment with a dipole later. My side of the building is the southern side. Right across the small backyard from my side is another apartment building, which is taller. A taller building will obviously block much of a dipole's signal from the horizon, which is invisible from my side of the building. Right next to my building to the east and west are other apartment buildings of the same height as mine. There is another street on the northern side of of my building, with no tall buildings directly across. An elevated dipole on the rooftop would be perfect for north-south or east-west propagation, but would be visible to people obviously. A dipole concealed on the wall on my side of the building would only radiate to the south, which is blocked by the taller building.

A 120' foot loop would be full-wave only around 40m, half-wave on 80, quarter-wave on 160, correct?

73,
Frank

On Mon, Apr 12, 2010 at 18:43, Rick Karlquist <richard@karlquist.com> wrote:

>
>
> Why have you chosen a loop instead of a dipole (or a bent dipole)?
> FYI, a full wave loop will want to radiate straight up (and down).
>
> Rick N6RK
>
>
>

[Non-text portions of this message have been removed]

7392. Re: [loopantennas] best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 23:12:07 UTC
From: M HOLDEN
Topic: 7386 Message: 7392

Horizontal loop radiation: Straight up on the fundamental certainly ! Lovely lobes at harmonics of the fundamental which become lower and lower in angle of radiation as frequency goes higher. See W4RNL website or google on "CEBIK". Pretty good idea I say.
 Regards, Mike G4HOL

--- On Tue, 13/4/10, ZephyrNYC <ZephyrNYC@...> wrote:

From: ZephyrNYC <ZephyrNYC@gmail.com>
Subject: Re: [loopantennas] best places to buy wire for rooftop horizontal loop
To: loopantennas@yahoogroups.com
Date: Tuesday, 13 April, 2010, 0:01

Rick,

I intend to experiment with a dipole later. My side of the building is the southern side. Right across the small backyard from my side is another apartment building, which is taller. A taller building will obviously block much of a dipole's signal from the horizon, which is invisible from my side of the building. Right next to my building to the east and west are other apartment buildings of the same height as mine. There is another street on the northern side of of my building, with no tall buildings directly across. An elevated dipole on the rooftop would be perfect for north-south or east-west propagation, but would be visible to people obviously. A dipole concealed on the wall on my side of the building would only radiate to the south, which is blocked by the taller building.

A 120' foot loop would be full-wave only around 40m, half-wave on 80, quarter-wave on 160, correct?

73,
Frank

On Mon, Apr 12, 2010 at 18:43, Rick Karlquist <richard@...> wrote:

>
>
> Why have you chosen a loop instead of a dipole (or a bent dipole)?
> FYI, a full wave loop will want to radiate straight up (and down).
>
> Rick N6RK
>
>
>

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

7393. Re: [loopantennas] best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-12 23:12:54 UTC
From: ZephyrNYC
Topic: 7386 Message: 7393

Thanks, Gary. I was trying to remember his URL. I typed "thewireguy" LOL.

On Mon, Apr 12, 2010 at 17:24, Gary Scott <countyhunterw4gns@...>wrote:

>
>
> Have a look-see here http://www.thewireman.com/
>
> Gary W4GNS
>
>

[Non-text portions of this message have been removed]

7394. Re: best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-13 18:50:06 UTC
From: ZephyrNYC
Topic: 7386 Message: 7394

Read this only if you're truly interested. It's long and boring. I warned you ;)

When I called Home Depot, I meant to say "stranded" and forgot the word, but instead said "braided", so the guy quoted me for braided wire LOL I thank you all sincerely for the corrections. Now I know what to ask for next time.

I'll check out Lowe's too, since I know they offer a military discount, and also the places that you mentioned. A couple of you good hams also offered to sell me some of their extra wire at good discount, which I'll also strongly consider.

I was way off on my eyeball guestimation of the perimeter around the rooftop's external walls last week. I just measured it a few minutes ago-- 332 feet or 101.1936 m around the perimeter, which is now approx. 5/8 wavelength of 160m, 5/4 or 1 1/4 wavelengths of 80m, and 2.5 wavelengths of 40m. What kind of propagation should a horizontal loop of that length hooked up to a tuner be expected to achieve? I'll open up the Antenna Book after I unpack it from one of the many moving boxes.

The most horizon I can see from the roof is to the east, which is almost completely unblocked. (Hello, Europe! ;) I can see the northern horizon but some of it is blocked by other buildings. (Don't worry, New England and Eastern Canada ;) I can't see the horizon directly to the south and west, but the buildings in those directions probably offer less than 15 degrees of takeoff angle till I see sky to the south and approx. 45 degrees to see the western sky. (Sorry guys.)

I didn't find any good attachment points for plastic cable ties. It looks like I'll go with masonry staples, since the walls are made of brick.

I doubt I'll be able to feed the antenna with twin lead because there are only two sets of windows in my apartment:

1. One end of one set (where I want to set up shack) opens up to the metal fire escape, and the window on the other end has a metal grate in front of it. I'll probably feed coax through here. The window frames seem to be made of aluminum.

2. The second window is in the bedroom (where I don't want to set up shack). One side is also covered by a metal grate. The other side isn't, and is the window most distant from the metal fire escape (approx. 18.5'). If my only choice was balanced line, I would feed it

through this window. I plan on purchasing one of the window feed through accessories made by MFJ.

Once again, I thank you all for your help.

73,
Frank

"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yaesu FT-857 group on Yahoo at http://groups.yahoo.com/group/FT-857/ , or send an email to FT-857-subscribe@yahoogroups.com .

7395. Re: [loopantennas] Re: best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-13 20:23:55 UTC
From: M HOLDEN
Topic: 7386 Message: 7395

Coax is a single impedance cable. When you change bands, the required impedance changes too. - If you use coax make sure it goes to the roof and terminates in an auto tuner. That WILL cope with band changes. Otherwise, take 300 ohm slotted ribbon from the loop through the available route to your shack. A non-resonant loop will give you some great results and I think 160 to 10m is in the bag for you. 10m will be horizon kissing and 160 will be cloud warming. IDEAL !!!
Say hello soon, I'm in Europe ! Regards, Mike G4HOL
--- On Tue, 13/4/10, ZephyrNYC <ZephyrNYC@...> wrote:

From: ZephyrNYC <ZephyrNYC@...>
Subject: [loopantennas] Re: best places to buy wire for rooftop horizontal loop
To:
Date: Tuesday, 13 April, 2010, 19:50

Read this only if you're truly interested. It's long and boring. I

warned you ;)

When I called Home Depot, I meant to say "stranded" and forgot the

word, but instead said "braided", so the guy quoted me for braided

wire LOL I thank you all sincerely for the corrections. Now I know

what to ask for next time.

I'll check out Lowe's too, since I know they offer a military

discount, and also the places that you mentioned. A couple of you

good hams also offered to sell me some of their extra wire at good

discount, which I'll also strongly consider.

I was way off on my eyeball guestimation of the perimeter around the

rooftop's external walls last week. I just measured it a few minutes

ago-- 332 feet or 101.1936 m around the perimeter, which is now

approx. 5/8 wavelength of 160m, 5/4 or 1 1/4 wavelengths of 80m, and

2.5 wavelengths of 40m. What kind of propagation should a horizontal

loop of that length hooked up to a tuner be expected to achieve? I'll

open up the Antenna Book after I unpack it from one of the many moving

boxes.

The most horizon I can see from the roof is to the east, which is almost completely unblocked. (Hello, Europe! ;) I can see the northern horizon but some of it is blocked by other buildings. (Don't worry, New England and Eastern Canada ;) I can't see the horizon directly to the south and west, but the buildings in those directions probably offer less than 15 degrees of takeoff angle till I see sky to the south and approx. 45 degrees to see the western sky. (Sorry guys.)

I didn't find any good attachment points for plastic cable ties. It looks like I'll go with masonry staples, since the walls are made of brick.

I doubt I'll be able to feed the antenna with twin lead because there are only two sets of windows in my apartment:

1. One end of one set (where I want to set up shack) opens up to the metal fire escape, and the window on the other end has a metal grate in front of it. I'll probably feed coax through here. The window frames seem to be made of aluminum.

2. The second window is in the bedroom (where I don't want to set up shack). One side is also covered by a metal grate. The other side isn't, and is the window most distant from the metal fire escape (approx. 18.5'). If my only choice was balanced line, I would feed it through this window. I plan on purchasing one of the window feed through accessories made by MFJ.

Once again, I thank you all for your help.

73,

Frank

"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yaesu FT-857 group on Yahoo at

http://groups. yahoo.com/ group/FT- 857/ , or send an email to

FT-857-subscribe@ yahoogroups. com .

[Non-text portions of this message have been removed]

7396. Re: [loopantennas] Re: best places to buy wire for rooftop horizontal loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-13 21:04:01 UTC
From: Rick Karlquist
Topic: 7386 Message: 7396

M HOLDEN wrote:

> 160 will be cloud warming. IDEAL !!!
> Say hello soon, I'm in Europe ! Regards, Mike G4HOL

The loop will be "small" on 160 meters which will result
in it having a null in the broadside direction, which
is straight up in the case of horizontal loop. Not ideal
for cloud warming.

Rick N6RK

7397. Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 05:43:53 UTC
From: huf1967
Topic: 7397 Message: 7397

I'm trying to build a big wheel loop antenna to use on a high altitude ballooning project. I've found several websites referring to the popularity of the big wheel antenna but with all the claims of popularity I can't seem to find any design plans. Through piecing information from several different websites together I think I may have some of the design figured out.

What I'm needing to know is how long each element should be. I'm wanting to use this for 144.390mhz with APRS. According to my calculation 144.39mhz has a wavelength of 6.8 feet and if I wanted to make a 1/4 wave antenna then each radiating element would be 20.4 inches long.

If anyone has an information or plans it would be appreciated. Also, once the elements are cut and attached how would you tune this type of antenna or would it even be possible to tune it ??

Thanks !!

7398. Re: [loopantennas] Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 06:47:00 UTC
From: Richard (Rick) Karlquist
Topic: 7397 Message: 7398

This appeared in old editions of the ARRL VHF manual.
I have one of these legacy editions and can scan the
article for you. I remember that it consisted of
three 1 wavelength loops spaced at 120 degrees in
the horizontal plane. I think they were simply
fed in parallel.

Rick N6RK

huf1967 wrote:
>
>
> I'm trying to build a big wheel loop antenna to use on a high altitude
> ballooning project. I've found several websites referring to the
> popularity of the big wheel antenna but with all the claims of
> popularity I can't seem to find any design plans. Through piecing
> information from several different websites together I think I may have
> some of the design figured out.

7399. Re: Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 15:43:04 UTC
From: huf1967
Topic: 7397 Message: 7399

Rick,

I would like to get those scans if possible. You can mail them to huf1967@.... I had heard that the plans were in the old ARRL manual but was unable to locate that particular manual.

Are each loop 1 wavelength each or 1/3 of a full wavelength ??

Thanks,
Jay

--- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@...> wrote:
>
> This appeared in old editions of the ARRL VHF manual.
> I have one of these legacy editions and can scan the
> article for you. I remember that it consisted of
> three 1 wavelength loops spaced at 120 degrees in
> the horizontal plane. I think they were simply
> fed in parallel.
>
> Rick N6RK
>
> huf1967 wrote:
> >
> >
> > I'm trying to build a big wheel loop antenna to use on a high altitude
> > ballooning project. I've found several websites referring to the
> > popularity of the big wheel antenna but with all the claims of
> > popularity I can't seem to find any design plans. Through piecing
> > information from several different websites together I think I may have
> > some of the design figured out.
>

7400. Re: [loopantennas] Re: Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 17:49:45 UTC
From: Rick Karlquist
Topic: 7397 Message: 7400

huf1967 wrote:
> Rick,
>
> I would like to get those scans if possible. You can mail them to
> huf1967@.... I had heard that the plans were in the old ARRL
> manual but was unable to locate that particular manual.
>
> Are each loop 1 wavelength each or 1/3 of a full wavelength ??
>
> Thanks,
> Jay

IIRC, each loop is 1 wavelength. The book is at my remote
base, which I won't be visiting again until April 27, so
I'll get back to you then.

Rick N6RK

7401. Re: [loopantennas] Re: Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 18:49:51 UTC
From: steve.g4vbd
Topic: 7397 Message: 7401

Hi Guys
try these web sites

http://home.hccnet.nl/uffe.noucha/log/bigwheel.htm

http://www.hamtv.com/wheel.html

http://www.vhfcomm.co.uk/dl8zx.htm

http://www.gmat.unsw.edu.au/snap/publications/ely_2004a.pdf

regards

Steve, g4vbd

> > I'm trying to build a big wheel loop antenna to use on a high altitude
> > ballooning project. I've found several websites referring to the
> > popularity of the big wheel antenna but with all the claims of
> > popularity I can't seem to find any design plans. Through piecing
> > information from several different websites together I think I may have
> > some of the design figured out.
>

[Non-text portions of this message have been removed]

7402. Re: Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 17:43:57 UTC
From: kd5foy_new
Topic: 7397 Message: 7402

3 full wave loops in parallel. google is your friend, tons of links

larry, kd5foy

--- In loopantennas@yahoogroups.com, "huf1967" <jayschinkel@...> wrote:
>
> Rick,
>
> I would like to get those scans if possible. You can mail them to huf1967@... I had heard that the plans were in the old ARRL manual but was unable to locate that particular manual.
>
> Are each loop 1 wavelength each or 1/3 of a full wavelength ??
>
> Thanks,
> Jay
>
>
>
>
>
> --- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@> wrote:
> >
> > This appeared in old editions of the ARRL VHF manual.
> > I have one of these legacy editions and can scan the
> > article for you. I remember that it consisted of
> > three 1 wavelength loops spaced at 120 degrees in
> > the horizontal plane. I think they were simply
> > fed in parallel.
> >
> > Rick N6RK
> >
> > huf1967 wrote:
> > >
> > >
> > > I'm trying to build a big wheel loop antenna to use on a high altitude
> > > ballooning project. I've found several websites referring to the
> > > popularity of the big wheel antenna but with all the claims of
> > > popularity I can't seem to find any design plans. Through piecing
> > > information from several different websites together I think I may have
> > > some of the design figured out.
> > >
>

7403. RE: [loopantennas] Re: Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 20:05:34 UTC
From: dx11
Topic: 7397 Message: 7403

For dimensions see:

http://f1rfm.free.fr/bigwheel.htm

Cor Beijersbergen

7404. Re: [loopantennas] Re: Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 20:09:27 UTC
From: richard
Topic: 7397 Message: 7404

On Wed, 14 Apr 2010 19:49:51 +0100
"steve.g4vbd" <steve.g4vbd@...> wrote:

> Hi Guys
> try these web sites
>
> http://home.hccnet.nl/uffe.noucha/log/bigwheel.htm
>
> http://www.hamtv.com/wheel.html
>
> http://www.vhfcomm.co.uk/dl8zx.htm
>
> http://www.gmat.unsw.edu.au/snap/publications/ely_2004a.pdf
>
> regards
>
> Steve, g4vbd
>
>
> > > I'm trying to build a big wheel loop antenna to use on a high altitude
> > > ballooning project. I've found several websites referring to the
> > > popularity of the big wheel antenna but with all the claims of
> > > popularity I can't seem to find any design plans. Through piecing
> > > information from several different websites together I think I may have
> > > some of the design figured out.
> >
>
>
> [Non-text portions of this message have been removed]
> .
It was in VHF Communications in the 1980's, it will show up in the index,
Also known as a clover leaf antenna

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
GHz
##

7405. Loop for 2M

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-14 22:23:31 UTC
From: Bill McGraw
Topic: 7405 Message: 7405

Rick,
I want to see that. What about 70cm?

Rick wrote,

"This appeared in old editions of the ARRL VHF manual.
I have one of these legacy editions and can scan the
article for you. I remember that it consisted of
three 1 wavelength loops spaced at 120 degrees in
the horizontal plane. I think they were simply
fed in parallel.

Rick N6RK"

Bill McGraw, KF5FJZ
"Somewhere South of Chicago"
Greenville, Mississippi

7406. TV coax

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-15 00:00:06 UTC
From: Bill McGraw
Topic: 7406 Message: 7406

I can't find out how to use the files to search for TV coax, wanting to build a vertical or horizontal loop for 75M, pro/con for DX only.

Bill McGraw, KF5FJZ
"Somewhere South of Chicago"
Greenville, Mississippi

7407. Turbo charged ferrite loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-15 02:56:53 UTC
From: sarmento2k
Topic: 7407 Message: 7407

Hi

I have just published an article with some photos of experiments using ferrite rods.

I really appreciate small loops a lot for MW/LW, not just for its practical results, but it's easy to use and we can go everywhere with a portable loop. Well not exactly everywhere, here in Brazil I had some troubles with federal agents when tried to pass airport security with one in my hand luggage

Maybe ferrite looks like old fashioned but it really works for MW dx.

Regards

Article : http://www.sarmento.net.br

Sarmento ☐ Rio de Janeiro - Brazil

7408. 2M loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-15 14:25:36 UTC
From: Jimmy
Topic: 7408 Message: 7408

Does anyone have a design for a 2M loop?

7409. Re: Turbo charged ferrite loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-15 16:14:08 UTC
From: aircheckIover
Topic: 7407 Message: 7409

Sarmento;

Nice looking website, antennas and articles!

Two things:
1) Which is the better performer for you - the open loop or ferrite? In terms of gain? In terms of nulling?

2) I use a 2ft open loop (sim to yours) air-coupled to a Twin-Ferrite by CCrane. The open loop is "picked up" by the CCrane ferrite, then signal is sent to radio. One figure eight affecting the other allows for unusual phasing and nulling, and more gain but without more noise. It is a wonderful DX combination although it takes up alot of space. With this setup I can separate two stations about 20 degrees apart - one almost due south and one almost due north. Magical!!

Mark

==========

--- In loopantennas@yahoogroups.com, "sarmento2k" <sarmento.campos@...> wrote:
>
> Hi
>
> I have just published an article with some photos of experiments using ferrite rods.
>
> I really appreciate small loops a lot for MW/LW, not just for its practical results, but it's easy to use and we can go everywhere with a portable loop. Well not exactly everywhere, here in Brazil I had some troubles with federal agents when tried to pass airport security with one in my hand luggage
>
> Maybe ferrite looks like old fashioned but it really works for MW dx.
>
> Regards
>
> Article : http://www.sarmento.net.br
>
> Sarmento ☐ Rio de Janeiro - Brazil
>

7410. Re: [loopantennas] Re: Turbo charged ferrite loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-15 16:36:25 UTC
From: Paul V Birke PEng
Topic: 7407 Message: 7410

excellent Mark

please look at
http://www.google.com/patents/about?id=xi5TAAAAEBAJ&dq=Sj%C3%B6strand++antenna

usa patent 2074944

for more inspiration

best wishes
Paul

From: aircheckIover <mdh@...>
To: loopantennas@yahoogroups.com
Sent: Thu, April 15, 2010 12:14:08 PM
Subject: [loopantennas] Re: Turbo charged ferrite loop antenna

Sarmento;

Nice looking website, antennas and articles!

Two things:
1) Which is the better performer for you - the open loop or ferrite? In terms of gain? In terms of nulling?

2) I use a 2ft open loop (sim to yours) air-coupled to a Twin-Ferrite by CCrane. The open loop is "picked up" by the CCrane ferrite, then signal is sent to radio. One figure eight affecting the other allows for unusual phasing and nulling, and more gain but without more noise. It is a wonderful DX combination although it takes up alot of space. With this setup I can separate two stations about 20 degrees apart - one almost due south and one almost due north. Magical!!

Mark

[Non-text portions of this message have been removed]

7411. Re: Big wheel loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-16 00:05:11 UTC
From: huf1967
Topic: 7397 Message: 7411

Thanks to all the information from everyone. Some of the sites I had been to before and some are new. Combining info from different sites has put some of the missing pieces together for this build. I'm trying to shoot for 144.39 for our balloon launches so we'll see how it turns out. Now to piece together materials !!

7412. Re: 2M loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-16 16:36:49 UTC
From: aajham
Topic: 7408 Message: 7412

In old vhf UHF books there is a one called a Squalo (not sure of spelling) it is a square loop with a gamma match I believe, built one years ago.

Also I built one from the AntennaX site that looks like a box frame when you are done, I think it was 2 loops made from copper pipe.

The site is complicated to access so I gave it up, something about a new password for every part some interesting designs though.

I have seen a few designs for Transmitter hunting loops (receive only) I need to build one of those.

Good Luck

--- In loopantennas@yahoogroups.com, "Jimmy" <oobiedoobie@...> wrote:
>
> Does anyone have a design for a 2M loop?
>

7413. Question for loop gurus!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-16 15:48:50 UTC
From: neilbellgroups
Topic: 7413 Message: 7413

In terms of directionality and noise which should give the better performance?

A ferrite bar like the Quantum Loop
----------OR----------
The AOR LA-390 1 foot diameter loop
----------OR----------
Crane Twin-coil ferrite

Directional nulling is the most important requirement and noise reduction is next. Gain is not that important and price is not an issue.

I do not have space for anything much larger than these choices and it must be indoors.

Neil Bell
KJ6FBA

7415. Re: Question for loop gurus!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-16 22:05:13 UTC
From: Daniele
Topic: 7413 Message: 7415

Try this ones:
http://users.netonecom.net/~swordman/Radio/re-loop-article.htm
http://www.frontiernet.net/~jadale/Loop.htm
Lots of information here about how to evaluate different loop types.
Best 73's
Daniele

--- In loopantennas@yahoogroups.com, "neilbellgroups" <neil.bell@...> wrote:
>
> In terms of directionality and noise which should give the better performance?
>
> A ferrite bar like the Quantum Loop
> -------------OR-------------------
> The AOR LA-390 1 foot diameter loop
> -------------OR-------------------
> Crane Twin-coil ferrite
>
> Directional nulling is the most important requirement and noise reduction is next. Gain is not that important and price is not an issue.
>
> I do not have space for anything much larger than these choices and it must be indoors.
>
> Neil Bell
> KJ6FBA
>

7416. New to group

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-16 21:58:25 UTC
From: JIM
Topic: 2096 Message: 7416

I have heard of a 4' loop antenna using PVC as it was explained to me
after making the loop, drill hole in the PVC every 2"and run wire thru
in and out. I don't know if this person is right or not.
I think he meant do the above on all four sides or ?
JIM

7417. Re: Turbo charged ferrite loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-17 01:58:54 UTC
From: sarmento2k
Topic: 7407 Message: 7417

Very interesting, since early broadcasting golden age, lots of experiments to enhance reception.
Regards
Sarmento

--- In loopantennas@...m, Paul V Birke PEng <nonlinear@...> wrote:
>
> excellent Mark
>
> please look at
> http://www.google.com/patents/about?id=xi5TAAAAEBAJ&dq=Sj%C3%B6strand++antenna
>
> usa patent 2074944
>
> for more inspiration
>
> best wishes
> Paul
>
>
>
>
> _____
> From: aircheckIover <mdh@...>
> To: loopantennas@yahoogroups.com
> Sent: Thu, April 15, 2010 12:14:08 PM
> Subject: [loopantennas] Re: Turbo charged ferrite loop antenna
>
>
> Sarmento;
>
> Nice looking website, antennas and articles!
>
> Two things:
> 1) Which is the better performer for you - the open loop or ferrite? In terms of gain? In terms of nulling?
>
> 2) I use a 2ft open loop (sim to yours) air-coupled to a Twin-Ferrite by CCrane. The open loop is "picked up" by the CCrane ferrite, then signal is sent to radio. One figure eight affecting the other allows for unusual phasing and nulling, and more gain but without more noise. It is a wonderful DX combination although it takes up alot of space. With this setup I can separate two stations about 20 degrees apart - one almost due south and one almost due north. Magical!!
>
> Mark

>
> [Non-text portions of this message have been removed]
>

7418. Re: Turbo charged ferrite loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-17 01:54:37 UTC
From: sarmento2k
Topic: 7407 Message: 7418

Hi Mark

1 ☐ No doubt the open loop. Although the large ferrite loop is similar in terms of nulling, but not gain.

2 ☐ I prefer magnetic coupling, and even when I use pre-amp, I don't use a coupling coil (one or two turn with another variable capacitor to form a LC circuit as usual) together with the main coil. I use a little ferrite rod with a coil and a ceramic capacitor to make it resonate at near central MW band, and than a FET and a small signal transistor to buffer into the receiver's 50 ohm input.

http://www.sarmento.net.br/Acoplador_Loop.htm
(it's in portuguese)

This configuration is easy to work and it's simple as put the preamp box near the loop antenna.

Regards
Sarmento

--- In loopantennas@yahoogroups.com, "aircheckIover" <mdh@...> wrote:
>
> Sarmento;
>
> Nice looking website, antennas and articles!
>
> Two things:
> 1) Which is the better performer for you - the open loop or ferrite? In terms of gain? In terms of nulling?
>
> 2) I use a 2ft open loop (sim to yours) air-coupled to a Twin-Ferrite by CCrane. The open loop is "picked up" by the CCrane ferrite, then signal is sent to radio. One figure eight affecting the other allows for unusual phasing and nulling, and more gain but without more noise. It is a wonderful DX combination although it takes up alot of space. With this setup I can separate two stations about 20 degrees apart - one almost due south and one almost due north. Magical!!
>
> Mark
>
> ==========
>
> --- In loopantennas@yahoogroups.com, "sarmento2k" <sarmento.campos@> wrote:
> >
> > Hi
> >
> > I have just published an article with some photos of experiments using ferrite rods.
> >
> > I really appreciate small loops a lot for MW/LW, not just for its practical results, but it's easy to use and we can go everywhere with a portable loop. Well not exactly everywhere, here in Brazil I had some troubles with federal agents when tried to pass airport security with one in my hand luggage
> >

> > Maybe ferrite looks like old fashioned but it really works for MW dx.
> >
> > Regards
> >
> > Article : http://www.sarmento.net.br
> >
> > Sarmento ☐ Rio de Janeiro - Brazil
> >
>

7419. Re: Turbo charged ferrite loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-17 03:15:57 UTC
From: aircheckclover
Topic: 7407 Message: 7419

Good find Paul.
Heck, nothing is new!!
But that's OK. I've been told there's a good paper on dual-phasing of loops at the ODXA website. Can't remember what the author called this technique but he had a cool name for it.

Mark

==========

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> excellent Mark
>
> please look at
> http://www.google.com/patents/about?id=xi5TAAAAEBAJ&dq=Sj%C3%B6strand++antenna
>
> usa patent 2074944
>
> for more inspiration
>
> best wishes
> Paul
>
>
>
>
>
> _____
> From: aircheckclover <mdh@...>
> To: loopantennas@yahoogroups.com
> Sent: Thu, April 15, 2010 12:14:08 PM
> Subject: [loopantennas] Re: Turbo charged ferrite loop antenna
>
>
>
> Sarmento;
>
> Nice looking website, antennas and articles!
>
> Two things:
> 1) Which is the better performer for you - the open loop or ferrite? In terms of gain? In terms of nulling?
>
> 2) I use a 2ft open loop (sim to yours) air-coupled to a Twin-Ferrite by CCrane. The open loop is "picked up" by the CCrane ferrite, then signal is sent to radio. One figure eight affecting the other allows for unusual phasing and nulling, and more gain but without more noise. It is a wonderful DX combination although it takes up alot of space. With this setup

I can separate two stations about 20 degrees apart - one almost due south and one almost due north. Magical!!
>
> Mark
>
> [Non-text portions of this message have been removed]
>

7420. Re: Question for loop gurus!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-17 14:49:13 UTC
From: airchecklover
Topic: 7413 Message: 7420

Neil;

Sounds like you mean for MW.

Well, to confuse things even more, let's add
Choice #4) Open loop.

What I know: I have a Chinese AOR clone. Gain and null are good but not the best. I'm in a high RF area and the amp has problems with that. I have the CCrane T-F. Gain & null are good but two issues: it is not the best at rejecting noise and the Q is tight - maybe 5 kcs. Good/bad - Tight Q cuts highs (fidelity) but can help 'pre-select' in tight spaces. I understand the Quantum Loop takes no prisoners with variable Q, good gain and tight nulling, but have never tried one. I am very impressed with the open loop / T-F combo i have stumbled upon. See a recent thread here for more info on that. Bottom line on the combo -
Bad: Hogs space, awkward without a lazy Susan, more to fiddle with. Good: Interesting synergies - open loop is my most quiet antenna and seems to keep T-F quiet. Nulling becomes amazingly tight and phasing makes things even more interesting. True improvement in S/N - the combo will make a weak and uncopyable station with any single antenna copyable. No open loop coupling issues because the T-F couples to the radio. And finally - more to fiddle with :)

Hope that helps.

Mark

==========

--- In loopantennas@yahoogroups.com, "neilbellgroups" <neil.bell@...> wrote:
>
> In terms of directionality and noise which should give the better performance?
>
> A ferrite bar like the Quantum Loop
> -------------OR-------------------
> The AOR LA-390 1 foot diameter loop
> -------------OR-------------------
> Crane Twin-coil ferrite
>
> Directional nulling is the most important requirement and noise reduction is next. Gain is not that important and price is not an issue.
>
> I do not have space for anything much larger than these choices and it must be indoors.
>
> Neil Bell
> KJ6FBA
>

7421. Re:Question for loop gurus!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-17 15:55:36 UTC
From: Darren Hennig
Topic: 7413 Message: 7421

For MW DXing only, the Quantum probably would be best, as it has the Q-tweaking feature to help tighten the tuning and add selectivity.

I have the latter two on your list, both do well at MW, though I find the La-390 generally "tighter" for nulls, and it has the benefit of going to LW and SW/HF should you wish to do that on occasion.

The other nice thing with the LA-390 is that you can also remotely connect the element [up to 5m away according to the manual] using an extension. I have done this with a 4m length of RG174 and BNCs to match the connections on the unit and loop. Gain is not affected significantly, and noise stays about the same. But, being able to orient the loop in a slightly quieter location away from the rig tends to help sometimes. It also helps to minimize wear on the base coneections. THe loop can then be placed closer ot a window, for example, and be slowly rotated [by hanging the loop off a curtain rod, etc.]

Another possible option is to get some thick ferrite [for MW/160m] from Stormwise dot com and wind your own loop with some litz. Not hard to do, and you can tune it with a variable. This is VERY quiet, and even running a preamp outboard of the antenna, it is really "tight". I use a 13.5" x 1" ferrite rod, 125u type.

Darren
VE6IZ

[Non-text portions of this message have been removed]

7422. Broad band receiving loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-18 13:22:46 UTC
From: markthomasq
Topic: 7422 Message: 7422

Hi everyone

Ive put up a vertical loop antenna 10 foot verticals and 12.5ft across (basically a small flag antenna without the resistor.) fed by a 9:1 balun (bottom corner) it will be used for general sw listening.
(broadcast bands)

The flags I use are always fed by a 16:1 balun and are of similar dimensions. Ive seen reports of a similar antenna used for sw with a 4;1 balun.

I was wondering which would by the best balun "value" for this antenna. I will be putting a resistor pot in the opposite bottom corner when resume MW (am) dxing

The antenna compares favourably with my vertical for 40m (33 foot vertical wire) better on the upper bands not so good on 7mhz or 6 which is to be expected I suppose.

Any advice on the balun or recommendations for a better low noise antenna

Also are there any designs for a loop for 17m Transmitting
Thanks very much

Mark

Isle of Anglesey

7423. Re: Broad band receiving loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-18 17:24:07 UTC
From: W1AEX
Topic: 7422 Message: 7423

Hi Mark,

I have nothing definitive to tell you regarding the best balun value(s) for a receive loop antenna. I can only tell you that I use 9:1 baluns on my receive loops, but being curious, I have substituted a 4:1 balun and found no significant difference in noise pickup or signal levels. I suspect that for receive purposes it is not terribly critical.

Purists will cite impedance characteristics and transmission line losses but I have found receiver front ends to be very tolerant with regard to matching. The largest contributing factor of the balun, in my opinion, is that it provides isolation from the outside surface of the coax feedline, and this contributes greatly to less local noise pickup.

My modest receive loop adventures are detailed at the link below. My vertical triangular loops are oriented so that one favors N-S and the other favors E-W reception. They are quite bi-directional from 400 KC to 5.0 Mhz but receive very well without a distinct directional pattern up through 20 Mhz. Being located away from the house, they are very quiet compared to my station dipole antennas. They are basically very simple K9AY sized vertical triangular loops without any terminating resistors or control circuitry.

http://members.cox.net/w1aex.fn31/loop.html

--- In loopantennas@yahoogroups.com, "markthomasq" <Daviesruby@...> wrote:
(snipped here)
>
> Any advice on the balun or recommendations for a better low noise antenna
>
> Thanks very much
>
> Mark
>
> Isle of Anglesey
>

7424. Question about changing antenna tuner from 27Mhz spectrum to SW bands

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-18 18:31:01 UTC
From: marc
Topic: 7424 Message: 7424

Hello,

I found this antenna tuner that seems to be for the 27Mhz band.
Here some pictures
http://users.fulladsl.be/spb13810/research/antennatuner/

If I adapt the spool (more turns) it will tune lower than 27Mhz.

I could put in a slf made spool, and then slide a ferrite bar through it
as well, to tune that part of the tuner ....

This is an antenna tuner for TX, not really for TX, but what would the 2
variable capacitors do?? (the word "balanced" comes to my mind...) I'm
"used to" ONE variable cap, and one spool ...

Other suggestions?

I can hang a loop antenna on the input, or some other "simple" vertical.

Thanks,
Marc

--
What's on Shortwave guide: choose an hour, go!
http://shortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

7425. Re: Question about changing antenna tuner from 27Mhz spectrum to SW bands

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-19 02:39:20 UTC
From: ozzy_1kw
Topic: 7424 Message: 7425

take the coil out and rewind one for 10 turns at 1.5" diameter. Tap the coil as needed.finished.

Rob

--- In loopantennas@yahoogroups.com, marc <marcsje@...> wrote:
>
> Hello,
>
> I found this antenna tuner that seems to be for the 27Mhz band.
> Here some pictures
> http://users.fulladsl.be/spb13810/research/antennatuner/
>
> If I adapt the spool (more turns) it will tune lower than 27Mhz.
>
> I could put in a slf made spool, and then slide a ferrite bar through it
> as well, to tune that part of the tuner ....
>
>
> This is an antenna tuner for TX, not really for TX, but what would the 2
> variable capacitors do?? (the word "balanced" comes to my mind...) I'm
> "used to" ONE variable cap, and one spool ...
>
> Other suggestions?
>
> I can hang a loop antenna on the input, or some other "simple" vertical.
>
> Thanks,
> Marc
>
> --
> What's on Shortwave guide: choose an hour, go!
> http://shortwave.tk
> 700+ Radio Stations on SW http://swstations.tk
> 300+ languages on SW http://radiolanguages.tk
>

7426. Re: [loopantennas] Re: Question about changing antenna tuner from 27Mhz spectrum to SW bands

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-19 03:16:01 UTC
From: pat walkup
Topic: 7424 Message: 7426

HI Marc
in addition to the tapped coil, you might also want to rewire one of the variable caps in series with the coil . That wou;ld mean insulating it from the chassis, but would make the tumer more versitile.
Pat

On 4/18/10, ozzy_1kw <ozzy_1kw@...> wrote:
>
>
>
> take the coil out and rewind one for 10 turns at 1.5" diameter. Tap the
> coil as needed.finished.
>
> Rob
>
> --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>, marc
> <marcsje@...> wrote:
> >
> > Hello,
> >
> > I found this antenna tuner that seems to be for the 27Mhz band.
> > Here some pictures
> > http://users.fulladsl.be/spb13810/research/antennatuner/
> >
> > If I adapt the spool (more turns) it will tune lower than 27Mhz.
> >
> > I could put in a slf made spool, and then slide a ferrite bar through it
> > as well, to tune that part of the tuner ....
> >
> >
> > This is an antenna tuner for TX, not really for TX, but what would the 2
> > variable capacitors do?? (the word "balanced" comes to my mind...) I'm
> > "used to" ONE variable cap, and one spool ...
> >
> > Other suggestions?
> >
> > I can hang a loop antenna on the input, or some other "simple" vertical.
> >
> > Thanks,
> > Marc
> >
> > --
> > What's on Shortwave guide: choose an hour, go!
> > http://shortwave.tk

> > 700+ Radio Stations on SW http://swstations.tk
> > 300+ languages on SW http://radiolanguages.tk
> >
>
>
>

[Non-text portions of this message have been removed]

7427. balanced line & metal-framed windows

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-22 21:31:34 UTC
From: ZephyrNYC
Topic: 7427 Message: 7427

Hello, everyone. Does anyone in the group feed an outdoor antenna with twin coax or regular (non-coax) balanced line going through a metal-framed window? If so, what kind of problems do you experience? AFAIK, using balanced line near metal is a big no-no, but I read this today:

Regular balanced line:

http://www.mail-archive.com/elecraft@.../msg30984.html

"... you can cross a metallic boundary with parallel feedline with no problem to the RF as long as it occurs at right angles to the feedline - again be careful that you have adequate insulation where you cross, the RF voltages can be quite high even with low or moderate power if the feedline has a high SWR."

And this on balanced (twin) coax:

http://eham.net/ehamforum/smf/index.php?topic=66987.0

"I would like some advice on feeding 450 ohm window line at right angles through aluminum siding. It's the only way I can do it! Can I get reasonably close at this right angle? or do I need several inches around etc."

"If you want to be entirely safe about it, you could change the ladderline to two side-by-side coaxes for the short final run through the siding and to the shack.

Connect an inside conductor of each coax to each of the balanced line conductors.

At the balanced line side, connect both coax shields together and solder. Insulate all three connections from each other well, using weatherproof tape or something suitable.

At the shack end, connect the two center conductors of the two coaxes to the balance line connects. Connect the two shields together and also connect them to shack ground.

This will create a shielded, balanced line that can cross conductive metals without problem. You could pass the two side-by-side coaxial cables through the siding through one tight pass hole or two, doesn't matter as they are now shielded but still running in blanced mode.

Old trick that works."

More on regular balanced line:

'But seriously, I'm sure you've heard that you have to "keep
ladderline several inches from metal."

Right angle crossings don't really count.

The important thing with keeping ladderline away from *metal* is that
you don't want to run it for a long stretch close to and in parallel
with a third unbroken conductor, because that turns it into a
different kind of feedline, one that has a lower characteristic
impedance and generally one that has more loss in the situations where
people like to use ladderline. So that's what you want to avoid.
And if you ran it very close to a long stretch of lossy, damp material
like dirt, the way the fields interact with the dirt would cause a lot
of very direct loss.'

More on balanced (twin) coax:

http://forums.hamisland.net/viewtopic.php?f=4&t=4793

Aside from differences in shielding, weight and cost; what are the
pros & cons of using balanced coax vs. regular balanced insulated
line?

Does RF from balanced feedline really cause interference to pacemakers
and other medical devices? I am curious because my apartment window
frames seem to be constructed of aluminum, and I have plans for an
antenna that will probably need a long feedline. The two windows are
approximately 4' and 15' from the edge of a metal fire escape.
Thanks.

73,
Frank wF2ANK

"Security is mostly a superstition. Avoiding danger is no safer in the
long run than outright exposure. Life is either a daring adventure or
nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yaesu FT-857 group on Yahoo at
http://groups.yahoo.com/group/FT-857/ , or send an email to
FT-857-subscribe@yahoogroups.com .

7428. Re: [loopantennas] balanced line & metal-framed windows

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-22 22:20:26 UTC
From: M HOLDEN
Topic: 7427 Message: 7428

Take out one pane of glass, replace it with acetate sheet or plexiglass and run two terminal posts through two drilled holes. Connect the twin feeder either side of the new plastic window. Mike G4HOL

--- On Thu, 22/4/10, ZephyrNYC <ZephyrNYC@...> wrote:

From: ZephyrNYC <ZephyrNYC@...>
Subject: [loopantennas] balanced line & metal-framed windows
To:
Date: Thursday, 22 April, 2010, 22:31

Hello, everyone. Does anyone in the group feed an outdoor antenna

with twin coax or regular (non-coax) balanced line going through a

metal-framed window? If so, what kind of problems do you experience?

AFAIK, using balanced line near metal is a big no-no, but I read this

today:

Regular balanced line:

http://www.mail- archive.com/ elecraft@ mailman.qth. net/msg30984. html

"... you can cross a metallic boundary with parallel

feedline with no problem to the RF as long as it occurs at right angles to

the feedline - again be careful that you have adequate insulation where you

cross, the RF voltages can be quite high even with low or moderate power if

the feedline has a high SWR."

And this on balanced (twin) coax:

http://eham. net/ehamforum/ smf/index. php?topic= 66987.0

"I would like some advice on feeding 450 ohm window line at right

angles through aluminum siding. It's the only way I can do it! Can I

get reasonably close at this right angle? or do I need several inches

around etc."

"If you want to be entirely safe about it, you could change the

ladderline to two side-by-side coaxes for the short final run through

the siding and to the shack.

Connect an inside conductor of each coax to each of the balanced line conductors.

At the balanced line side, connect both coax shields together and solder. Insulate all three connections from each other well, using weatherproof tape or something suitable.

At the shack end, connect the two center conductors of the two coaxes to the balance line connects. Connect the two shields together and also connect them to shack ground.

This will create a shielded, balanced line that can cross conductive metals without problem. You could pass the two side-by-side coaxial cables through the siding through one tight pass hole or two, doesn't matter as they are now shielded but still running in blanced mode.

Old trick that works."

More on regular balanced line:

'But seriously, I'm sure you've heard that you have to "keep ladderline several inches from metal."

Right angle crossings don't really count.

The important thing with keeping ladderline away from *metal* is that you don't want to run it for a long stretch close to and in parallel with a third unbroken conductor, because that turns it into a different kind of feedline, one that has a lower characteristic impedance and generally one that has more loss in the situations where people like to use ladderline. So that's what you want to avoid.

And if you ran it very close to a long stretch of lossy, damp material like dirt, the way the fields interact with the dirt would cause a lot of very direct loss.'

More on balanced (twin) coax:

http://forums. hamisland. net/viewtopic. php?f=4&t= 4793

Aside from differences in shielding, weight and cost; what are the pros & cons of using balanced coax vs. regular balanced insulated line?

Does RF from balanced feedline really cause interference to pacemakers and other medical devices? I am curious because my apartment window frames seem to be constructed of aluminum, and I have plans for an antenna that will probably need a long feedline. The two windows are approximately 4' and 15' from the edge of a metal fire escape.

Thanks.

73,

Frank wF2ANK

"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yaesu FT-857 group on Yahoo at http://groups. yahoo.com/ group/FT- 857/ , or send an email to FT-857-subscribe@ yahoogroups. com .

[Non-text portions of this message have been removed]

7429. Re: [loopantennas] balanced line & metal-framed windows

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-23 01:27:00 UTC
From: Jim Dunstan
Topic: 7427 Message: 7429

At 05:31 PM 4/22/2010 -0400, you wrote:
>
>
>Hello, everyone. Does anyone in the group feed an outdoor antenna
>with twin coax or regular (non-coax) balanced line going through a
>metal-framed window? If so, what kind of problems do you experience?
>AFAIK, using balanced line near metal is a big no-no, but I read this
>today:

I have used balanced feed line 600 ohm home brew, 450 ohm, 300 ohm Twin lead, 75 ohm Twin lead (no longer available), and never had any problems with any of them. Most people don't remember that TV twin lead was designed for VHF use and was connected directly from the antenna to the receiver on millions of TV sets with no problem. If it could handle VHF it certainly won't have any difficulty with HF.
Standard techniques .... if running parallel to metal objects .... like a tower .... keep the line at least 1 ft away (2 ft is better). On these parallel runs it is a good idea to put a few twists in the feed line.

Crossing a metal barrier .... such as a rain gutter, or a window frame does NOT create an "RF" problem. I have used a number of different feed-through solutions. 1. make the hole big enough for twin-lead to go through. Make sure there is enough insulation around the portion going past the metal. You can transition from 450 ohm to 300 ohm back to 450 ohm with no difficulty ... just be sure each piece is balanced line. This system works fine in the 100 - 150 watt range.

When dealing with high power then the feed through technique is different ... just like feeding the stove AC power is different than your floor lamp. Same kind of AC ... just more of it hi hi. A technique I have used for high power is to construct 2 parallel insulated feed through's using ceramic fittings (harder to find these days) with a center copper rod in each with nuts and washers at each end. Then simply connect the outside parallel line to the outside connectors and the inside parallel line to the inside connectors.

It is simply a mechanical problem. You will have to size up your own situation .... and walk up and down the isles in Home Depot until you see something that will do the trick !!

>Regular balanced line:
>
><http://www.mail-archive.com/elecraft@.../msg30984.html>http://www.mail-archive.com/elecraft@.../msg30984.html
>
>"... you can cross a metallic boundary with parallel

>feedline with no problem to the RF as long as it occurs at right angles to
>the feedline - again be careful that you have adequate insulation where you
>cross, the RF voltages can be quite high even with low or moderate power if
>the feedline has a high SWR."

By definition the line will have SWR .... but if the antenna being fed is very short in relation to the wavelength of the RF being sent to it there can be very high RF voltages. However if the antenna is 100 ft or more the RF voltages will usually be manageable at all HF frequencies. However as you move up in power you will also have to be sure all points will handle potential RF voltages.

For example if you feed a 32 FT dipole on 40M you will get by if running QRP. At 100 Watts you will put a strain on the feed line as well as the balanced tuner. At 1000 watts ... forget it hi hi.

In my view the only reason to go to all the trouble of converting parallel coax cables to balanced feed line (also questionable whether there is RF shielding) is that running the parallel cable next to a metal object or through metal conduit a considerable distance it is unavoidable. Going through a wall is no problem. I have done it both commercially and in Ham radio with very high power ... with no problem.

Jim, VE3CI

[Non-text portions of this message have been removed]

7430. Re: [loopantennas] balanced line & metal-framed windows

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-23 01:42:10 UTC
From: Jim Dunstan
Topic: 7427 Message: 7430

At 10:20 PM 4/22/2010 +0000, you wrote:
>
>
>Take out one pane of glass, replace it with acetate sheet or plexiglass
>and run two terminal posts through two drilled holes. Connect the twin
>feeder either side of the new plastic window. Mike G4HOL
>
>--- On Thu, 22/4/10, ZephyrNYC
><<mailto:ZephyrNYC%40gmail.com>ZephyrNYC@...> wrote:
>pproximately 4' and 15' from the edge of a metal fire escape.

Hi,

Another technique I have used is to drill 2 holes through the frame a couple of inches from each other. Then push plastic tubing through the holes so that the tubing is flush on both the inside and outside surfaces. Then get appropriate diameter threaded brass rod to run through each tube .... e.g. 3 to 4 inches ... depending on the thickness of the window frame ... wall ... etc.. Washers and nuts on each side for fastening the parallel cable. Ceramic tubing was common a long time ago. However check out Home Depot ... I am sure you will find all you need hi hi. It will make a nice neat feed-through.

Jim, VE3CI

[Non-text portions of this message have been removed]

7431. Built Antenna for Sangean ATS909

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-23 19:59:41 UTC
From: sasha_and_laurent
Topic: 7431 Message: 7431

Hello, I am new to the forum. It is looking very hitech to me!! I do not know much about antennas. I have a Sangean ATS909 and I want to bring it with me where I work in the south of Sahara desert (Hassi Messaoud, Algeria). I would like to be able to receive radio from France. Hassi Messaoud is located approximately 1300 km south of Marseille, 2000 km south of Paris. Any recommendation of what can be done here? The radio has a 3.5 jack input for an external antenna.

Thanks for any help.

Laurent

7432. Re: [loopantennas] Built Antenna for Sangean ATS909

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-24 15:58:08 UTC
From: kevin asato
Topic: 7431 Message: 7432

Welcome. Let's start by finding out what frequency bands you are most interested in and if your antenna is portable or permanent. That would help in determining what antenna can suit your needs. Try also to search on Loop Antenna and it will also give you many references. Most of them are focused on the Medium Wave (MW) band, but by changing the size of the loop or the number of turns, something may suit your needs. Keep in mind also that band conditions normally change during daily and yearly cycles and where you live so things may not always work the same.
I have taken my ATS-909 on travel but have used a Terk Advantage for MW (530-1710) reception in the States and the ATS-60 portable reel antenna supplied by Sangean or a simple dipole when traveling internationally due to weight limitations and short term of travel (business).

73,kevinkc6pob
--- On Fri, 4/23/10, sasha_and_laurent <laurent.barbot@...> wrote:

From: sasha_and_laurent <laurent.barbot@...>
Subject: [loopantennas] Built Antenna for Sangean ATS909
To: loopantennas@yahoogroups.com
Date: Friday, April 23, 2010, 12:59 PM

Hello, I am new to the forum. It is looking very hitech to me!! I do not know much about antennas. I have a Sangean ATS909 and I want to bring it with me where I work in the south of Sahara desert (Hassi Messaoud, Algeria). I would like to be able to receive radio from France. Hassi Messaoud is located approximately 1300 km south of Marseille, 2000 km south of Paris. Any recommendation of what can be done here? The radio has a 3.5 jack input for an external antenna.

Thanks for any help.

Laurent

[Non-text portions of this message have been removed]

7433. Re: Built Antenna for Sangean ATS909

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-24 16:29:51 UTC
From: osage_archer
Topic: 7431 Message: 7433

Although some may poo-poo them as not being a "real" antenna (whatever that is), you can find the "slinky" antennas on eBay which naturally are compact and durable for travel. I use one for my ATS-909 and it works well. Also any reel antenna or even just a wire 6-7 meters long or longer will work well - you can just put clips on the ends and attach to the whip antenna and to any elevated termination. Either of these will give you much improved shortwave reception and are cheap and easy solutions for travel. For AM broadcast band reception the Terk Advantage will work well and is reasonably compact and inexpensive.

Tim C.

--- In loopantennas@yahoogroups.com, "sasha_and_laurent" <laurent.barbot@...> wrote:
>
> Hello, I am new to the forum. It is looking very hitech to me!! I do not know much about antennas. I have a Sangean ATS909 and I want to bring it with me where I work in the south of Sahara desert (Hassi Messaoud, Algeria). I would like to be able to receive radio from France. Hassi Messaoud is located approximately 1300 km south of Marseille, 2000 km south of Paris. Any recommendation of what can be done here? The radio has a 3.5 jack input for an external antenna.
>
> Thanks for any help.
>
> Laurent
>

7434. Trees and things

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-25 09:41:48 UTC
From: richard
Topic: 7434 Message: 7434

Hi all
How susceptible are mag loops to foliage on trees ?

My 4mtr diameter loop I use for 80 mtr has now refused to resonate, sweeping it from a sig gen there seems to be a slight resonance at about 5 MHz.
It was placed between a Magnolia bush and a cherry tree, to please the XYL, sort of semi hidden, if you can hide something that size.

I was going to build a return loss bridge, and did'nt get a round to it, now I wish I had !!

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7435. Re: Trees and things

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-25 19:18:43 UTC
From: capntripps2000
Topic: 7434 Message: 7435

I never have a problem with my trees and resonance of my 80M magnetic loop. Only time I did was due to rain water on the UHF connector before I weatherproofed it.

Readjust the matching section for low SWR and retune.

Surrounding objects will affect the impedance but adjusting the matching section will always compensate. The end effect will be slightly less efficiency but you can live with that.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> Hi all
> How susceptible are mag loops to foliage on trees ?
>
> My 4mtr diameter loop I use for 80 mtr has now refused to resonate, sweeping it
> from a sig gen there seems to be a slight resonance at about 5 MHz.
> It was placed between a Magnolia bush and a cherry tree, to please the XYL,
> sort of semi hidden, if you can hide something that size.
>
>

7436. Re: [loopantennas] Re: Trees and things

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-25 22:00:15 UTC
From: richard
Topic: 7434 Message: 7436

On Sun, 25 Apr 2010 19:18:43 -0000
"capntripps2000" <capntripps2000@...> wrote:

> I never have a problem with my trees and resonance of my 80M magnetic loop.
> Only time I did was due to rain water on the UHF connector before I
> weatherproofed it.
>
> Readjust the matching section for low SWR and retune.
>
> Surrounding objects will affect the impedance but adjusting the matching
> section will always compensate. The end effect will be slightly less
> efficiency but you can live with that.
>
> Andrew
> N3LCW
>
>
>
Thanks Andrew I'll do that.

--
Best wishes

Richard Bown

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
GHz
##

7437. Re: Built Antenna for Sangean ATS909

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-26 06:47:03 UTC
From: sasha_and_laurent
Topic: 7431 Message: 7437

Thanks Tim for your input. As I mentioned I know nothing about antenna. My radio was provided with an external wire that is 7m long approx and that is rolled inside it's case. I was looking at it as a cheap and maybe inefficient device since it was not looking a like a proper antenna.
I will then use it and try to catch frequencies of French radio there. Thanks again for your help.
Laurent.

--- In loopantennas@yahoogroups.com, "osage_archer" <timchandler2001@...> wrote:
>
> Although some may poo-poo them as not being a "real" antenna (whatever that is), you can find the "slinky" antennas on eBay which naturally are compact and durable for travel. I use one for my ATS-909 and it works well. Also any reel antenna or even just a wire 6-7 meters long or longer will work well - you can just put clips on the ends and attach to the whip antenna and to any elevated termination. Either of these will give you much improved shortwave reception and are cheap and easy solutions for travel. For AM broadcast band reception the Terk Advantage will work well and is reasonably compact and inexpensive.
>
> Tim C.
>
> --- In loopantennas@yahoogroups.com, "sasha_and_laurent" <laurent.barbot@> wrote:
> >
> > Hello, I am new to the forum. It is looking very hitech to me!! I do not know much about antennas. I have a Sangean ATS909 and I want to bring it with me where I work in the south of Sahara desert (Hassi Messaoud, Algeria). I would like to be able to receive radio from France. Hassi Messaoud is located approximately 1300 km south of Marseille, 2000 km south of Paris. Any recommendation of what can be done here? The radio has a 3.5 jack input for an external antenna.
> >
> > Thanks for any help.
> >
> > Laurent
> >
>

7438. Loop antenna for car??

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-28 15:43:10 UTC
From: grayrobertc
Topic: 7438 Message: 7438

Anybody have a car set-up? Maybe a rectangular look on top, outside or inside? I'd like to use my portable receiver in my car. I've tried wrapping a little wire antenna around the roof on the inside...I can actually get better-than-whip response. But I'm think a loop would be better.

Anybody??

7439. Re: [loopantennas] Loop antenna for car??

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-28 16:15:17 UTC
From: jose alonso
Topic: 7438 Message: 7439

Try this : one short ferrite bar whith some wire coiled on it and connected to the antena input of the receiver.
Then the ferrite is placed transversally to one of the car´s door frame.

Or easier : put your portable near the frame to couple it directly to the internal ferrite (if your portable has internal ferrite antenna)

It works for medium wave.

Jose

De: grayrobertc <grayrobertc@...>
Para: loopantennas@yahoogroups.com
Enviado: mié,28 abril, 2010 17:43
Asunto: [loopantennas] Loop antenna for car??

Anybody have a car set-up? Maybe a rectangular look on top, outside or inside? I'd like to use my portable receiver in my car. I've tried wrapping a little wire antenna around the roof on the inside...I can actually get better-than- whip response. But I'm think a loop would be better.

Anybody??

[Non-text portions of this message have been removed]

7440. Re: [loopantennas] Loop antenna for car??

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-28 16:28:50 UTC
From: jose alonso
Topic: 7438 Message: 7440

Correction : the wire coiled in the bar must be conected to the antenna and ground of the receiver, with a short lenght of coaxial cable, or a pair of wires.

Jose

_____
De: jose alonso <jaafes@yahoo.com>
Para: loopantennas@yahoogroups.com
Enviado: mié,28 abril, 2010 18:15
Asunto: Re: [loopantennas] Loop antenna for car??

Try this : one short ferrite bar whith some wire coiled on it and connected to the antena input of the receiver.
Then the ferrite is placed transversally to one of the car´s door frame.

Or easier : put your portable near the frame to couple it directly to the internal ferrite (if your portable has internal ferrite antenna)

It works for medium wave.

Jose

_____
De: grayrobertc <grayrobertc@ gmail.com>
Para: loopantennas@ yahoogroups. com
Enviado: mié,28 abril, 2010 17:43
Asunto: [loopantennas] Loop antenna for car??

Anybody have a car set-up? Maybe a rectangular look on top, outside or inside? I'd like to use my portable receiver in my car. I've tried wrapping a little wire antenna around the roof on the inside...I can actually get better-than- whip response. But I'm think a loop would be better.

Anybody??

[Non-text portions of this message have been removed]

7441. Re: Loop antenna for car??

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-28 18:40:37 UTC
From: grayrobertc
Topic: 7438 Message: 7441

Thanks Jose!

I don't have a ferrit bar lying around. I've seen talk about the CCrane(?) ferrite bar.

So let me ask...you get the bar, put it flush against the metal car body (e.g., against the roof on the inside), and connect the ends to the receiver antenna and ground.

That seems like it might work. I was thinking about an active loop...buy I'm sure my wife wouldn't want it on top! I think it would be kinda cool!

-Robert

--- In loopantennas@yahoogroups.com, jose alonso <jaafes@...> wrote:
>
> Correction : the wire coiled in the bar must be conected to the antenna and ground of the receiver, with a short lenght of coaxial cable, or a pair of wires.
>
> Jose
>
>
> _____
> De: jose alonso <jaafes@...>
> Para: loopantennas@yahoogroups.com
> Enviado: mié,28 abril, 2010 18:15
> Asunto: Re: [loopantennas] Loop antenna for car??
>
>
> Try this : one short ferrite bar whith some wire coiled on it and connected to the antena input of the receiver.
> Then the ferrite is placed transversally to one of the car´s door frame.
>
> Or easier : put your portable near the frame to couple it directly to the internal ferrite (if your portable has internal ferrite antenna)
>
> It works for medium wave.
>
> Jose
>
> _____ _____ _____ __
> De: grayrobertc <grayrobertc@ gmail.com>
> Para: loopantennas@ yahoogroups. com
> Enviado: mié,28 abril, 2010 17:43
> Asunto: [loopantennas] Loop antenna for car??
>
> Anybody have a car set-up? Maybe a rectangular look on top, outside or inside? I'd like to use my portable receiver in my car. I've tried wrapping a little wire antenna around the

roof on the inside...I can actually get better-than- whip response. But I'm think a loop would be better.
>
> Anybody??
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7442. Re: [loopantennas] Loop antenna for car??

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-28 23:42:40 UTC
From: Jim Dunstan
Topic: 7438 Message: 7442

At 03:43 PM 4/28/2010 +0000, you wrote:
>
>
>Anybody have a car set-up? Maybe a rectangular look on top, outside or
>inside? I'd like to use my portable receiver in my car. I've tried
>wrapping a little wire antenna around the roof on the inside...I can
>actually get better-than-whip response. But I'm think a loop would be better.
>
>Anybody??

Hi,

An old ARRL antenna handbook (1950's vintage I believe) shows a loop arrangement for HF mobile. basically 2 grounded vertical antennas bent over and coupled. It can be fed at either ground point. It has a short ... 1 page discussion on its characteristics and efficiency. the major problem is the efficiency; with the very low radiation resistance the antenna coupling is very critical vis-a-vis efficiency. However, unlike a loaded vertical antenna a lossy loading coil is not needed as the loop is tuned by a series capacitor. As with all small loops the loop construction and feeding is critical if any amount of power is to be converted to electromagnetic radiation.

Jim, VE3CI

7443. Re: [loopantennas] Loop antenna for car??

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-28 23:45:18 UTC
From: Jim Dunstan
Topic: 7438 Message: 7443

At 03:43 PM 4/28/2010 +0000, you wrote:
>
>
>Anybody have a car set-up? Maybe a rectangular look on top, outside or
>inside? I'd like to use my portable receiver in my car. I've tried
>wrapping a little wire antenna around the roof on the inside...I can
>actually get better-than-whip response. But I'm think a loop would be better.
>
>Anybody??

PS... my last posting dealt with a HF transmitting antenna
arrangement. the arrangement would work quite well for receiving ... as
the loop would be tuned with a single capacitor ... which could be located
at the front panel of your vehicle.

Jim, VE3CI

7444. RE: [loopantennas] Loop antenna for car??

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-29 07:22:57 UTC
From: dx11
Topic: 7438 Message: 7444

Hello,

Google for "mobile loop antenna" and you will find these:

http://www.smeter.net/antennas/mobile-loop-1.php

http://www.stealth.ae/plugins/custompages/detinf.php?id=372&id_categories=13
6

http://www.smc-comms.com/docs/spec_sheets/nvis_loop_antennas.pdf

regards,

Cor Beijersbergen

7445. Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-30 03:59:45 UTC
From: sean
Topic: 7445 Message: 7445

I was thinking of making a loop antenna using copper foil. My understanding is that 100mm copper foil would be equivalent to 50mm copper pipe. However there is some talk about 'current crowding' at the edges of the foil. There is a reference in following document that I would like to follow up:
http://midnightdesignsolutions.com/MidnightLoop/Midnight%20Loop%20(Mar%2011a).pdf
And the reference is to:
Resistance of Foil Conductors For Antennas, Rudy Severns N6LF, QEX May/June 2002 Tech Notes
Maybe someone could scan that for me?
I have some interest in maximum Q loop antennas. There are indications that a 2 turn foil antenna would be best in that regard. However it is all very complex because of the proximity effect and distributed capacitance etc.

Sean O'Connor

7446. Re: [loopantennas] Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-30 13:33:54 UTC
From: toddroberts2001@aol.com
Topic: 7445 Message: 7446

In a message dated 4/30/2010 8:32:23 A.M. Eastern Daylight Time,
bitterlemon40@... writes:
I was thinking of making a loop antenna using copper foil. My
understanding is that 100mm copper foil would be equivalent to 50mm copper pipe.
However there is some talk about 'current crowding' at the edges of the foil.
There is a reference in following document that I would like to follow up:
http://midnightdesignsolutions.com/MidnightLoop/Midnight%20Loop%20(Mar%2011a
).pdf
And the reference is to:
Resistance of Foil Conductors For Antennas, Rudy Severns N6LF, QEX
May/June 2002 Tech Notes
Maybe someone could scan that for me?
I have some interest in maximum Q loop antennas. There are indications
that a 2 turn foil antenna would be best in that regard. However it is all very
complex because of the proximity effect and distributed capacitance etc.

Sean O'Connor

Sean,
I have had very good luck using a strip of copper flashing for a loop
element as far as efficiency goes. One thing I did find out is that
a copper foil loop will not hold up very well if placed outdoors.

If placed outdoors in the open the wind tended to catch the strip
and it would twist and vibrate in the wind and eventually fail due
to metal fatigue.

For an outdoor antenna I would only recommend using round
copper pipe as it is very rigid compared to the copper foil and
will stand up to the wind and weather much better.

For an indoor or attic antenna a copper foil loop should work
fine as long as it is held up by a rigid framework with good
insulation. I would stick with a single-turn loop.

Remember skin effect and use copper foil 10 mils thick or thicker
for lowest RF resistance.

73 - Todd WD4NGG

7447. Re: [loopantennas] Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-04-30 13:55:46 UTC
From: richard
Topic: 7445 Message: 7447

On Fri, 30 Apr 2010 09:33:54 EDT
toddroberts2001@... wrote:

> In a message dated 4/30/2010 8:32:23 A.M. Eastern Daylight Time,
> bitterlemon40@... writes:
> I was thinking of making a loop antenna using copper foil. My
> understanding is that 100mm copper foil would be equivalent to 50mm copper
> pipe. However there is some talk about 'current crowding' at the edges of
> the foil. There is a reference in following document that I would like to
> follow up:
> http://midnightdesignsolutions.com/MidnightLoop/Midnight%20Loop%20(Mar%2011a).pdf
> And the reference is to:
> Resistance of Foil Conductors For Antennas, Rudy Severns N6LF, QEX
> May/June 2002 Tech Notes
> Maybe someone could scan that for me?
> I have some interest in maximum Q loop antennas. There are indications
> that a 2 turn foil antenna would be best in that regard. However it is all
> very complex because of the proximity effect and distributed capacitance etc.
>
> Sean O'Connor
>
>
> Sean,
> I have had very good luck using a strip of copper flashing for a loop
> element as far as efficiency goes. One thing I did find out is that
> a copper foil loop will not hold up very well if placed outdoors.
>
> If placed outdoors in the open the wind tended to catch the strip
> and it would twist and vibrate in the wind and eventually fail due
> to metal fatigue.
>
> For an outdoor antenna I would only recommend using round
> copper pipe as it is very rigid compared to the copper foil and
> will stand up to the wind and weather much better.
>
> For an indoor or attic antenna a copper foil loop should work
> fine as long as it is held up by a rigid framework with good
> insulation. I would stick with a single-turn loop.
>
> Remember skin effect and use copper foil 10 mils thick or thicker
> for lowest RF resistance.
>
> 73 - Todd WD4NGG
>
You can also use as length of heliax it nearly self supporting, LDF 4-50 is

equivalent to 13 mm because of the ridges in it, but the nice thing is it an interference fit inside 15mm Cu tube, the same as 1/2" Cu tube, so yoiu can make the loop an strip back the outer cover and stuff it up the 1/2" tube so you can use ordinary pipe fittings,
There is always a good supply of LDF4-50 , just ask any of the VHF/ UHF Dx guys, they may have a piece long enough for your needs./
ie a length that water has got into, once that happens its pretty useless as coax ,but it doesn't matter for building loops as you are using the outer copper cover. It will also handle power.
HTH

--
Best wishes

Richard Bown G8JVNM

###
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
###

7448. Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 00:37:23 UTC
From: capntripps2000
Topic: 7445 Message: 7448

I've used 1/4" self sticking copper foil used for stained glass work for quick magnetic loop antennas setup in hotel rooms. These run aorund $5 for a 60ft spool. I would run the foil along the hotel window spaced several inches inside the metal window frame. I used gamma matching at the bottom of the loop to match to the coax and a wide spaced air variable capacitor at the top where I split the foil. Using a battery operated soldering iron I tack soldered the wire connections to the foil. I also keep an assortment of capacitors in my bag in case I need to pad the tuning cap. Using up to 20 watts I worked 20-40M CW with good results. I've even worked as low as 80M if the window was large enough and also had surprisingly good results. When ready to check out of the hotel the foil comes off the window easily with no residue and I discard the foil in the trash.

Stealthy and effective!

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "sean" <bitterlemon40@...> wrote:
>
> I was thinking of making a loop antenna using copper foil. My understanding is that 100mm copper foil would be equivalent to 50mm copper pipe. However there is some talk about 'current crowding' at the edges of the foil.

7449. Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 00:59:02 UTC
From: xtemporize
Topic: 7445 Message: 7449

CQ magazine for April 1967 has an article "Skin Effect in High
Frequency Design". I quote: "The values from the graph (fig. 1)
represent the depth at which currents will be reduced to 1/e (where
e=2.302) of the surface currents, and it is customary to provide for at
least 5 times the skin depth shown. For all practical purposes, 5 times is close to 100%
conduction." The graph with the article is quite small,but it looks like the basic value
for copper is 1 mil and for
aluminum, 2 mil. So if I interpret this correctly and the article is
true, 5 mils would suffice for copper, and 10 mil for aluminum. That
would seem to make copper foil usable. Aluminum foil, I suppose you
would have to use a much larger width to lower the overall AC resistance. I have thought
about making a loop from plastics plumbing
pipe, and then somehow covering it with copper foil, like maybe a couple
lengths stretched along the whole length of the pipe, the loop being
built in a square. I wonder how solderable this copper foil is, if at
all. I found my two rolls of copper foil in a garbage dumpster after
some kind of constructon job (we have a very wasteful country) but I
think it is also sold for use in stained-glass hobby projects. Aluminum foil comes in
widths up to maybe 18 inches and not expensive at all
so maybe it could be used somehow. You would have to build some
kind of box-like framework to attach it to, something looking kind of
like a box kite. -Hue Miller / Newport, Oregon, USA

7450. Re: [loopantennas] Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 01:04:45 UTC
From: Jim Dunstan
Topic: 7445 Message: 7450

At 12:37 AM 5/2/2010 +0000, you wrote:
>
>
>
>
>I've used 1/4" self sticking copper foil used for stained glass work for
>quick magnetic loop antennas setup in hotel rooms. These run aorund $5 for
>a 60ft spool. I would run the foil along the hotel window spaced several
>inches inside the metal window frame. I used gamma matching at the bottom
>of the loop to match to the coax and a wide spaced air variable capacitor
>at the top where I split the foil. Using a battery operated soldering iron
>I tack soldered the wire connections to the foil. I also keep an
>assortment of capacitors in my bag in case I need to pad the tuning cap.
>Using up to 20 watts I worked 20-40M CW with good results. I've even
>worked as low as 80M if the window was large enough and also had
>surprisingly good results. When ready to check out of the hotel the foil
>comes off the window easily with no residue and I discard the foil in the
>trash.
>
>Stealthy and effective!
>
>Andrew
>N3LCW

Hi Andrew

A great idea. I'm going to practice on the front picture window! By the
way ... who caries the copper foil tape ?

Thanks,

Jim, VE3CI

7451. Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 01:05:09 UTC
From: xtemporize
Topic: 7445 Message: 7451

The foil I found in the trash is 2 inch width. Pretty nice stuff. Interesting the idea of the disposable loop antenna using narrower stuff. Now re "current crowding", back around the late 1970s when AEA (company) was offering a loop antenna built on a metallic band or stip, this may have been the reason MFJ company touted their loop antenna as being more efficient than a model not using a cylindrical conductor. Now that AEA is gone, I don't recall seeing MFJ advertisement text that still claims this advantage, since there's not really any competition. -Hue Miller

7452. Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 01:11:00 UTC
From: xtemporize
Topic: 7445 Message: 7452

It occurred to me that I could try a "proof of concept" experiment by
taking a large cardboard box from a moving company, and running a strip
of aluminum foil around it. That would be a strip around 12 inches or more wide. I wonder
if she high voltage developed would be a fire hazard
with the cardboard? At least it would be safe at low powers. I recall
once many years ago, trying to run a 80 meters, 100 watt transmitter
into a short indoor antenna, made of aluminum foil by the way, and
setting the window curtain on fire, from the high voltage flashover.
-Hue Miller

7453. RE: [loopantennas] Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 01:48:51 UTC
From: Brent G DeWitt
Topic: 7445 Message: 7453

Your local home improvement store probably has copper tape as "slug tape".
The adhesive isn't conductive like EMI/EMC tape from 3M, but it's a lot more
available.

73,

Brent - AB1LF

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
Behalf Of Jim Dunstan
Sent: Saturday, May 01, 2010 9:05 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Foil based loop antennas

At 12:37 AM 5/2/2010 +0000, you wrote:
>
>
>
>
>I've used 1/4" self sticking copper foil used for stained glass work for
>quick magnetic loop antennas setup in hotel rooms. These run aorund $5 for
>a 60ft spool. I would run the foil along the hotel window spaced several
>inches inside the metal window frame. I used gamma matching at the bottom
>of the loop to match to the coax and a wide spaced air variable capacitor
>at the top where I split the foil. Using a battery operated soldering iron
>I tack soldered the wire connections to the foil. I also keep an
>assortment of capacitors in my bag in case I need to pad the tuning cap.
>Using up to 20 watts I worked 20-40M CW with good results. I've even
>worked as low as 80M if the window was large enough and also had
>surprisingly good results. When ready to check out of the hotel the foil
>comes off the window easily with no residue and I discard the foil in the
>trash.
>
>Stealthy and effective!
>
>Andrew
>N3LCW

Hi Andrew

A great idea. I'm going to practice on the front picture window! By the
way ... who caries the copper foil tape ?

Thanks,

Jim, VE3CI

[Non-text portions of this message have been removed]

7454. Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 15:43:24 UTC
From: capntripps2000
Topic: 7445 Message: 7454

I bought several foil rolls on Ebay but they can also be found in arts and crafts stores that carry stained glass supplies. I found some locally after I bought mine on Ebay.

re; cardboard and fire: unless the loop arcs over somewhere or there are metal particles in the board I wouldn't worry about a few watts of RF. Personally, I'd avoid the cardboard anyway. It reminds me of the Harry Lythall SM0VPO packing crate loop antenna:

http://www.sm0vpo.com/antennas/crate.htm

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:

>
> A great idea. I'm going to practice on the front picture window! By the
> way ... who caries the copper foil tape ?
>
> Thanks,
>
> Jim, VE3CI
>

7455. RE: [loopantennas] Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 15:45:03 UTC
From: Rick Karlquist
Topic: 7445 Message: 7455

I would just like to clear up 2 common misconceptions:

1. Tubing vs foil (or any other non-close shape):
RF current spreads out on the conductor and concentrates on
the edges. Tubing has no edge, therefore the RF
current will spread out more uniformly. If the tubing
is circular (as opposed to square) the current is forced by
symmetry to be uniform and there is no current crowding.
This is why round tubing will have the less loss than
foil of comparable dimensions.

2. Reducing conductor loss in a small loop ultimately results
in an impractically high Q with very narrow bandwidth. If
you are stuck with a small loop, it just isn't going to be
very efficient and there isn't a lot that you can do about it.

Summarizing: foil will be lossier than comparable tubing.
It may not be much better than wire. So your foil loop will
not be especially efficient. OTOH, if foil is convenient to
use, go ahead, because loop efficiency is much more about loop
size than conductor size.

Rick N6RK

7456. Foil-based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 16:27:23 UTC
From: Bill McGraw
Topic: 7456 Message: 7456

Andrew, N3LCW wrote,
"I used gamma matching at the bottom of the loop to match to the coax and a wide spaced air variable capacitor at the top where I split the foil."

Andrew,
I'm still studying loops at age 65, but dense in abstracts and terminology. I assume you are referring to matching impedance of the loop to your transceiver when you say "used gamma matching." Try to use concrete terms to explain and show what you did in gamma matching. I can't visualize what you did.

Bill McGraw, KF5FJZ
"Somewhere South of Chicago"
Greenville, Mississippi

7457. Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 16:34:35 UTC
From: david feldman
Topic: 7445 Message: 7457

I found on amazon.com JVCC brand 36 yard by 1/4, 1/2 and 1" 1 oz (thickness measure) tape with conductive adhesive (USD $12, 22, 39 respectively.)

http://www.amazon.com/JVCC-CFL-5CA-Copper-Conductive-Adhesive/dp/B000WQBRJA/ref=sr_1_3?ie=UTF8&s=hi&qid=1272817726&sr=1-3

Maybe it is used in laptop display repair (for shielding the inverter and fluorescent lamp circuitry)?

Not known if it can be cleanly removed from window glass...

>>N3LCW
>
> Hi Andrew
>
> A great idea. I'm going to practice on the front picture window! By the
> way ... who caries the copper foil tape ?
>
> Thanks,
>
> Jim, VE3CI
>

_____
The New Busy is not the old busy. Search, chat and e-mail from your inbox.
http://www.windowslive.com/campaign/thenewbusy?ocid=PID28326::T:WLMTAGL:ON:WL:en-US:WM_HMP:042010_3

7458. RE: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 16:39:29 UTC
From: david feldman
Topic: 7445 Message: 7458

Another one - 2" wide tape (thickness unspecified) also 36 yard roll, however, it does include in description text "it's aggressive adhesive system..." so maybe not so easily removed? Anyway, USD 49 per 36 yard roll makes interesting possibility for wrapping lengths of PVC (not sure if it would survive outdoor flexing and getting around 45/90 degree angles...)

http://www.1stmaskingtape.com/detail.php?pid=11119&cid=575

> I found on amazon.com JVCC brand 36 yard by 1/4, 1/2 and 1" 1 oz (thickness measure) tape with conductive adhesive (USD $12, 22, 39 respectively.)
>
> http://www.amazon.com/JVCC-CFL-5CA-Copper-Conductive-Adhesive/dp/B000WQBRJA/ref=sr_1_3?ie=UTF8&s=hi&qid=1272817726&sr=1-3
>
> Maybe it is used in laptop display repair (for shielding the inverter and fluorescent lamp circuitry)?
>
> Not known if it can be cleanly removed from window glass...
>
>>>N3LCW
>>
>> Hi Andrew
>>
>> A great idea. I'm going to practice on the front picture window! By the
>> way ... who caries the copper foil tape ?
>>
>> Thanks,
>>
>> Jim, VE3CI
>>
>
> _____
> The New Busy is not the old busy. Search, chat and e-mail from your inbox.
> http://www.windowslive.com/campaign/thenewbusy?ocid=PID28326::T:WLMTAGL:ON:WL:en-US:WM_HMP:042010_3

_____
Hotmail has tools for the New Busy. Search, chat and e-mail from your inbox.
http://www.windowslive.com/campaign/thenewbusy?ocid=PID28326::T:WLMTAGL:ON:WL:en-US:WM_HMP:042010_1

7459. Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 18:41:32 UTC
From: enriqueeeeee2001
Topic: 7459 Message: 7459

Hello Group,

Recently I have sold a Wellbrook 1530+ antenna, I have been using it for two years with good results. I have moved home and two strong stations on MW creates intermodulations in the receiver.
So, I have been thinking about a replacement for the 1530+ , Wellbrook 330S it is good for shortwave and do not produce intermodulations because it is more attenuated on MW.

I have read some reviews about the RF systems DX one MKII, it is said that its perfomance is better than the Wellbrook. Does it need a good earth?

My questions:

Is worth buying the Rf systems instead of the Wellbrook?Any significant improvement?
Would I pick up much more weak stations, clearer and with less noise?
I am mainly intereested in listening weak stations on tropical band, so a good antenna it is important.

I would be very grateful if somebody could throw some light about this difficult election.

Thank you very much
Kind Regards.

7460. Re: [loopantennas] RE: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 19:08:56 UTC
From: Christopher E. Brown
Topic: 7445 Message: 7460

Why go through the hassle? Wrapping copper tape on a PVC form leaves you with a fairly stiff loop, and alot of unknowns.

"Air con" copper tube (available in multiple sizes at any home supply or plumbing house).

Thin wall copper pipe, easy enough to make an octagonal loop with a couple sticks and some 45 elbows.

If you want flexable/portable there are a number of receive only designs that used coax. You could also use a fine strand DC power cable, #4 can be had that rolls up almost as easy as rope.

Losses would be higher, but I suspect losses would be lower in #4 power cable than with copper foil wrapped on a PVC form.

Don't get me wrong, the copper foil trick is neat for a temp antenna, used in myself on 6M once I just would not use it for a high current low band antenna where I had another choice.

On Sun, 2 May 2010, david feldman wrote:

>
> Another one - 2" wide tape (thickness unspecified) also 36 yard roll,
> however, it does include in description text "it's aggressive adhesive
> system..." so maybe not so easily removed? Anyway, USD 49 per 36 yard
> roll makes interesting possibility for wrapping lengths of PVC (not sure
> if it would survive outdoor flexing and getting around 45/90 degree
> angles...)
>
> http://www.1stmaskingtape.com/detail.php?pid=11119&cid=575
>
>> I found on amazon.com JVCC brand 36 yard by 1/4, 1/2 and 1" 1 oz (thickness measure) tape with conductive adhesive (USD $12, 22, 39 respectively.)
>>
>> http://www.amazon.com/JVCC-CFL-5CA-Copper-Conductive-Adhesive/dp/B000WQBRJA/ref=sr_1_3?ie=UTF8&s=hi&qid=1272817726&sr=1-3
>>
>> Maybe it is used in laptop display repair (for shielding the inverter and fluorescent lamp circuitry)?
>>
>> Not known if it can be cleanly removed from window glass...
>>
>>>> N3LCW
>>>
>>> Hi Andrew
>>>

>>> A great idea. I'm going to practice on the front picture window! By the
>>> way ... who caries the copper foil tape ?
>>>
>>> Thanks,
>>>
>>> Jim, VE3CI
>>>
>>
>> _____
>> The New Busy is not the old busy. Search, chat and e-mail from your inbox.
>> http://www.windowslive.com/campaign/thenewbusy?ocid=PID28326::T:WLMTAGL:ON:WL:en-US:WM_HMP:042010_3

7461. Re: [loopantennas] Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-02 20:09:05 UTC
From: Don
Topic: 7459 Message: 7461

I would purchase or make one or two filters to block/severely attenuate
the MW band first. I am mostly interested in NDB's below the MW band and
use two that do a good job. Both were home built. Both have in/out
switches built in.

Don
Upland, CA
34.10 -117.63 1250ft ASL
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SPM30 SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
2x PA0RDT Mini-Whip @ 22ft
LFL1010

On 02-May-10 11:41, enriqueeeeee2001 wrote:
> Hello Group,
>
>
> Recently I have sold a Wellbrook 1530+ antenna, I have been using it for two
> years with good results. I have moved home and two strong stations on MW creates
> intermodulations in the receiver.
> So, I have been thinking about a replacement for the 1530+ , Wellbrook 330S it
> is good for shortwave and do not produce intermodulations because it is more
> attenuated on MW.
>
> I have read some reviews about the RF systems DX one MKII, it is said that its
> perfomance is better than the Wellbrook. Does it need a good earth?
>
> My questions:
>
> Is worth buying the Rf systems instead of the Wellbrook?Any significant improvement?
> Would I pick up much more weak stations, clearer and with less noise?
> I am mainly intereested in listening weak stations on tropical band, so a good
> antenna it is important.
>
> I would be very grateful if somebody could throw some light about this
> difficult election.
>
> Thank you very much
> Kind Regards.
>
>
>
>
>

>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.814 / Virus Database: 271.1.1/2849 - Release Date: 05/01/10 23:27:00
>
>

7462. PCB loop antenna software

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-04 01:36:37 UTC
From: sean
Topic: 7462 Message: 7462

I wrote a PCB magnetic loop antenna calculator a while ago:
http://lemontree.googlecode.com/files/PCBAntenna.zip
I based the maths on the reference that is included in the zip file.
I doubt the results are terribly accurate, just back of the envelope figures. For example it does not include dielectric losses from the PCB material.
Anyway you can play around with it and see how the different parameters interact.

7463. Re: Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-04 20:25:53 UTC
From: enriqueeeeee2001
Topic: 7459 Message: 7463

Thanks,

Yes I have already sold the 1530+, I was using it with a Racal 1772
receiver.
The 1772 has a RF tune, is like a preselector, it works excellent. I can null
the Am interferences, but it is very tired adjusting the potentiometer everytime
you move of frequency.
I am also interested in AM and LW Dxing, so before buying the Wellbrook 330S I
would like to know if it would be better the MK II. How is the perfomance on HF?

I have read some reviews about it and it is said that it needs a good ground,
Would I have better catches, regional stations?

Thank you for your help.

--- In loopantennas@yahoogroups.com, Don <stb55@...> wrote:
>
> I would purchase or make one or two filters to block/severely attenuate
> the MW band first. I am mostly interested in NDB's below the MW band and
> use two that do a good job. Both were home built. Both have in/out
> switches built in.
>
> Don
> Upland, CA
> 34.10 -117.63 1250ft ASL
> 2x R-75 w/250Hz R-71A w/250Hz R-70
> SDR-IQ SPM30 SR-AF& LPF DSP599zx
> MFJ-784B HD-1418 AF-1 MSB-1
> 2x PA0RDT Mini-Whip @ 22ft
> LFL1010
>
>
>
> On 02-May-10 11:41, enriqueeeeee2001 wrote:
> > Hello Group,
> >
> >
> > Recently I have sold a Wellbrook 1530+ antenna, I have been using it for two
> > years with good results. I have moved home and two strong stations on MW creates
> > intermodulations in the receiver.
> > So, I have been thinking about a replacement for the 1530+ , Wellbrook 330S it
> > is good for shortwave and do not produce intermodulations because it is more
> > attenuated on MW.
> >
> > I have read some reviews about the RF systems DX one MKII, it is said that its
> > perfomance is better than the Wellbrook. Does it need a good earth?

> >
> > My questions:
> >
> > Is worth buying the Rf systems instead of the Wellbrook?Any significant improvement?
> > Would I pick up much more weak stations, clearer and with less noise?
> > I am mainly intereested in listening weak stations on tropical band, so a good
> > antenna it is important.
> >
> > I would be very grateful if somebody could throw some light about this
> > difficult election.
> >
> > Thank you very much
> > Kind Regards.
> >
> >
> >
> >
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather
than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> >
> > No virus found in this incoming message.
> > Checked by AVG - www.avg.com
> > Version: 9.0.814 / Virus Database: 271.1.1/2849 - Release Date: 05/01/10 23:27:00
> >
> >
>

7464. Re: [loopantennas] Re: Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-04 23:10:22 UTC
From: Don
Topic: 7459 Message: 7464

Well, the Wellbrook is a loop so you have the possibility to null out interference or noise. The DX 1 is omni. I have not put a ground on my LFL1010. Sometimes grounds will add noise. Everyone's situation is different - I am happy without it.

I logged 62 new NDB's the first 30 days after I installed the LFL1010. I believe this is due to the lower noise floor. I wish I had not been so cheap and got one before. I think the Wellbrook loops are pretty much the same - some are supposedly optimized for certain bands.

I don't know much about the DX 1 other than it is an active antenna and will be noiser but you may not notice that on SW bands. Also you don't need a rotator. I also think it is better to have a vertical active antenna, a loop and a wire antenna. Each responds differently to signals. I recently took down my wire antennas a couple of years ago in favor of the PA0RDT Mini-Whips though. The wires only problem was that they were ugly on my small real estate!

Don
Upland, CA
34.10 -117.63 1250ft ASL
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SPM30 SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
2x PA0RDT Mini-Whip @ 22ft
LFL1010

On 04-May-10 13:25, enriqueeeeee2001 wrote:
> Thanks,
>
>
> Yes I have already sold the 1530+, I was using it with a Racal 1772
> receiver.
> The 1772 has a RF tune, is like a preselector, it works excellent. I can null
> the Am interferences, but it is very tired adjusting the potentiometer everytime
> you move of frequency.
> I am also interested in AM and LW Dxing, so before buying the Wellbrook 330S I
> would like to know if it would be better the MK II. How is the perfomance on HF?
>
> I have read some reviews about it and it is said that it needs a good ground,
> Would I have better catches, regional stations?
>
>
>
> Thank you for your help.
>

>
> --- In loopantennas@yahoogroups.com, Don<stb55@...> wrote:
>
>> I would purchase or make one or two filters to block/severely attenuate
>> the MW band first. I am mostly interested in NDB's below the MW band and
>> use two that do a good job. Both were home built. Both have in/out
>> switches built in.
>>
>> Don
>> Upland, CA
>> 34.10 -117.63 1250ft ASL
>> 2x R-75 w/250Hz R-71A w/250Hz R-70
>> SDR-IQ SPM30 SR-AF& LPF DSP599zx
>> MFJ-784B HD-1418 AF-1 MSB-1
>> 2x PA0RDT Mini-Whip @ 22ft
>> LFL1010
>>
>>
>>
>> On 02-May-10 11:41, enriqueeeeee2001 wrote:
>>
>>> Hello Group,
>>>
>>>
>>> Recently I have sold a Wellbrook 1530+ antenna, I have been using it for two
>>> years with good results. I have moved home and two strong stations on MW creates
>>> intermodulations in the receiver.
>>> So, I have been thinking about a replacement for the 1530+ , Wellbrook 330S it
>>> is good for shortwave and do not produce intermodulations because it is more
>>> attenuated on MW.
>>>
>>> I have read some reviews about the RF systems DX one MKII, it is said that its
>>> perfomance is better than the Wellbrook. Does it need a good earth?
>>>
>>> My questions:
>>>
>>> Is worth buying the Rf systems instead of the Wellbrook?Any significant improvement?
>>> Would I pick up much more weak stations, clearer and with less noise?
>>> I am mainly intereested in listening weak stations on tropical band, so a good
>>> antenna it is important.
>>>
>>> I would be very grateful if somebody could throw some light about this
>>> difficult election.
>>>
>>> Thank you very much
>>> Kind Regards.
>>>
>>>
>>>
>>>

>>>
>>>
>>>
>>> ------------------------------------
>>>
>>> If you've got links, post them in the Links section!
>>> http://groups.yahoo.com/group/loopantennas/links
>>>
>>> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
>>> http://groups.yahoo.com/group/loopantennas/files
>>>
>>> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>>> http://ph.groups.yahoo.com/group/loopantennas/photos
>>>
>>> And please trim all this when replying!Yahoo! Groups Links
>>>
>>>
>>>
>>>
>>>
>>>
>>> No virus found in this incoming message.
>>> Checked by AVG - www.avg.com
>>> Version: 9.0.814 / Virus Database: 271.1.1/2849 - Release Date: 05/01/10 23:27:00
>>>
>>>
>>>
>>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.814 / Virus Database: 271.1.1/2853 - Release Date: 05/03/10 23:27:00
>
>

7465. Re: Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-05 07:27:54 UTC
From: enriqueeeeee2001
Topic: 7459 Message: 7465

I have got also a PA0RDT Mini-whip, but no significant improvement, too noisy for my taste. As well I have a PAR end-fed it is a good antenna but the Wellbrook outperfoms both of them.

I am still thinking about the Wellbrook 330S, I have mailed Mr Andy, the owner, and has told me that the 330S has 4db gain from 4Khz but it is attenuated on MW and LW.

Since I am also interested in MW Dxing, I think that with a good preamplifier I could solve that attenuation.

Regards.

--- In loopantennas@yahoogroups.com, Don <stb55@...> wrote:
>
> Well, the Wellbrook is a loop so you have the possibility to null out
> interference or noise. The DX 1 is omni. I have not put a ground on my
> LFL1010. Sometimes grounds will add noise. Everyone's situation is
> different - I am happy without it.
>
> I logged 62 new NDB's the first 30 days after I installed the LFL1010. I
> believe this is due to the lower noise floor. I wish I had not been so
> cheap and got one before. I think the Wellbrook loops are pretty much
> the same - some are supposedly optimized for certain bands.
>
> I don't know much about the DX 1 other than it is an active antenna and
> will be noiser but you may not notice that on SW bands. Also you don't
> need a rotator. I also think it is better to have a vertical active
> antenna, a loop and a wire antenna. Each responds differently to
> signals. I recently took down my wire antennas a couple of years ago in
> favor of the PA0RDT Mini-Whips though. The wires only problem was that
> they were ugly on my small real estate!
>
> Don
> Upland, CA
> 34.10 -117.63 1250ft ASL
> 2x R-75 w/250Hz R-71A w/250Hz R-70
> SDR-IQ SPM30 SR-AF& LPF DSP599zx
> MFJ-784B HD-1418 AF-1 MSB-1
> 2x PA0RDT Mini-Whip @ 22ft
> LFL1010
>
>
>
> On 04-May-10 13:25, enriqueeeeee2001 wrote:
> > Thanks,
> >

> >
> > Yes I have already sold the 1530+, I was using it with a Racal 1772
> > receiver.
> > The 1772 has a RF tune, is like a preselector, it works excellent. I can null
> > the Am interferences, but it is very tired adjusting the potentiometer everytime
> > you move of frequency.
> > I am also interested in AM and LW Dxing, so before buying the Wellbrook 330S I
> > would like to know if it would be better the MK II. How is the perfomance on HF?
> >
> > I have read some reviews about it and it is said that it needs a good ground,
> > Would I have better catches, regional stations?
> >
> >
> >
> > Thank you for your help.
> >
> >
> > --- In loopantennas@yahoogroups.com, Don<stb55@> wrote:
> >
> >> I would purchase or make one or two filters to block/severely attenuate
> >> the MW band first. I am mostly interested in NDB's below the MW band and
> >> use two that do a good job. Both were home built. Both have in/out
> >> switches built in.
> >>
> >> Don
> >> Upland, CA
> >> 34.10 -117.63 1250ft ASL
> >> 2x R-75 w/250Hz R-71A w/250Hz R-70
> >> SDR-IQ SPM30 SR-AF& LPF DSP599zx
> >> MFJ-784B HD-1418 AF-1 MSB-1
> >> 2x PA0RDT Mini-Whip @ 22ft
> >> LFL1010
> >>
> >>
> >>
> >> On 02-May-10 11:41, enriqueeeeee2001 wrote:
> >>
> >>> Hello Group,
> >>>
> >>>
> >>> Recently I have sold a Wellbrook 1530+ antenna, I have been using it for two
> >>> years with good results. I have moved home and two strong stations on MW creates
> >>> intermodulations in the receiver.
> >>> So, I have been thinking about a replacement for the 1530+ , Wellbrook 330S it
> >>> is good for shortwave and do not produce intermodulations because it is more
> >>> attenuated on MW.
> >>>
> >>> I have read some reviews about the RF systems DX one MKII, it is said that its
> >>> perfomance is better than the Wellbrook. Does it need a good earth?
> >>>

> >>> My questions:
> >>>
> >>> Is worth buying the Rf systems instead of the Wellbrook?Any significant improvement?
> >>> Would I pick up much more weak stations, clearer and with less noise?
> >>> I am mainly intereested in listening weak stations on tropical band, so a good
> >>> antenna it is important.
> >>>
> >>> I would be very grateful if somebody could throw some light about this
> >>> difficult election.
> >>>
> >>> Thank you very much
> >>> Kind Regards.
> >>>
> >>>
> >>>
> >>>
> >>>
> >>>
> >>>
> >>> ------------------------------------
> >>>
> >>> If you've got links, post them in the Links section!
> >>> http://groups.yahoo.com/group/loopantennas/links
> >>>
> >>> Post files here. If the file comes from a website, please put it in the Links rather
than uploading the file.
> >>> http://groups.yahoo.com/group/loopantennas/files
> >>>
> >>> You can now view images at higher resolution in Photos. Upload JPG and GIF into
Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> >>> http://ph.groups.yahoo.com/group/loopantennas/photos
> >>>
> >>> And please trim all this when replying!Yahoo! Groups Links
> >>>
> >>>
> >>>
> >>>
> >>>
> >>>
> >>> No virus found in this incoming message.
> >>> Checked by AVG - www.avg.com
> >>> Version: 9.0.814 / Virus Database: 271.1.1/2849 - Release Date: 05/01/10 23:27:00
> >>>
> >>>
> >>>
> >>
> >
> >
> >
> > ------------------------------------

> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> >
> > No virus found in this incoming message.
> > Checked by AVG - www.avg.com
> > Version: 9.0.814 / Virus Database: 271.1.1/2853 - Release Date: 05/03/10 23:27:00
> >
> >
>

7466. Re: [loopantennas] Re: Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-05 09:46:36 UTC
From: Andy Ikin
Topic: 7459 Message: 7466

Enrique,

If you let me know the power and the distance you are from the two MW stations I can work out whether the ALA330S would be suitable.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

7467. Re: Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-05 22:00:05 UTC
From: gmcjetpilot
Topic: 7459 Message: 7467

Get the 330S. Who said the RF Sys was better?

Passport## rated these two antennas.
330S **** - FOUR STARS
RF Sys DX1 Pro Mk II ***1/2 - THREE HALF STARS

2006 Edition - can get it on Amazon I think new or used. Get it and read the review. The Wellbrook is excellent.

The RF SYS Con was:
unbalanced design susceptible to buzz (mag loops excel in noise reduction)

AC power supply hum albeit slight

More likely to exacerbate signal fade

6 Month Warranty

7468. Re: Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-05 22:07:30 UTC
From: gmcjetpilot
Topic: 7459 Message: 7468

Get the 330S. Who said RF Sys DX Pro II was better?

Passport 2006 edition reviewed both. You can buy a copy of Passport used or new, 2006 editon on Amazon I think. That is where I got mine. Read the reviews.

The 330 got FOUR STARS
The RF Sys DX 1 Pro Mk II got THREE and Half STARS.

The CONS for the RF Pro Mk II:

Unbalanced antenna design more susceptible to importing buzz (local noise) (Note: magnetic loops like the Wellbrook are better in rejecting local noise.)

AC power supply gave slight hum

More likely to exacerbate signal fade.

+10dB gain setting was actually +6dB gain

6 month warranty

7469. Re: Wellbrook or RF systems

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-06 01:44:10 UTC
From: dfrenchau
Topic: 7459 Message: 7469

I would not believe everything you read, as I have the DX1 PRO mark2 and also the 1530+ and I can assure you, that the DX1 can hear a lot more than the Wellbrook.
The only advantage the Wellbrook has is nulling out noise and interference.
Importing buzz and local noise re: the dx1) Passband said it "could", not, that it "does".
If you have the DX1 earthed correctly it is as quiet as the Wellbrook.
"More likely to exacerbate signal fade"."FIDDLESTIX", to be honest the 300' longwire is worse. On a given day the DX1 holds a better DRM signal than the longwire

Lastly, I would never sell the DX1 PRO MK2, if I had to sell any of them I would sell the Wellbrook, but in saying that the Wellbrook is a great antenna, but not as good as the DX1.

Cheers and regards David

--- In loopantennas@yahoogroups.com, "gmcjetpilot" <gmcjetpilot@...> wrote:
>
> Get the 330S. Who said RF Sys DX Pro II was better?
>
> Passport 2006 edition reviewed both. You can buy a copy of Passport used or new, 2006 editon on Amazon I think. That is where I got mine. Read the reviews.
>
> The 330 got FOUR STARS
> The RF Sys DX 1 Pro Mk II got THREE and Half STARS.
>
> The CONS for the RF Pro Mk II:
>
> Unbalanced antenna design more susceptible to importing buzz (local noise) (Note: magnetic loops like the Wellbrook are better in rejecting local noise.)
>
> AC power supply gave slight hum
>
> More likely to exacerbate signal fade.
>
> +10dB gain setting was actually +6dB gain
>
> 6 month warranty
>

7470. hams needed all over the world

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-06 05:06:37 UTC
From: ZephyrNYC
Topic: 7470 Message: 7470

I got this on my twitter account. Please share. People all over the world need your assistance:

RT @HumanityRoad: ATTENTION HAM RADIO OPERATORS: Let's work tgthr 2 help ppl in catastrophic events. Contact http://bit.ly/9HmXLj #HmRd

73,
Frank

"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yahoo group for helping hams (amateur radio operators) and non-hams alike at http://groups.yahoo.com/group/HamRadioHelpGroup/ or email HamRadioHelpGroup-subscribe@yahoogroups.com .

Join the largest Yaesu FT-857 group on Yahoo at http://groups.yahoo.com/group/FT-857/ or email FT-857-subscribe@yahoogroups.com .

7471. 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-06 17:34:43 UTC
From: james
Topic: 7471 Message: 7471

The shape of my back yard can accommodate either one, but I am leaning towards a folded inverted V. from what I seen online googling for folded-dipole designs they look like a loop that was squashed in to a dipole configuration, I have a 4:1 balun I will be using at the feed point (fed with 50 OHM coax) when I put it all together,

I also have a 50 OHM terminator resistor to use where the ends of the dipole come together making a loop, (not sure if I should use it or not)

I have an auto-tuner for 80, 40, 20 & 15 so SWR wont hurt the radio, I just want some resonance so it will RX/TX well (after spending big bucks on a HF rig I cant see going without a auto-tuner for protection)

7472. Re: [loopantennas] 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-06 21:54:46 UTC
From: Jim Dunstan
Topic: 7471 Message: 7472

At 05:34 PM 5/6/2010 +0000, you wrote:
>
>
>The shape of my back yard can accommodate either one, but I am leaning
>towards a folded inverted V. from what I seen online googling for
>folded-dipole designs they look like a loop that was squashed in to a
>dipole configuration, I have a 4:1 balun I will be using at the feed point
>(fed with 50 OHM coax) when I put it all together,
>
>I also have a 50 OHM terminator resistor to use where the ends of the
>dipole come together making a loop, (not sure if I should use it or not)
>
>I have an auto-tuner for 80, 40, 20 & 15 so SWR wont hurt the radio, I
>just want some resonance so it will RX/TX well (after spending big bucks
>on a HF rig I cant see going without a auto-tuner for protection)

Hi,

First, a folded dipole is NOT a loop ..... it is a dipole. As with any dipole it can be configured in a Vee configuration .... usually because it is easier to do than a horizontal version ... one support etc...

The antenna currents in a folded dipole are equal and exactly in phase along the total length of the antenna. However, because the current is divided equally in the two wires the current at the feed point is one half. Using simple ohms law this then converts the input impedance by a factor of 4. If the impedance of any particular traditional dipole in your location ... given height and ground conditions etc... was 70 ohms .... then the impedance of a folded version would be 4x70 or 280 ohms. there is no reason to put a termination resistor at the ends.

If you plan on using the dipole for a single band then cutting the antenna length to 1/2 wavelength will do the trick and it will represent a satisfactory match to 50 cable in the traditional format ... and a suitable match to 300 twin lead in the folded configuration. However if you plan on using the antenna for multiple bands then you will have a non resonant condition on most frequencies and complex impedances. the twinlead will be a better choice ... whether you use a traditional dipole or a folded dipole.

Jim, VE3CI

7473. Re: 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-09 17:03:01 UTC
From: james
Topic: 7471 Message: 7473

You're right!

Thanks for the reply, from looking at images and diagrams of folded dipoles they looked like a squashed loop, but after reading some info at Wikipedia I see they don't make a connection forming a loop (they just come close) = solved that mystery.

From my experience loops seem to be quiet yet still get good reception and HF can be quite noisy, I have built a half wave delta loop fed at the apex and so far it is working nicely.

7474. Re: [loopantennas] Re: 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-09 22:18:32 UTC
From: M HOLDEN
Topic: 7471 Message: 7474

If only you could erect a full wave, say 283 feet circumference, and feed it with 300 ohm slotted ribbon, tuned up in the shack, it would shine from 80 to 6 metres. Horizontal layout gives amazing results and low noise on all bands. Big is beautiful!!! Mike, G4HOL.

--- On Sun, 9/5/10, james <jamesdeansghost@...> wrote:

From: james <jamesdeansghost@...>
Subject: [loopantennas] Re: 80 meter folded dipole VS loop
To: loopantennas@yahoogroups.com
Date: Sunday, 9 May, 2010, 18:03

You're right!

Thanks for the reply, from looking at images and diagrams of folded dipoles they looked like a squashed loop, but after reading some info at Wikipedia I see they don't make a connection forming a loop (they just come close) = solved that mystery.

From my experience loops seem to be quiet yet still get good reception and HF can be quite noisy, I have built a half wave delta loop fed at the apex and so far it is working nicely.

[Non-text portions of this message have been removed]

7475. Re: 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-10 18:03:55 UTC
From: james
Topic: 7471 Message: 7475

me too! I would need more wire & real estate :)

7476. Re: [loopantennas] Re: 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-11 02:38:16 UTC
From: Andy
Topic: 7471 Message: 7476

> Thanks for the reply, from looking at images and diagrams of folded
> dipoles they looked like a squashed loop, but after reading some info at
> Wikipedia I see they don't make a connection forming a loop (they just
> come close) = solved that mystery.

Actually, most folded dipoles are wired exactly like a loop. If you start with a loop and squash it flat, you would end up with a folded dipole exactly. But this act of squashing it, makes it behave totally differently. The currents redistribute themselves and the pattern changes a lot.

I haven't seen the Wikipedia info, but if it shows the folded dipole with the ends NOT connected together, that is one way you CAN do it, but most often the ends are shorted.

There is this notion of capture area for an antenna (the more the better), and it would seem like opening up a folded dipole into an open loop would increase capture area and make the antenna more effective. In other words, maximizing the use of your yard's space, in area not just linear space, MIGHT be a good thing. But I think the difference is actually small.

Loops and (folded) dipoles have rather different directional characteristics, as well as bandwidth, and usefulness on multiple bands, and those should also influence your decision.

For example, a (folded) dipole's pattern looks like a donut, but a full size loop's pattern is more like back-to-back flashlights. Thus the loop might give you less "wasted" power going in directions you don't care about (like straight up or down if you only want to do DX).

Both loops and folded dipoles (with both ends shorted so that it forms a loop) do have the advantage that static voltages won't build up across the antenna terminals, which makes them quieter in the wind or rain.

Andy

7477. Re: 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-11 16:00:49 UTC
From: aircheckIover
Topic: 7471 Message: 7477

Good explanation! I've always wondered ....

-Mark

==========

--- In loopantennas@...m, Andy <ai.egrps@...> wrote:
>
> > Thanks for the reply, from looking at images and diagrams of folded
> > dipoles they looked like a squashed loop, but after reading some info at
> > Wikipedia I see they don't make a connection forming a loop (they just
> > come close) = solved that mystery.
>
> Actually, most folded dipoles are wired exactly like a loop. If you start
> with a loop and squash it flat, you would end up with a folded dipole
> exactly. But this act of squashing it, makes it behave totally differently.
> The currents redistribute themselves and the pattern changes a lot.
>
> I haven't seen the Wikipedia info, but if it shows the folded dipole with
> the ends NOT connected together, that is one way you CAN do it, but most
> often the ends are shorted.
>
> There is this notion of capture area for an antenna (the more the better),
> and it would seem like opening up a folded dipole into an open loop would
> increase capture area and make the antenna more effective. In other words,
> maximizing the use of your yard's space, in area not just linear space,
> MIGHT be a good thing. But I think the difference is actually small.
>
> Loops and (folded) dipoles have rather different directional
> characteristics, as well as bandwidth, and usefulness on multiple bands, and
> those should also influence your decision.
>
> For example, a (folded) dipole's pattern looks like a donut, but a full size
> loop's pattern is more like back-to-back flashlights. Thus the loop might
> give you less "wasted" power going in directions you don't care about (like
> straight up or down if you only want to do DX).
>
> Both loops and folded dipoles (with both ends shorted so that it forms a
> loop) do have the advantage that static voltages won't build up across the
> antenna terminals, which makes them quieter in the wind or rain.
>
> Andy
>

7478. Re: 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-11 17:24:12 UTC
From: tenorman1952
Topic: 7471 Message: 7478

--- In loopantennas@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> > Thanks for the reply, from looking at images and diagrams of folded
> > dipoles they looked like a squashed loop, but after reading some info at
> > Wikipedia I see they don't make a connection forming a loop (they just
> > come close) = solved that mystery.
>
> Actually, most folded dipoles are wired exactly like a loop. If you start
> with a loop and squash it flat, you would end up with a folded dipole
> exactly.

Yes, but there is a big difference....

In a loop the difference in the wave causes the current to flow in one direction on one side of the loop, and the opposite direction on the other side of the loop, because the two sides of the loop are being intersected, and magnetic wave cut on a different part of the wave.

But with a "folded dipole" both sides of the "loop" formed are too close together, and the signals are going in the same direction. The other half of the "folded dipole, that is, the half not connected to the feedline, is wasted. It has the same currents and voltages as its parallel portion all along the wire. So no current flows from the feedline half to the other half and vice versa. The voltages out on the ends are the same, and have zero current flow.

I have made folded loops and then cut them at the ends, and it makes no difference. The other piece of wire is wasted.

7479. Re: [loopantennas] Re: 80 meter folded dipole VS loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-12 04:14:35 UTC
From: Andy
Topic: 7471 Message: 7479

> > Actually, most folded dipoles are wired exactly like a loop. If you
> > start
> > with a loop and squash it flat, you would end up with a folded dipole
> > exactly.
>
>
> Yes, but there is a big difference....

Indeed there is. What I described above is just the physical topology, that the wires of the folded dipole do trace out a flattened loop. But as an antenna, the folded dipole behaves nothing like a loop and everything like a dipole ... with the two exceptions that (1) its feedpoint impedance is quadrupled, and (2) it has DC continuity.

Like you say, the current directions are those of a dipole.

> The other half of the "folded dipole, that is, the half not connected to
> the feedline, is wasted.
...
> I have made folded loops and then cut them at the ends, and it makes no
> difference. The other piece of wire is wasted.

I'm not sure exactly what you're saying, if it's how I'm reading it ... but it isn't wasted. Yes, you can cut the bridges between the two wires and THAT won't make much difference, but it's not the same thing as removing the other (now disconnected) wire. That other wire has a significant effect; it is quite tightly coupled to the fed dipole wires. It causes the terminal voltage across the other wires to double, and the current to be halved, for the same power. So the feedpoint impedance quadruples. Big change.

Does it improve antenna gain, or reception? No. But it is most useful to move the impedance upwards. For a low horizontal HF antenna, that is an important matching technique. Also for FM radios, to transform the 72 ohm dipole impedance up to the radio's 300 ohm input impedance.

And as a side effect, it widens the antenna's bandwidth a bit, just like a cage dipole does, because the antenna is effectively fatter.

It's worth remembering that the folded dipoles we're talking about shouldn't be confused with T2FD's, which employ a terminating resistor(s) to achieve very wide SWR bandwidths while sacrificing efficiency. It's a different animal.

Andy

7480. Technician class ham radio podcast?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-12 16:58:19 UTC
From: Steve Greenfield
Topic: 7480 Message: 7480

I'm looking for a podcast/podclass for the Technician Class amateur radio license, something I can listen to at work that -DOESN'T- require iTunes or other 3rd party installation, just whatever comes in IE/Windows.

I've found higher class podcasts, and those requiring iTunes.

Thanks,
 Steve Greenfield
Electronic Engineering Technician AT
Electronic Technician 20+ years
CET Computers and Consumer Electronics
IPC-A-610D CIS Specialist
http://www.linkedin.com/in/stevenjgreenfield

[Non-text portions of this message have been removed]

7481. Re: Technician class ham radio podcast?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-12 21:05:59 UTC
From: joop_l
Topic: 7480 Message: 7481

Something like these?
http://hamradioclass.com/shownotes/

Cheers,
Joop

7482. high vswr

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-13 11:51:16 UTC
From: richard
Topic: 7482 Message: 7482

```
Hi
My 4.5 mtr diameter loop works very well when tuned with a high C:L ratio.
Its tuned with a 10 -100pF vacuum cap, and I'm using a vacuum relay to switch
in a 390 pF door knob cap to resonate on top band.
On top band it covers 1.980 - below 1.8 MHz, the bandwidth without tuning is
only about 1 KHz.
With the 390 pF cap switched out it covers 3.650 - 7.730 MHz.
Across top band the VSWR is very low , and the same with 80 mtrs, but If I
wanted to use 5 MHz the SWR is creeping up still very usable, at 7 MHz its up
to 1.8:1 then rises to 2:1 at 7.1 and 2.5:1 at 7.2 MHz.

I'm guessing at 7.2 MHz the tuning cap is about 15pF, allowing for the stray
capacitance of the wiring in the head unit. The whole thing is remotely
controlled.
Would I gain a decrease in the SWR if I reduce the diameter of the feed loop ?
or is this normal behaviour, and ignore it.
I don't want to screw up the performance on top band.

TIA

--
Best wishes

Richard Bown

##########################################################################################
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
GHz
##########################################################################################
```

7483. Re: Technician class ham radio podcast?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-13 14:47:28 UTC
From: tenorman1952
Topic: 7480 Message: 7483

--- In loopantennas@yahoogroups.com, Steve Greenfield <alienrelics@...> wrote:
>
> I'm looking for a podcast/podclass for the Technician Class amateur radio license, something I can listen to at work that -DOESN'T- require iTunes or other 3rd party installation, just whatever comes in IE/Windows.
>

Steve, go to

http://www.w5ddl.org/

and on the left side of the page you will see classroom presentation (PowerPoint) for Tech, General, and Extra. From doing the Tech Powerpoints my practice test scores were bumped up from 80%-85% to 95%-100%. I scored 35/35 when I took the actual tests.

You will need PowerPoint, or at least, a PowerPoint Viewer. You will find in the Tech presentation a link to download the free PowerPoint Viewer. You may or may not have this as part of your MS Office Suite. No matter, a free download.

These are excellent, and I urge you to download the presentations and work on them, two chapters a night, and at the same time, take some of the practice tests to be found at QRZ.com, eHam.net, etc.

Once you get your practice tests over 90% for the Tech, begin studying for the General, too, while continuing to study and take practice tests for the Tech. And if get your General scrores up, begin on the Extra.

The General opens the world of HF to you, and is a lot of bang for the buck. It is really not much more difficult than the Tech.

I don't mean to sound as if bragging, but I took and passed all three tests in one sitting. Others have done the same. Don't shortchange yourself. Aim high.

73
Paul
AE5JU

7484. Re: high vswr

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-14 00:45:52 UTC
From: capntripps2000
Topic: 7482 Message: 7484

At 4.5M diameter your loop is 46ft in circumference which is quite large for 40M. The best you may be able to do is get a compromise SWR across all 3 bands if you modify the feed loop.

I would be happy with using that loop on 80 - 160M with that low SWR and perhaps a second smaller loop for 40M and above. Either way with a 2.5 SWR on 40M you will still have an effective signal.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> Hi
> My 4.5 mtr diameter loop works very well when tuned with a high C:L ratio.
> Its tuned with a 10 -100pF vacuum cap, and I'm using a vacuum relay to switch
> in a 390 pF door knob cap to resonate on top band.
> On top band it covers 1.980 - below 1.8 MHz, the bandwidth without tuning is
> only about 1 KHz.
> With the 390 pF cap switched out it covers 3.650 - 7.730 MHz.
> Across top band the VSWR is very low , and the same with 80 mtrs, but If I
> wanted to use 5 MHz the SWR is creeping up still very usable, at 7 MHz its up
> to 1.8:1 then rises to 2:1 at 7.1 and 2.5:1 at 7.2 MHz.
>
> I'm guessing at 7.2 MHz the tuning cap is about 15pF, allowing for the stray
> capacitance of the wiring in the head unit. The whole thing is remotely
> controlled.
> Would I gain a decrease in the SWR if I reduce the diameter of the feed loop ?
> or is this normal behaviour, and ignore it.
> I don't want to screw up the performance on top band.
>
> TIA
>
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
> GHz
> ##
>

7485. Re: Technician class ham radio podcast?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-14 18:59:53 UTC
From: alienrelics
Topic: 7480 Message: 7485

Thanks!

Steve Greenfield

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
---snip----
> I don't mean to sound as if bragging, but I took and passed all three tests in one sitting. Others have done the same. Don't shortchange yourself. Aim high.
>
> 73
> Paul
> AE5JU
>

7486. Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-16 14:44:38 UTC
From: bm40g
Topic: 7445 Message: 7486

Hi All,

If you tried to price the cost of copper lately, its clear that for an economic solution to the truely efficient magnetic loop antenna, a non-copper support of the loop makes sense. Really, to get good efficiency for middle HF frequency (7 to 15 MHz), a three inch diameter copper tubular conductor in the 3 to 4 foot diameter range is a good target.

A tubular conductor that size from copper, or even aluminum is very heavy, and will require some significant mechanical design.

A PVC octagon made from 3 inch or 4 inch lightwieght (not the solid) PVC tubing is a reasonable cost.

If one then, rather than wrap the copper flashing, but laid it side by side in-line with the PVC support tube , a low resitance loop could be made. The issue with wrapping , is that the currents flow in the direction of the tubing, and every time a current has to jump to the next layer of wrapping, it incurs a resistance. So, a wrapped configuration would require soldering every wrap-to-wrap joint, and then you still get the solder surface resistance. By having the conductors in line, with say a tack solder here and there, much less resistance is encurred.

Now, current bunching is an issue, but I have not seen any modeling to suggest how much of issue at HF. The practicalities of the flat loop may just not occur until much higher frequencies. Or maybe not. Without any true high frequency analysis, its just not clear how wide the strip has to be before the current bunching increases the resistance by what percentage over the predicted surface area resistance. Indeed, what modelling I have done on this issue tends to indicate the currents stay on the inside surface of a conductor with significant thickness, especially near the drive end of the loop. This implies that the optimum conductor may actually be a half-tube. Where current bunching pushes currents to the edges, but the induction action in the antenna pulls the currents torwards the smallest radius section of the tube. The result being an even coduction across the surface of the half-round conductor.

7487. Re: high vswr

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-16 14:56:30 UTC
From: bm40g
Topic: 7482 Message: 7487

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> Hi
> My 4.5 mtr diameter loop works very well when tuned with a high C:L ratio.
> Its tuned with a 10 -100pF vacuum cap, and I'm using a vacuum relay to switch
> in a 390 pF door knob cap to resonate on top band.
> On top band it covers 1.980 - below 1.8 MHz, the bandwidth without tuning is
> only about 1 KHz.
> With the 390 pF cap switched out it covers 3.650 - 7.730 MHz.
> Across top band the VSWR is very low , and the same with 80 mtrs, but If I
> wanted to use 5 MHz the SWR is creeping up still very usable, at 7 MHz its up
> to 1.8:1 then rises to 2:1 at 7.1 and 2.5:1 at 7.2 MHz.
>
> I'm guessing at 7.2 MHz the tuning cap is about 15pF, allowing for the stray
> capacitance of the wiring in the head unit. The whole thing is remotely
> controlled.
> Would I gain a decrease in the SWR if I reduce the diameter of the feed loop ?
> or is this normal behaviour, and ignore it.
> I don't want to screw up the performance on top band.
>
> TIA
>
> --
> Best wishes
>
> Richard Bown
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
> GHz
> ##
>

Hi Richard,

This is a symptom of the 7 MHz length of your loop is borderline magnetic/borderline folded dipole. The two modes combine and change the impedance of the antenna. You will also note that its omnidirectional on 7 MHz, or nearly so. 4.5 meters diameter results in a 14.2 meter loop length, which is .35 lamda on the 40 meter band.

I have the same action on my 1 1/4 meter diameter loop antenna, where its a nice mag-loop at 7 MHz, but its an omin mag/folded loop at 14 MHz.

I happened to have tuned my coupling loop for best match at 14 MHz, and then its about 2:1 at the low end of 40, which I then use a match box to fix.

You can address this by motorizing your coupling loop , so that you can squash it down at the high frequencies, and return it to circular at the low frequenies (or visa versa). Another possibility is two coupling loops, and just switch between the too. Make sure the loops have good RF high voltage capability. Because the unused loop will see on the order of twice your drive voltage to the coupling loop in use.

7488. Re: [loopantennas] Re: Foil based loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-16 15:04:58 UTC
From: Richard (Rick) Karlquist
Topic: 7445 Message: 7488

bm40g wrote:
> If you tried to price the cost of copper lately, its clear that for an
> economic solution to the truely efficient magnetic loop antenna, a
> non-copper support of the loop makes sense. Really, to get good
> efficiency for middle HF frequency (7 to 15 MHz), a three inch diameter
> copper tubular conductor in the 3 to 4 foot diameter range is a good
> target.

The problem with this approach is that high efficiency necessarily
results in very narrow bandwidth and very high Q (ie high voltages
across the gap). At some point, it becomes impractical as an antenna.

> If one then, rather than wrap the copper flashing, but laid it side by
> side in-line with the PVC support tube , a low resitance loop could be

Right

> true high frequency analysis, its just not clear how wide the strip has
> to be before the current bunching increases the resistance by what

A tubular conductor uniquely has no edges for current to bunch up
on, and due to circular symmetry, the current is forced to be uniform.
Any non closed cross section will have current bunching.

> percentage over the predicted surface area resistance. Indeed, what
> modelling I have done on this issue tends to indicate the currents stay
> on the inside surface of a conductor with significant thickness,

What tool are you using to model? I did a bunch of measurements on
loops and found that the Q goes up as the conductor thickness increases,
but only to a point of diminishing returns. After that, you can't
get a higher Q no matter how thick the conductor. (This was for a
solid wire conductor). This maximum Q was only several hundred,
and could not be explained by radiation resistance. I hypothesized
that the currents were being bunched up by the magnetic field and
were not fully utilizing the conductor.

> especially near the drive end of the loop. This implies that the optimum
> conductor may actually be a half-tube. Where current bunching pushes
> currents to the edges, but the induction action in the antenna pulls the
> currents torwards the smallest radius section of the tube. The result
> being an even coduction across the surface of the half-round conductor.

That's interesting; two opposing effects. Hard to say which one "wins"

Rick N6RK

7489. Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-16 15:21:11 UTC
From: toddroberts2001@aol.com
Topic: 7489 Message: 7489

Hi All,
I am wondering if anyone has tried locating the feed loop
or Gamma match next to the tuning capacitor and if
they had success with this arrangement?

This would simplify tuning/matching the loop and
simplify construction a bit if the tuning cap and
feedpoint could be located close together, especially for a
larger size loop. This is compared to the normal method
of locating the tuning capacitor at the opposite end of the loop
away from the feedpoint. This requires locating the tuning capacitor at
the highest point of the loop and complicates the mechanical
construction especially for a larger circumference loop like a 70
ft circumference loop for 80 meters.

I know it will unbalance the loop if the gamma
match ground point is next to the tuning capacitor
but I don't see any reason why it wouldn't work.

Unbalancing the loop should mainly effect the
sharpness of the null direction but for transmitting
most people want the antenna to be more omnidirectional.

I plan to experiment with this feed method over the next
few months and will report on how it works for me. My test
loop will be a square loop 30-40ft circumference for 40
meters only for highest efficiency.

73 Todd WD4NGG

[Non-text portions of this message have been removed]

7490. Re: [loopantennas] Re: high vswr

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-16 15:29:44 UTC
From: richard
Topic: 7482 Message: 7490

On Sun, 16 May 2010 14:56:30 -0000
"bm40g" <donver@...> wrote:

> >
>
> Hi Richard,
>
> This is a symptom of the 7 MHz length of your loop is borderline
> magnetic/borderline folded dipole. The two modes combine and change the
> impedance of the antenna. You will also note that its omnidirectional on 7
> MHz, or nearly so. 4.5 meters diameter results in a 14.2 meter loop length,
> which is .35 lamda on the 40 meter band.
>
> I have the same action on my 1 1/4 meter diameter loop antenna, where
> its a nice mag-loop at 7 MHz, but its an omin mag/folded loop at 14 MHz.
>
> I happened to have tuned my coupling loop for best match at 14 MHz, and
> then its about 2:1 at the low end of 40, which I then use a match box to fix.
>
> You can address this by motorizing your coupling loop , so that you can
> squash it down at the high frequencies, and return it to circular at the low
> frequenies (or visa versa). Another possibility is two coupling loops, and
> just switch between the too. Make sure the loops have good RF high voltage
> capability. Because the unused loop will see on the order of twice your drive
> voltage to the coupling loop in use.
>
>
>
>
Hiya
Yes that would definitely explain the action, I did reduce the circumference a bit , I removed about a foot which on topband gave my all but the to 10 KHz, but the Q is very high, the bandwidth is only just wide enough for SSB.
If they ever give us 5 MHz as a permanent addition, at the moment you have to apply to use it.
To get the best coupling the coupling loop[is already squashed down to more like a folded dipole.

I've tried comparisons between the loop and the shortened 40 mtr dipole, there's not much in it, so maybe best to leave it for now,
The next motorising project must be the ATU, that could then be put outside.
Might even be able to use a 2.3 GHz control link, but Id have to turn it off when I use 2.3 GHz, 120W to a small dish!

--
Best wishes

Richard Bown G8JVM

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7491. Re: [loopantennas] Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-16 15:33:25 UTC
From: Chris Trask
Topic: 7489 Message: 7491

>
> I am wondering if anyone has tried locating the feed loop
> or Gamma match next to the tuning capacitor and if
> they had success with this arrangement?
>
> This would simplify tuning/matching the loop and
> simplify construction a bit if the tuning cap and
> feedpoint could be located close together, especially for a
>larger size loop. This is compared to the normal method
> of locating the tuning capacitor at the opposite end of the loop
> away from the feedpoint. This requires locating the tuning capacitor at
> the highest point of the loop and complicates the mechanical
> construction especially for a larger circumference loop like a 70
> ft circumference loop for 80 meters.
>

<<SNIP>>

You may want to consider an alternative balanced feed method that I devised after listening to many people complain about the various earlier transmitting loop feed methods:

http://www.home.earthlink.net/~christrask/Paper012.html

It simplifies the mechanics, does away with the expensive vacuum variable capacitor, and does not compromise the balance of the feed.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7492. Re: [loopantennas] Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-16 20:33:33 UTC
From: Jim Dunstan
Topic: 7489 Message: 7492

At 11:21 AM 5/16/2010 -0400, you wrote:
>
>
>Hi All,
>I am wondering if anyone has tried locating the feed loop
>or Gamma match next to the tuning capacitor and if
>they had success with this arrangement?

Yes, and maybe ... hi hi. I have fed a small loop (about 4' in dia ... 12.5' in circumference) with a short length of parallel feed line and a balanced antenna tuner (the tuner tunes the loop and matches the feed line at the same time) and used it from approx 5 - 15 mhz. The project started as a tuned loop for SW reception. The feed line was about 8' long ... from the loop to the balcony window. It was an excellent receiving loop which had sharp nulls ... good for nulling local RFI. The loop material started with RG58 (tied together as a single conductor). Out of curiosity I tried feeding it with a 20m QRP radio and lo and behold I managed a few contacts. I then upgraded the loop to 3/8" solid copper tubing .... es upgraded the feed line from TV twin lead to heavy duty 450 ladder line .... and I could make regular 20m contacts with my QRP radio.

That is as far as I got with the experiment. However I think the next step would be to upgrade the antenna tuner with heavier duty capacitors and to substitute home brew rigid feed line for the 450 ohm ladder line .... and make the loop itself (same diameter) out of 1/2" copper tubing. I believe I could feed higher power to the loop (up to 100 watts). I could see the loop mounted with the base about 8' up on a rotatable pole with the tuner at the base and the rigid feed line mounted along the length of the pole.

the antenna tuner was a simple link coupled L-match (often called a Z-match tuner). Tuning the loop and matching the 50 ohm load of the radio was a snap.

Now I have seen other experiments with larger loops (although less than 1 wavelength) where the loop is tuned at the base and the feed point is moved off-center. The feed point impedance changes the further you move it off center. the experimenter moved the feed point to a place that was mechanically convenient and presented an impedance that could be easily fed with a fixed RF transformer. The impedance would of course change as you changed bands .... which would make me think that if the plan was to use the loop for multi-bands it would make sense to couple the feed point with an antenna tuner to accomplish both tasks ... tuning and coupling with what would then be a combined tuner/matcher hi hi.

The smaller the loop the more robust the tuning components must be .... as well as the construction of the loop itself.

Jim, VE3CI

7493. Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-17 00:13:09 UTC
From: capntripps2000
Topic: 7489 Message: 7493

On that note see this link for something very similar with the same convenience:

http://users.tpg.com.au/ldbutler/HFTXLoop.htm

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 11:21 AM 5/16/2010 -0400, you wrote:
> >
> >
> >Hi All,
> >I am wondering if anyone has tried locating the feed loop
> >or Gamma match next to the tuning capacitor and if
> >they had success with this arrangement?
>
> Yes, and maybe ... hi hi. I have fed a small loop (about 4' in dia ...
> 12.5' in circumference) with a short length of parallel feed line and a
> balanced antenna tuner (the tuner tunes the loop and matches the feed line
> at the same time) and used it from approx 5 - 15 mhz. The project started
> as a tuned loop for SW reception. The feed line was about 8' long ... from
> the loop to the balcony window. It was an excellent receiving loop which
> had sharp nulls ... good for nulling local RFI. The loop material started
> with RG58 (tied together as a single conductor). Out of curiosity I tried
> feeding it with a 20m QRP radio and lo and behold I managed a few
> contacts. I then upgraded the loop to 3/8" solid copper tubing .... es
> upgraded the feed line from TV twin lead to heavy duty 450 ladder line ....
> and I could make regular 20m contacts with my QRP radio......

7494. Re: [loopantennas] Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-17 01:00:59 UTC
From: Jim Dunstan
Topic: 7489 Message: 7494

At 12:13 AM 5/17/2010 +0000, you wrote:
>
>
>On that note see this link for something very similar with the same
>convenience:
>
><http://users.tpg.com.au/ldbutler/HFTXLoop.htm>http://users.tpg.com.au/ldbutler/HFTXLoop.
htm
>
>Andrew
>N3LCW

Hi Andrew,

Almost except he has connections at both sides of the loop .... feed line
on one side and tuning capacitor on the other. Keep the antenna tuner
(Z-match) .... keep the feed line (only 8' long ladder line) .... remove
the tuning capacitor and replace with the end of the ladder line. There is
only 1 connection to the loop. The z-match both tunes the loop and couples
it to the radio. In fact, the loop could sit on the same table as the
tuner and radio which would eliminate the feed line altogether. I would
need to construct a new unit with more robust components. The unit I used
could handle 5 watts .... anymore and I am sure the capacitors would arc.

The reason I mentioned the feed line and the 8ft pole is I am sure I
wouldn't like the idea of sitting next to the loop with 100 w of RF hi
hi. I'm not fussy about 2 adjustments (coupling and tuning) in two
different locations. As I mentioned I stumbled on the single point
arrangement in a receiving application and it seems to have application for
transmission as well. In the most common arrangement you need to run over
to the loop every time you want to touch up the loop tuning or use more
complicated remote tuning.

Maybe I will experiment with a robust system this summer ... the loop would
remain permanently on the deck with a short heavy duty feed line to the
operating position. I would need to weather proof the ant/loop tuner.

Jim, VE3CI

>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com, Jim
>Dunstan <jimdunstan@...> wrote:
> >
> > At 11:21 AM 5/16/2010 -0400, you wrote:
> > >
> > >

> > >Hi All,
> > >I am wondering if anyone has tried locating the feed loop
> > >or Gamma match next to the tuning capacitor and if
> > >they had success with this arrangement?
> >

[Non-text portions of this message have been removed]

7495. ferrite loop for 600 meters / MW

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-17 00:52:24 UTC
From: xbrnr
Topic: 7495 Message: 7495

Hi All,
Does anyone have plans/schematics for building a ferrite rod antenna for the 600 meter or lower AM Broadcast band? Ive never experimented with ferrite rod or loopstick antennas . I know very little about them. I have built quite a few magnetic receiving loops though.

Thanks
Rick
KA2PBO

7496. Re: ***SPAM*** [loopantennas] ferrite loop for 600 meters / MW

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-17 02:10:38 UTC
From: EDUARDO
Topic: 7496 Message: 7496

Hi,

See the site www.radiodx.qsl.br.

respectfully,

Eduardo
Mairipor?- SP- Brasil

----- Original Message -----
From: "xbrnr" <xbrnr@...>
To: <loopantennas@yahoogroups.com>
Sent: Sunday, May 16, 2010 9:52 PM
Subject: ***SPAM*** [loopantennas] ferrite loop for 600 meters / MW

> Hi All,
> Does anyone have plans/schematics for building a ferrite rod antenna for
> the 600 meter or lower AM Broadcast band? Ive never experimented with
> ferrite rod or loopstick antennas . I know very little about them. I have
> built quite a few magnetic receiving loops though.
>
> Thanks
> Rick
> KA2PBO
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 8.5.435 / Virus Database: 271.1.1/2878 - Release Date: 05/16/10
18:26:00

7497. Re:ferrite loop for 600 meters / MW

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-17 16:52:21 UTC
From: Darren Hennig
Topic: 7495 Message: 7497

Rick:

Check out Stormwise dot com. They have thick ferrite rods that will be very useful for making a MW ferrite antenna. I used a 13.5" x1.25" rod passively tuned with a variable capacitor, and used a separate 3-turn winding for a hi-Z [~500 ohm] input into my R75. Works very well, VERY quiet. They also sell tuned units integrated to permit sending to radio direct, maybe another option?

Basically, parallel tune the rod to get the resonance. Abotu 45-50 turns on the 125u rods is around 270-300uH, ideal for a small varible in the 270-365pF [max range].

Darren
VE6IZ

[Non-text portions of this message have been removed]

7498. Moderator msg Re: ***SPAM*** [loopantennas] ferrite loop for 600 meters / MW

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-17 19:14:17 UTC
From: alienrelics
Topic: 7496 Message: 7498

-Please- remove the "SPAM" when your software adds it.

BTW, if you add http:// it makes it a click-able link. And don't let periods or any punctuation "touch" the link.

http://www.radiodx.qsl.br

Thank you,
Steve Greenfield
moderator loop antennas

--- In loopantennas@yahoogroups.com, "EDUARDO" <adcas@...> wrote:
>
> Hi,
>
> See the site www.radiodx.qsl.br.
>
> respectfully,
>
> Eduardo
> Mairiporã- SP- Brasil
>
>
>
>
> ----- Original Message -----
> From: "xbrnr" <xbrnr@...>
> To: <loopantennas@yahoogroups.com>
> Sent: Sunday, May 16, 2010 9:52 PM
> Subject: ***SPAM*** [loopantennas] ferrite loop for 600 meters / MW
>
>
> > Hi All,
> > Does anyone have plans/schematics for building a ferrite rod antenna for
> > the 600 meter or lower AM Broadcast band? Ive never experimented with
> > ferrite rod or loopstick antennas . I know very little about them. I have
> > built quite a few magnetic receiving loops though.
> >
> > Thanks
> > Rick
> > KA2PBO
> >
> >
> >
> > ------------------------------------

> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the
> > Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF
> > into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
>
>
> ---
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 8.5.435 / Virus Database: 271.1.1/2878 - Release Date: 05/16/10
> 18:26:00
>

7499. ferrite loop for 600 meters / MW

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 00:35:01 UTC
From: xbrnr
Topic: 7495 Message: 7499

Hi All,
Does anyone have plans/schematics for building a ferrite rod antenna for the 600 meter or lower AM Broadcast band? Ive never experimented with ferrite rod or loopstick antennas . I know very little about them. I have built quite a few magnetic receiving loops though.

Thanks
Rick
KA2PBO

7500. Re: [loopantennas] ferrite loop for 600 meters / MW

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 01:21:32 UTC
From: John Popelish
Topic: 7495 Message: 7500

xbrnr wrote:
> Hi All, Does anyone have plans/schematics for building a
> ferrite rod antenna for the 600 meter or lower AM
> Broadcast band? Ive never experimented with ferrite rod
> or loopstick antennas . I know very little about them. I
> have built quite a few magnetic receiving loops though.

I don't have a specific design for you, but I have some experimental results using cheap and available long form ferrite beads, assembled into a rod, in 3 materials. The most generic medium frequency material (Steward type 28) performed very well (based on the Q of various coils) at 500kHz. I also experimented with the effect on the Q of introducing small gaps between the stacked beads.

The reports are in the Popelish folder of the files section of the ferriterodantennaexperimenters yahoo discussion group with file names of:
Experiment_Q_vs_F_vs_GAPS_5z.pdf
Experiment_Q_vs_F_vs_GAP_Distribution.pdf

Perhaps this work will give you some leads.

--
Regards,

John Popelish

7501. Initial impressions of the ferrite loop antenna (the big one!)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 01:34:35 UTC
From: sarmento2k
Topic: 7501 Message: 7501

Hi, I've post a video on my blog of dxing using my experimental ferrite loop antenna.

I's possible to see the results of signal increase hearing FIRS Falklands (1,500 miles away).

I have made several experimentation and recorded some interesting features, like nulling, and I will be continuously posting the videos and comments on my blog.

My first post at :

http://blog.sarmento.eng.br/2010/05/15/ferrite-loop-antenna-hard-core-dx-on-medium-waves/

The root URL of further posts: http://www.sarmento.blog.br

Regards

Sarmento Campos - Rio de Janeiro, Brazil

http://www.sarmento.blog.br
http://www.sarmento.net.br

7502. Re: [loopantennas] ferrite loop for 600 meters / MW

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 11:34:21 UTC
From: EDUARDO
Topic: 7495 Message: 7502

Hi all,

see the site or the link down

http://www.radiodx.qsl.br/RGP3.htm

respectfully,

Eduardo
Mairiporã- SP- Brasil
www.radiodx.qsl.br

----- Original Message -----
From: xbrnr
To: loopantennas@yahoogroups.com
Sent: Monday, May 17, 2010 9:35 PM
Subject: ***SPAM*** [loopantennas] ferrite loop for 600 meters / MW

Hi All,
Does anyone have plans/schematics for building a ferrite rod antenna for the 600 meter or lower AM Broadcast band? Ive never experimented with ferrite rod or loopstick antennas . I know very little about them. I have built quite a few magnetic receiving loops though.

Thanks
Rick
KA2PBO

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 8.5.437 / Virus Database: 271.1.1/2880 - Release Date: 05/17/10 18:26:00

[Non-text portions of this message have been removed]

7503. Re: Initial impressions of the ferrite loop antenna (the big one!)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 14:05:23 UTC
From: james
Topic: 7501 Message: 7503

thats quite a loop stick you got there (nice fat one!) i have a "Select-A-Tenna" for an indoors AM broadcast band antenna that works nicely and has a tuning capacitor of some sort, i have never opened it as it seems to be a sealed unit so i have no idea what is inside the Select-A-Tenna,

i enjoy turning the AM broadcast band at night i just wish there was not dozens of stations all playing the same program (CoastToCoastAM) that show is for loonys, a person has to be crazy to believe the drivel they broadcast on coasttocoastam, but once in a while i find a good station, 650 WSM out of Nashville Tennessee is a good one

7504. Superloop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 18:18:38 UTC
From: sm0yym
Topic: 7504 Message: 7504

Hi,
I am gooing to put up a 120 meter loop in rectangular shape and connected to 350 ohm ladderline ? - windowline? and ended with RG 58 coax.
Do I need a balun and if, what size ?
Intrested to hear your comments and pro and con.

73 de LARS/SM0YYM

7505. Superloop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 18:16:16 UTC
From: sm0yym
Topic: 7504 Message: 7505

Hi,
I am gooing to put up a 120 meter loop in rectangular shape and connected to 350 ohm ladderline ? - windowline? and ended with RG 58 coax.
Do I need a balun and if, what size ?
Intrested to hear your comments and pro and con.

73 de LARS/SM0YYM

7506. Superloop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 18:19:08 UTC
From: sm0yym
Topic: 7504 Message: 7506

Hi,
I am gooing to put up a 120 meter loop in rectangular shape and connected to 350 ohm ladderline ? - windowline? and ended with RG 58 coax.
Do I need a balun and if, what size ?
Intrested to hear your comments and pro and con.

73 de LARS/SM0YYM

7507. Wherevto purchas VAR Capitors w/1.4"shaft

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 20:40:35 UTC
From: rich3x
Topic: 7507 Message: 7507

Needs source for manual tuable range from about 15 to 600 pf. 1.4"shaft & couling to stepping motor fot remote control of mag loop.

Parts store recommendations -- tks much de Rich/N2JR

7508. Re: [loopantennas] Superloop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-18 22:07:33 UTC
From: Jim Dunstan
Topic: 7504 Message: 7508

At 06:16 PM 5/18/2010 +0000, you wrote:
>
>
>Hi,
>I am gooing to put up a 120 meter loop in rectangular shape and connected
>to 350 ohm ladderline ? - windowline? and ended with RG 58 coax.
>Do I need a balun and if, what size ?
>Intrested to hear your comments and pro and con.
>
>73 de LARS/SM0YYM

Hi Lars,

A 120m loop (horizontally oriented I assume) will make an excellent antenna on all bands 160m to 10m ... higher the better. It is impossible to predict the impedance it will present at whatever frequencies you are planning to use. However it is safe to say their will be considerable impedance range to deal with. You already mentioned ladder line (the characteristic impedance of the ladder line is of no consequence ... e.g. 300 and 450 ohm is common .. home made 600 ohm line even better) .... you also don't need to have the same line all the way. You can start with 300 ohm line then connect to 450 ohm line ... and it won't matter a whit .... but choose the best quality that is practical for you. The loop is a balanced load and your radio is an unbalanced RF power source. A conversion from balanced to unbalanced needs to take place somewhere between the antenna and the radio. The best scenario is to bring the ladder line as close to the radio as possible and to terminate it at a balanced antenna tuner. (it is a myth that parallel feed line radiates). Bringing proper balanced line into the shack is less troublesome than coax that is not properly terminated in whatever balanced to unbalanced device you use.

Most commercially manufactured antenna tuners are designed to match an unbalanced load to an unbalanced source (the radio). Most of these tuners will have a built-in balun (a transmission line transformer) at the antenna end of the tuner to accommodate balanced feed lines (usually as an after-thought). This is the best place for it if you are going to use a balun. You should use as robust a balun as possible as the impedances it will face will range considerably from the impedance range of 50 to 200 ohms that it likes. Once the impedance ranges farther .... with added complexity of either capacitive or inductive reactance it plays havoc with ferrite wound baluns.

The ideal would be to use an antenna tuner designed particularly for balanced feed line. They were common in early times ... then all but disappeared ... but seem to be coming back. Another ideal solution would

be to put an external automatic antenna tuner right at the feed point ... and then use high quality coax feed line all the way to the shack (SGC makes such tuners).

I would avoid RG58 if possible and go to RG8 or RG213 .... that is if you insist on putting the balun some distance away from the shack.

73
Jim, VE3CI

7509. Re: Superloop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-19 16:32:48 UTC
From: wild_bill_yonder
Topic: 7504 Message: 7509

Hi Lars. I would echo most of what Jim says here. I had up a 120m loop last fall. Im not sure if I tried to tune 160m or not. If I did, it didn't work with my tuner. Worked 80m, 40m and 20m really good. Never spent time on the other bands, but should tune up to 10m or even 6m fine. I wound up shortening it to 80m. The main difference is in the pattern. The 120m had more lobes on 20m with some pretty good gain, but also more deep nulls. The 80m loop has almost as much gain on 20m but a bit more coverage. As far as a balun goes, I feed the loop with 450ohm line. right after entry to the shack I have a homebrew 4:1, than to the coax inptu of my cheap little tuner. I don't use the built in. But I guess the best setup, which I may try and mod/rebuild my tuner, is the balanced line coming straight from the matching network, with a 1:1 50ohm balun on the transmitter side. Good luck with yours!

Bill W2NVD

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 06:16 PM 5/18/2010 +0000, you wrote:
> >
> >
> >Hi,
> >I am gooing to put up a 120 meter loop in rectangular shape and connected
> >to 350 ohm ladderline ? - windowline? and ended with RG 58 coax.
> >Do I need a balun and if, what size ?
> >Intrested to hear your comments and pro and con.
> >
> >73 de LARS/SM0YYM
>
> Hi Lars,
>
> A 120m loop (horizontally oriented I assume) will make an excellent antenna
> on all bands 160m to 10m ... higher the better.

The loop is a
> balanced load and your radio is an unbalanced RF power source. A
> conversion from balanced to unbalanced needs to take place somewhere
> between the antenna and the radio. The best scenario is to bring the
> ladder line as close to the radio as possible and to terminate it at a
> balanced antenna tuner.

>
> I would avoid RG58 if possible and go to RG8 or RG213 .... that is if you
> insist on putting the balun some distance away from the shack.
>
> 73
> Jim, VE3CI
>

7510. 2M/70cm/HF transceiver loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-20 04:19:35 UTC
From: Bill McGraw
Topic: 7510 Message: 7510

Group,

I need some advice and have lots of questions.

I'm a new Technician, will take the General this summer. I'm 65 and have been DX'ing for 50 years, made and still make crystal sets, small and large horizontal and vertical loops for inside my office for small AM radios, a RS DX 398, and an OCF vertical for a scanner. I have a borrowed 2M/70cm dual band radio and was given an MFJ 1522 antenna mounted on a 10' PVC mast.

I understand the compromise with 2M/70cm/HF radios but I want to have the least equipment possible for my office/shack, already cramped space and would want to be able go mobile with 12V DC power or to camp sites. Some of these radios--Kenwood, Yaesu and ICOM--have built-in ATU's and I'd want that. A power supply and 120V AC would be useful if the radio would work on both. I have 2 12V batteries I use for other appliances and CB radios and could use them for camping.

What would be the minimum loop antenna for the HF radio, 160-10M, shape, orientation--horizontal easiest, minimum height and any proper coax? What loop could I use for mobile or camping?

I am getting dense in my early disabled retirement some 18 years ago, so go easy on terminology and connections. I have plenty of TV coax and would consider using it for a loop.

Bill McGraw, KF5FJZ
"Somewhere South of Chicago"
Greenville, Mississippi

7511. Re: Wherevto purchas VAR Capitors w/1.4"shaft

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-23 00:51:47 UTC
From: bm40g
Topic: 7507 Message: 7511

--- In loopantennas@yahoogroups.com, "rich3x" <rich3x@...> wrote:
>
> Needs source for manual tuable range from about 15 to 600 pf. 1.4"shaft & couling to stepping motor fot remote control of mag loop.
>
> Parts store recommendations -- tks much de Rich/N2JR
>

Hi rich3x,

I think you mean 1/4 " shaft.

I would not worry about the shaft size too much. You can always adapt with parts from SDP/SI - google it! They do small orders no problem.

7512. Re: ferrite loop for 600 meters / MW

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-23 13:54:12 UTC
From: xbrnr
Topic: 7495 Message: 7512

--- In loopantennas@yahoogroups.com, "xbrnr" <xbrnr@...> wrote:
>
> Hi All,
> Does anyone have plans/schematics for building a ferrite rod antenna for the 600 meter or lower AM Broadcast band? Ive never experimented with ferrite rod or loopstick antennas . I know very little about them. I have built quite a few magnetic receiving loops though.
>
> Thanks
> Rick
> KA2PBO
>

Thanks guys! I have a lot of information to get started now. I ordered some ferrites from an antique electronics dealer here in the states.I hope to have them this week and I can start experimenting.

Thanks
Rick

7513. New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-23 12:54:58 UTC
From: Joe
Topic: 162 Message: 7513

Hi All,

After much time spent thinking about loop antennas I finally got to build one.

The loop I built is a 36 inch diameter loop of 3/8 inch soft copper tubing. I am feeding it with a wire loop. (not a faraday shield).
I also built a stand which holds the bottom of the loop about 4 feet off the floor. The cap I used is a two gang cap with the gangs connected in series so I do not go thru any wiper connections.

I placed the feed loop at the top so I could get to the cap better for tuning.

The results of this loop and the cap I used are:

Tunes from 20 meters to 10 meters with a SWR on 20 meters of 1.1:1 and it goes up until I get to 10 meters where it is 1.5:1. I have not been able to get the SWR flat across this frequency spread.

So far I have not made any contacts with it. On receive it seems to be about 1 S unit below my attic antennas. (I live in a restricted area and cannot have outside antennas.)

With the cap I am using I cannot use output power over 20 watts. I guess this will be my QRP antenna to use with my FT-817. I hope to use it portable in local parks. The stand I built is of Schedule 40 PVC pipe. I built it so I can take it apart in a few sections to make it easy for transporting.

I would be interested in hearing any comments from other users of this type of antenna.

73 ... Joe/K2ZFD

7515. Re: Initial impressions of the ferrite loop antenna (the big one!)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-24 15:48:55 UTC
From: sarmento2k
Topic: 7501 Message: 7515

With our Sun behaving like a crazy guy, MW propagation is very strange nowadays in my region. I used to listen to Saudi Arabia (1512kHz), France Info (1557 kHz) and others using just the ferrite loop antenna.

I have tested another loop, which is supposed to have much more gain and no transoceanic DX, just South America.

You can see the video of this one, nulling a local power station and bringing Argentina, Paraguay and Uruguay:

http://blog.sarmento.eng.br/2010/05/22/antena-loop-de-quadro-para-ondas-medias-excelente-ferramenta-para-dx/

73s
Sarmento - Rio de Janeiro

--- In loopantennas@yahoogroups.com, "james" <jamesdeansghost@...> wrote:
>
> thats quite a loop stick you got there (nice fat one!) i have a "Select-A-Tenna" for an indoors AM broadcast band antenna that works nicely and has a tuning capacitor of some sort, i have never opened it as it seems to be a sealed unit so i have no idea what is inside the Select-A-Tenna,
>
> i enjoy turning the AM broadcast band at night i just wish there was not dozens of stations all playing the same program (CoastToCoastAM) that show is for loonys, a person has to be crazy to believe the drivel they broadcast on coasttocoastam, but once in a while i find a good station, 650 WSM out of Nashville Tennessee is a good one
>

7516. Re: [loopantennas] John: are u aware of this?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-24 16:26:16 UTC
From: John Popelish
Topic: 7516 Message: 7516

Paul V Birke PEng wrote:
> http://www.sarmento.eng.br/Loop_Ferrite_Rod_Antenna.htm

I am pleased to see that the experimenter is posting to this
group.

Sarmento, are you willing and available to discuss the
experimental models and concepts shown on this page?

--
Regards,

John Popelish

7517. New Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-24 20:09:33 UTC
From: Richard Harrison
Topic: 162 Message: 7517

Joe: Pls keep me/us informed of your progress with the ft-817 and loop. I plan on also using a ft-817 and building the same size loop for use during Field Day.

de Rich/N2JR

With the cap I am using I cannot use output power over 20 watts. I guess this will be my QRP antenna to use with my FT-817. I hope to use it portable in local parks. The stand I built is of Schedule 40 PVC pipe. I built it so I can take it apart in a few sections to make it easy for transporting.

I would be interested in hearing any comments from other users of this type of antenna.

73 ... Joe/K2ZFD

From my iPad...R. Harrison

[Non-text portions of this message have been removed]

7518. Re: John: are u aware of this?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-24 20:24:21 UTC
From: sarmento2k
Topic: 7516 Message: 7518

Hi John, as a matter of fact, my main objective here is to share and most important to me, is to learn about loop antennas.

Next try I will change the coupling method. Instead of magnetically coupling I will directly connect the loop into the receiver.

I wonder if a coupling coil, with 2 or 3 turns will be suffice to couple into the low impedance input of the receiver (50 Ohms).

In theory, at least, it's supposed to use another variable capacitor to tune this coupling loop too, but capacitance should be very high. An the other way, the higher the number of turns of this coupling coil, less capacitance needed, but it may be an issue to the main tuned loop.

I think of using a low capacity coaxial cable ☐ like RGC58, to connect this coupling loop into the Icom.

Any idea about it?

Regards
Sarmento

--- In loopantennas@yahoogroups.com, John Popelish <jpopelish@...> wrote:
>
> Paul V Birke PEng wrote:
> > http://www.sarmento.eng.br/Loop_Ferrite_Rod_Antenna.htm
>
> I am pleased to see that the experimenter is posting to this
> group.
>
> Sarmento, are you willing and available to discuss the
> experimental models and concepts shown on this page?
>
> --
> Regards,
>
> John Popelish
>

7519. Re: Ferrite rod loop antenna for MW (was Re: John: are u aware of this?)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-24 23:11:24 UTC
From: John Popelish
Topic: 7516 Message: 7519

sarmento2k wrote:
> Hi John, as a matter of fact, my main objective here is
> to share and most important to me, is to learn about loop
> antennas.
>
> Next try I will change the coupling method. Instead of
> magnetically coupling I will directly connect the loop
> into the receiver.
>
> I wonder if a coupling coil, with 2 or 3 turns will be
> suffice to couple into the low impedance input of the
> receiver (50 Ohms).
>
> In theory, at least, it's supposed to use another
> variable capacitor to tune this coupling loop too, but
> capacitance should be very high. An the other way, the
> higher the number of turns of this coupling coil, less
> capacitance needed, but it may be an issue to the main
> tuned loop.
>
> I think of using a low capacity coaxial cable – like
> RGC58, to connect this coupling loop into the Icom.
>
> Any idea about it?

Sarmento:

Before discussion alternate coupling methods, I have a few
questions about the designs described in this web page:

http://www.sarmento.eng.br/Loop_Ferrite_Rod_Antenna.htm

You spend a lot of effort talking about rod arrangements and
their lines of contact and packing density. But without
quantitative comparisons, I am having trouble visualizing
how these differences matter. I tend to think more about
the physical coupling between the external RF fields and the
rods and coils.

Based on this point of view, I suspect that you might well
see almost identical results with the inner layer of rods
completely removed and replaced with spacers. I picture the
effects of the rods as a magnetic sort of short circuit for
the magnetic component of the EM waves, gathering flux over
the exposed rod surfaces near their ends and passing it all
through the center section. The inner layer or rods, having

much less surface exposed to these external fields (only their ends) might not be utilized as effectively as the outer layer.

Also, from this point of view, there should be more RF flux near the center of the rod than near the ends, but I see your drawings showing the coil near one end, rather than being in the center. But I see no reason given for this choice.

From the photos, it also appears that you place your tuning capacitors right against the end of the rod bundle, where the gathered external flux would be most concentrated. This would cause the flux to go around or to penetrate the metal parts of the capacitor, while producing eddy current losses and signal reduction from those diversions and losses.

I would be happy to read any reactions you might have to these thoughts.

--
Regards,

John Popelish

7520. Re: [loopantennas] Re: Initial impressions of the ferrite loop antenna (the big one!)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-24 16:04:58 UTC
From: Vladimir Duk
Topic: 7501 Message: 7520

Hi Sarmento,

At what time (GMT) you did the listenings you mentioned? I?m trying to
listen MW transoceanic (1512kHz, 1557kHz and so on) here in Florianopolis
for a while, without success.
Any other transoceanic listenings you could mention, so I could try them
here?

73! Vlad PP5VU

On Mon, May 24, 2010 at 12:48 PM, sarmento2k <
sarmento.campos@...> wrote:

>
>
> With our Sun behaving like a crazy guy, MW propagation is very strange
> nowadays in my region. I used to listen to Saudi Arabia (1512kHz), France
> Info (1557 kHz) and others using just the ferrite loop antenna.
>
> I have tested another loop, which is supposed to have much more gain and no
> transoceanic DX, just South America.
>
> You can see the video of this one, nulling a local power station and
> bringing Argentina, Paraguay and Uruguay:
>
>
> http://blog.sarmento.eng.br/2010/05/22/antena-loop-de-quadro-para-ondas-medias-excelente
-ferramenta-para-dx/
>
> 73s
> Sarmento - Rio de Janeiro
>
>
> --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>,
> "james" <jamesdeansghost@...> wrote:
> >
> > thats quite a loop stick you got there (nice fat one!) i have a
> "Select-A-Tenna" for an indoors AM broadcast band antenna that works nicely
> and has a tuning capacitor of some sort, i have never opened it as it seems
> to be a sealed unit so i have no idea what is inside the Select-A-Tenna,
> >
> > i enjoy turning the AM broadcast band at night i just wish there was not
> dozens of stations all playing the same program (CoastToCoastAM) that show
> is for loonys, a person has to be crazy to believe the drivel they broadcast
> on coasttocoastam, but once in a while i find a good station, 650 WSM out of

> Nashville Tennessee is a good one
> >
>
>
>

[Non-text portions of this message have been removed]

7521. Re: Initial impressions of the ferrite loop antenna (the big one!)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-26 16:28:57 UTC
From: sarmento2k
Topic: 7501 Message: 7521

Hi Vlad

I haven't tested yet using my long time sleeping mini-bog during gray line, but some stations should be easy to catch like :

684 kHz, Spain
1548 kHz, Moscow/Kuwait
1620 kHz, Caribbean region
1503 kHz, Taiwan (during gray line)
1476 kHz, Dubai
(some of this stations have already been logged in Lorena/São Paulo several times)

73s
Sarmento Campos

--- In loopantennas@yahoogroups.com, Vladimir Duk <vladimirduk@...> wrote:
>
> Hi Sarmento,
>
> At what time (GMT) you did the listenings you mentioned? I´m trying to
> listen MW transoceanic (1512kHz, 1557kHz and so on) here in Florianopolis
> for a while, without success.
> Any other transoceanic listenings you could mention, so I could try them
> here?
>
> 73! Vlad PP5VU
>
> On Mon, May 24, 2010 at 12:48 PM, sarmento2k <
> sarmento.campos@...> wrote:
>
> >
> >
> > With our Sun behaving like a crazy guy, MW propagation is very strange
> > nowadays in my region. I used to listen to Saudi Arabia (1512kHz), France
> > Info (1557 kHz) and others using just the ferrite loop antenna.
> >
> > I have tested another loop, which is supposed to have much more gain and no
> > transoceanic DX, just South America.
> >
> > You can see the video of this one, nulling a local power station and
> > bringing Argentina, Paraguay and Uruguay:
> >
> >
> > http://blog.sarmento.eng.br/2010/05/22/antena-loop-de-quadro-para-ondas-medias-excelente-ferramenta-para-dx/
> >

> > 73s
> > Sarmento - Rio de Janeiro
> >
> >
> > --- In loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>,
> > "james" <jamesdeansghost@> wrote:
> > >
> > > thats quite a loop stick you got there (nice fat one!) i have a
> > "Select-A-Tenna" for an indoors AM broadcast band antenna that works nicely
> > and has a tuning capacitor of some sort, i have never opened it as it seems
> > to be a sealed unit so i have no idea what is inside the Select-A-Tenna,
> > >
> > > i enjoy turning the AM broadcast band at night i just wish there was not
> > dozens of stations all playing the same program (CoastToCoastAM) that show
> > is for loonys, a person has to be crazy to believe the drivel they broadcast
> > on coasttocoastam, but once in a while i find a good station, 650 WSM out of
> > Nashville Tennessee is a good one
> > >
> >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

7522. Re:Ferrite loopstick

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-27 03:58:11 UTC
From: Alex P
Topic: 7522 Message: 7522

Sarmento,

Had a look at your video clips and I was wondering where you got the ferrite sticks from?

Alex

[Non-text portions of this message have been removed]

7523. Re:Ferrite loopstick

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-27 13:24:32 UTC
From: sarmento2k
Topic: 7522 Message: 7523

Hi Alex

I bought the ferrite rods from a Brazilian industry called Sontag. They export several models (specially for MW and SW frequency ranges).

The difference of this antenna comparing to the classical bazooka is the internal disposal of the rods and the rods specification.

I'll take same pics to show it inside and try to scan the datasheet of the rods I have used.

Regards
Sarmento

--- In loopantennas@yahoogroups.com, Alex P <winston376@...> wrote:
>
> Sarmento,
>
> Had a look at your video clips and I was wondering where you got the ferrite sticks from?
>
> Alex
>
>
>
>
> [Non-text portions of this message have been removed]
>

7524. Ferrite rod loop antenna for MW (was Re: John: are u aware of this?)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-27 14:38:58 UTC
From: sarmento2k
Topic: 7516 Message: 7524

Hi John

This weekend I will write a briefing about it. Your exposure is extremely relevant and was the basis of my research.

I have tested two distinct ferrite sticks, one appropriate for lower frequencies and higher frequencies, and I have also tried to use powder. I had access to the raw material (it's another story) during its production.

And there were big differences of performance.

The variable capacitor is located 10 cm distant from the bundle of ferrites that's why the antenna is so big, I mean, due to the considerations you note, it's ok.

I will post more pics of the assembly to write more about it.

Regards
Sarmento

--- In loopantennas@yahoogroups.com, John Popelish <jpopelish@...> wrote:
>
> sarmento2k wrote:
> > Hi John, as a matter of fact, my main objective here is
> > to share and most important to me, is to learn about loop
> > antennas.
> >
> > Next try I will change the coupling method. Instead of
> > magnetically coupling I will directly connect the loop
> > into the receiver.
> >
> > I wonder if a coupling coil, with 2 or 3 turns will be
> > suffice to couple into the low impedance input of the
> > receiver (50 Ohms).
> >
> > In theory, at least, it's supposed to use another
> > variable capacitor to tune this coupling loop too, but
> > capacitance should be very high. An the other way, the
> > higher the number of turns of this coupling coil, less
> > capacitance needed, but it may be an issue to the main
> > tuned loop.
> >
> > I think of using a low capacity coaxial cable ☐ like
> > RGC58, to connect this coupling loop into the Icom.
> >
> > Any idea about it?
>

> Sarmento:
>
> Before discussion alternate coupling methods, I have a few
> questions about the designs described in this web page:
>
> http://www.sarmento.eng.br/Loop_Ferrite_Rod_Antenna.htm
>
> You spend a lot of effort talking about rod arrangements and
> their lines of contact and packing density. But without
> quantitative comparisons, I am having trouble visualizing
> how these differences matter. I tend to think more about
> the physical coupling between the external RF fields and the
> rods and coils.
>
> Based on this point of view, I suspect that you might well
> see almost identical results with the inner layer of rods
> completely removed and replaced with spacers. I picture the
> effects of the rods as a magnetic sort of short circuit for
> the magnetic component of the EM waves, gathering flux over
> the exposed rod surfaces near their ends and passing it all
> through the center section. The inner layer or rods, having
> much less surface exposed to these external fields (only
> their ends) might not be utilized as effectively as the
> outer layer.
>
> Also, from this point of view, there should be more RF flux
> near the center of the rod than near the ends, but I see
> your drawings showing the coil near one end, rather than
> being in the center. But I see no reason given for this choice.
>
> From the photos, it also appears that you place your tuning
> capacitors right against the end of the rod bundle, where
> the gathered external flux would be most concentrated. This
> would cause the flux to go around or to penetrate the metal
> parts of the capacitor, while producing eddy current losses
> and signal reduction from those diversions and losses.
>
> I would be happy to read any reactions you might have to
> these thoughts.
>
> --
> Regards,
>
> John Popelish
>

7525. Re: [loopantennas] Ferrite rod loop antenna for MW (was Re: John: are u aware of this?)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-27 17:10:56 UTC
From: John Popelish
Topic: 7516 Message: 7525

sarmento2k wrote:
> Hi John
>
> This weekend I will write a briefing about it. Your
> exposure is extremely relevant and was the basis of my
> research.
>
> I have tested two distinct ferrite sticks, one
> appropriate for lower frequencies and higher frequencies,
> and I have also tried to use powder. I had access to the
> raw material (it's another story) during its production.
>
> And there were big differences of performance.
>
> The variable capacitor is located 10 cm distant from the
> bundle of ferrites that's why the antenna is so big, I
> mean, due to the considerations you note, it's ok.
>
> I will post more pics of the assembly to write more about
> it.

I look forward to seeing those additional details. Thank you.

--
Regards,

John Popelish

7526. Help making the most out of my new purchase

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-28 05:43:36 UTC
From: corbintechboy
Topic: 7526 Message: 7526

Hello,

New here and have a few questions.

I just ordered what will be my first "real radio" after years in the radio hobby. I ordered the Yaesu FRG-100 and very excited about my purchase. Naturally after being in the Shortwave hobby for many years I have played with many different types of wires and such to try and get the best signals on the little radios I have had.

With this purchase, I want to match this radio with the best antenna solution that fits into the constraints I have here at the house. I have been looking at some different loops across the net and have done some reading as to what I would like to do. The amount of space I have here is a real issue and a ground is no way practical at all. The radio will be on the second floor of an older home with no pipes in sight and no way to put anything out a window, in front of a window is fine for my situation here.

Now the questions:

I will be doing a lot of utility decoding and whatnot with the radio as well as some broadcast listening and have no real "target" as to where in the bands I want this radio to shine. I have been reading about the "Magnet loop" and this really appeals to me for the local noise canceling features. What is the smallest I can get away with and not sacrifice the amount of signal I recieve?

Another thing I was looking at is just making an all out loop and would like to know if I were able to wrap a wire like I think 462 inches around a loop for the 6.0Mhz area would all the frequencies above the 6.0Mhz be able to use an antenna tuner to make the loop efficient up to around 15.0Mhz?

I have no electronic skills and making any kind of soldered type board is out of the question, do I need to?

Space is about my main constraint here, dont have much.

Thanks in advance for the help!

7527. Re: Technician class ham radio podcast?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-30 15:09:22 UTC
From: alienrelics
Topic: 7480 Message: 7527

Thanks! I might try taking several in one sitting, too.

Steve Greenfield

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, Steve Greenfield <alienrelics@> wrote:
> >
> > I'm looking for a podcast/podclass for the Technician Class amateur radio license, something I can listen to at work that -DOESN'T- require iTunes or other 3rd party installation, just whatever comes in IE/Windows.
> >
>
> Steve, go to
>
> http://www.w5ddl.org/
>
> and on the left side of the page you will see classroom presentation (PowerPoint) for Tech, General, and Extra. From doing the Tech Powerpoints my practice test scores were bumped up from 80%-85% to 95%-100%. I scored 35/35 when I took the actual tests.
>
> You will need PowerPoint, or at least, a PowerPoint Viewer. You will find in the Tech presentation a link to download the free PowerPoint Viewer. You may or may not have this as part of your MS Office Suite. No matter, a free download.
>
> These are excellent, and I urge you to download the presentations and work on them, two chapters a night, and at the same time, take some of the practice tests to be found at QRZ.com, eHam.net, etc.
>
> Once you get your practice tests over 90% for the Tech, begin studying for the General, too, while continuing to study and take practice tests for the Tech. And if get your General scrores up, begin on the Extra.
>
> The General opens the world of HF to you, and is a lot of bang for the buck. It is really not much more difficult than the Tech.
>
> I don't mean to sound as if bragging, but I took and passed all three tests in one sitting. Others have done the same. Don't shortchange yourself. Aim high.
>
> 73
> Paul
> AE5JU
>

7528. Re: Help making the most out of my new purchase

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-30 18:35:38 UTC
From: corbintechboy
Topic: 7526 Message: 7528

Hello again,

I now realize after doing more reading that my post is very misinformed.

I was under the impression that I needed to make the wire in a loop a 1/4 wave in order for it to work if I were to do an all out loop (if that makes sense). I did more research and have learned this is not the case.

I got on the radio last night at 0000 UTC and noticed that the setup I have here is not much good on the SW bands. I did indeed pick up some stations but the noise floor was very high (S6-8). On MW the wire wrapped around my room fared much better and I was able to do some good MW DX. In a sense what I have here is a big loop around the ceiling.

I still have questions. A lot of the info I find about magnetic loops has to do with transmitting, something I won't be doing. Do the same rules apply?

Also wondering about the size, I read that I can use 1/10 wavelength and I am really lost as to how to calculate that. I don't understand the size.

I also am wondering about the variable capacitor, does this have to be attached to the loop or can I move it closer to my station? The way I have the radio here the radio will be on one side of the room and the loop on another. If I can attach the capacitor to the coax it will be much easier.

In front of the window I have about 3.5 feet in width I can play with, if I were to move the loop to an inside wall I got about 5 food in width at that point. I live in a vinyl sided wood house so the inside wall could even work.

Thinking about the target frequencies, I think my interest lies at around 4Mhz up to around 15Mhz there bouts. Could this be done in the space constraints?

Been on ebay looking at capacitors and there are some really nice ones to be had. Should I get one with only one tuning set of fins? Or should I get one with three?

Hope I make a little more sense this time around.

7529. Re: [loopantennas] Re: Help making the most out of my new purchase

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-05-30 20:55:27 UTC
From: Jim Dunstan
Topic: 7526 Message: 7529

At 06:35 PM 5/30/2010 +0000, you wrote:
>
>
>Hello again,
>
>I now realize after doing more reading that my post is very misinformed.
>
>I was under the impression that I needed to make the wire in a loop a 1/4
>wave in order for it to work if I were to do an all out loop (if that
>makes sense). I did more research and have learned this is not the case.

Hi,

almost any length of wire will "work" whether configured as a loop or as a straight piece with the feed point located in the middle (dipole or doublet). Both configurations loop and dipole have a common characteristic in that they are considered "balanced". By that it is meant that the antenna element is complete and does not require a reference to ground, earth, counterpoise, or whatever you want to call it ... in order for RF currents to flow through the feed line to the radio.

When you speak of 1/4, 1/2, or 1 wavelength etc.. you are talking about the electrical length of the element at a particular frequency and resonance. I just so happens that an element that is 1/2 wavelength at some particular frequency and is arranged as a dipole represents some desirable attributes .... e.g. presents approximately 50 ohms impedance (with no complicated inductive or capacitive reactance). If you increase the length to 1 full wavelength and configure it into a loop it presents approximately 100 ohms.

The information above only makes sense for frequencies in the HF range of 3.5 to 30 mhz. Frequencies lower than 2-3 mhz become too large to be practical in terms of resonant lengths.

>I got on the radio last night at 0000 UTC and noticed that the setup I
>have here is not much good on the SW bands. I did indeed pick up some
>stations but the noise floor was very high (S6-8). On MW the wire wrapped
>around my room fared much better and I was able to do some good MW DX. In
>a sense what I have here is a big loop around the ceiling.
>
>I still have questions. A lot of the info I find about magnetic loops has
>to do with transmitting, something I won't be doing. Do the same rules apply?

Generally speaking NO. The most critical aspect in constructing a small loop (generally one that is considerably smaller than 1/4 wavelength in circumference) is to make the element, tuning, and coupling components

robust enough to withstand high RF currents and voltages.

>Also wondering about the size, I read that I can use 1/10 wavelength and I
>am really lost as to how to calculate that. I don't understand the size.

As mentioned in the first comments the smallest (naturally resonant) loop antenna is considered the 1 full wavelength. The rule of thumb formula for calculating this length is 1005/Frequency. So a naturally resonant loop for 14 mhz would be 1005/14 = 72' 8" It has certain characteristics in terms of input impedance and radiation pattern. A loop that is 1/10 wavelength would be only a little more than 7ft in circumference and it needs to be "tuned" in order to become resonant (to make up for the shortened length) and has much different feed and radiation characteristics.

When the loop is large ... it will work well even if it is not resonant ... as in the case of the loop around the room. If it is small (in the 1/10 WL range) it generally must be tuned in order to perform adequately. (there are exceptions .... eg. providing much additional RF amplification).

>I also am wondering about the variable capacitor, does this have to be
>attached to the loop or can I move it closer to my station? The way I have
>the radio here the radio will be on one side of the room and the loop on
>another. If I can attach the capacitor to the coax it will be much easier.

Yes, the capacitor can be located at a distance from the loop

>In front of the window I have about 3.5 feet in width I can play with, if
>I were to move the loop to an inside wall I got about 5 food in width at
>that point. I live in a vinyl sided wood house so the inside wall could
>even work.
>
>Thinking about the target frequencies, I think my interest lies at around
>4Mhz up to around 15Mhz there bouts. Could this be done in the space
>constraints?
>
>Been on ebay looking at capacitors and there are some really nice ones to
>be had. Should I get one with only one tuning set of fins? Or should I get
>one with three?
>
>Hope I make a little more sense this time around.

Have fun with the experiments

Jim

7530. Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-03 01:41:57 UTC
From: Irv F
Topic: 7489 Message: 7530

--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:
>
> Hi All,
> I am wondering if anyone has tried locating the feed loop
> or Gamma match next to the tuning capacitor and if
> they had success with this arrangement?
>
> This would simplify tuning/matching the loop and
> simplify construction a bit if the tuning cap and
> feedpoint could be located close together, especially for a
> larger size loop. This is compared to the normal method
> of locating the tuning capacitor at the opposite end of the loop
> away from the feedpoint. This requires locating the tuning capacitor at
> the highest point of the loop and complicates the mechanical
> construction especially for a larger circumference loop like a 70
> ft circumference loop for 80 meters.
>
> I know it will unbalance the loop if the gamma
> match ground point is next to the tuning capacitor
> but I don't see any reason why it wouldn't work.
>
> Unbalancing the loop should mainly effect the
> sharpness of the null direction but for transmitting
> most people want the antenna to be more omnidirectional.
>
> I plan to experiment with this feed method over the next
> few months and will report on how it works for me. My test
> loop will be a square loop 30-40ft circumference for 40
> meters only for highest efficiency.
>
> 73 Todd WD4NGG
>

The portion of the loop opposite the capacitor is the only real
place to get a low impedance feed point which the gamma match
requires. You would have difficulty feeding the loop anywhere
around the capacitor because of the very high voltages there.

Believe me, it would greatly simplify the construction of the
magloops if the feedpoint and capacitor could be colocated -- thats
why you never see it in magloop articles.

I'm in the process of building a loop now. Due to medical reasons
I had to sell my house and move into a residence where I could get
nursing assistance. I have a nice patio, and that's where the loop
is going to sit. I just picked up a Yaesu ND-817 and am looking

to get back on the air again. I'll propably build two loops in order to cover 80 thru 10M with a reasonably degree of efficiency.

Irv VE6BP

7531. Re: balanced line & metal-framed windows

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-03 01:54:06 UTC
From: Irv F
Topic: 7427 Message: 7531

With 50+ years of ham radio using twin lead (300Ohm Twin Lead)
I've run across metal pipes, under metal doors, over filing
cabinets, under metal window screens, and almost anywhere I had
to to get a line out of doors. Without any consideration of
do's and dont's by technical gurus, kind of like the bumblebee
who the gurus say cannot fly but flies, I have enjoyed countless
years of fun using this feeder. I've never run more than a hundred watts or so, and never
worried about distance from other metal
surfaces. In a pinch I've even used zip cord!
Get the line out any way you can and get on the air. Then make
changes if you feel you aren't getting out -- but I think you'll
be pleased. I sure was!

Irv VE6BP

--- In loopantennas@yahoogroups.com, ZephyrNYC <ZephyrNYC@...> wrote:
>
> Hello, everyone. Does anyone in the group feed an outdoor antenna
> with twin coax or regular (non-coax) balanced line going through a
> metal-framed window? If so, what kind of problems do you experience?
> AFAIK, using balanced line near metal is a big no-no, but I read this
> today:
>
>
> Regular balanced line:
>
> http://www.mail-archive.com/elecraft@.../msg30984.html
>
> "... you can cross a metallic boundary with parallel
> feedline with no problem to the RF as long as it occurs at right angles to
> the feedline - again be careful that you have adequate insulation where you
> cross, the RF voltages can be quite high even with low or moderate power if
> the feedline has a high SWR."
>
>
> And this on balanced (twin) coax:
>
> http://eham.net/ehamforum/smf/index.php?topic=66987.0
>
> "I would like some advice on feeding 450 ohm window line at right
> angles through aluminum siding. It's the only way I can do it! Can I
> get reasonably close at this right angle? or do I need several inches
> around etc."
>
> "If you want to be entirely safe about it, you could change the

> ladderline to two side-by-side coaxes for the short final run through
> the siding and to the shack.
>
> Connect an inside conductor of each coax to each of the balanced line
> conductors.
>
> At the balanced line side, connect both coax shields together and
> solder. Insulate all three connections from each other well, using
> weatherproof tape or something suitable.
>
> At the shack end, connect the two center conductors of the two coaxes
> to the balance line connects. Connect the two shields together and
> also connect them to shack ground.
>
> This will create a shielded, balanced line that can cross conductive
> metals without problem. You could pass the two side-by-side coaxial
> cables through the siding through one tight pass hole or two, doesn't
> matter as they are now shielded but still running in blanced mode.
>
> Old trick that works."
>
>
>
> More on regular balanced line:
>
> 'But seriously, I'm sure you've heard that you have to "keep
> ladderline several inches from metal."
>
> Right angle crossings don't really count.
>
> The important thing with keeping ladderline away from *metal* is that
> you don't want to run it for a long stretch close to and in parallel
> with a third unbroken conductor, because that turns it into a
> different kind of feedline, one that has a lower characteristic
> impedance and generally one that has more loss in the situations where
> people like to use ladderline. So that's what you want to avoid.
> And if you ran it very close to a long stretch of lossy, damp material
> like dirt, the way the fields interact with the dirt would cause a lot
> of very direct loss.'
>
>
> More on balanced (twin) coax:
>
> http://forums.hamisland.net/viewtopic.php?f=4&t=4793
>
>
> Aside from differences in shielding, weight and cost; what are the
> pros & cons of using balanced coax vs. regular balanced insulated
> line?
>

>
> Does RF from balanced feedline really cause interference to pacemakers
> and other medical devices? I am curious because my apartment window
> frames seem to be constructed of aluminum, and I have plans for an
> antenna that will probably need a long feedline. The two windows are
> approximately 4' and 15' from the edge of a metal fire escape.
> Thanks.
>
>
> 73,
> Frank wF2ANK
>
>
> "Security is mostly a superstition. Avoiding danger is no safer in the
> long run than outright exposure. Life is either a daring adventure or
> nothing."
>
> - Helen Keller (1880-1968), The Open Door
>
> Join the largest Yaesu FT-857 group on Yahoo at
> http://groups.yahoo.com/group/FT-857/ , or send an email to
> FT-857-subscribe@yahoogroups.com .
>

7532. Re: balanced line

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-03 02:11:17 UTC
From: Richard Harrison
Topic: 7532 Message: 7532

Irv: What a delightful, no nonsense response by encapsulating your 50+ years of experience of advice that you've proven works. Continue your contributions to this group.
de Rich N2JR

Sent from my iPad...R. Harrison

7533. Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-03 03:18:14 UTC
From: capntripps2000
Topic: 7489 Message: 7533

That's quite interesting and is what I observed when I tried to feed a loop next to the tuning capacitor; the gamma feed needed to be increased to a size much larger than typical and I gave up when I could not get the SWR below 3:1 with a large gamma section on a 1/4 circumference loop.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "Irv F" <finkirv@...> wrote:
>
>
>
>
> The portion of the loop opposite the capacitor is the only real
> place to get a low impedance feed point which the gamma match
> requires. You would have difficulty feeding the loop anywhere
> around the capacitor because of the very high voltages there.
>
> Believe me, it would greatly simplify the construction of the
> magloops if the feedpoint and capacitor could be colocated -- thats
> why you never see it in magloop articles.
>
> I'm in the process of building a loop now. Due to medical reasons
> I had to sell my house and move into a residence where I could get
> nursing assistance. I have a nice patio, and that's where the loop
> is going to sit. I just picked up a Yaesu ND-817 and am looking
> to get back on the air again. I'll propably build two loops in order to cover 80 thru 10M with a reasonably degree of efficiency.
>
> Irv VE6BP
>

7534. Re: [loopantennas] Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-03 17:31:38 UTC
From: Jim Dunstan
Topic: 7489 Message: 7534

At 01:41 AM 6/3/2010 +0000, you wrote:
>
>
>
>
>--- In
><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com,
>toddroberts2001@... wrote:
> >
> > Hi All,
> > I am wondering if anyone has tried locating the feed loop
> > or Gamma match next to the tuning capacitor and if
> > they had success with this arrangement?
> >>
> > 73 Todd WD4NGG
> >
>
>The portion of the loop opposite the capacitor is the only real
>place to get a low impedance feed point which the gamma match
>requires. You would have difficulty feeding the loop anywhere
>around the capacitor because of the very high voltages there.

Hi Irv,

It is not really difficult to couple to the loop at the tuning capacitor. The circuitry is simple ... the problem is as you say ... dealing with the high RF voltages. It also relates to the amount of power you run. If you run QRP no problem.

>Believe me, it would greatly simplify the construction of the
>magloops if the feedpoint and capacitor could be colocated -- thats
>why you never see it in magloop articles.

The reason you don't see it done is that it requires non-traditional methods.

MFJ made several versions of a Mag Loop Tuner that operated in this fashion. Simply connect the loop to the 2 stand-off insulators. the tuner acted as the base as well as the tuner and it could sit on the table next to the rig. I didn't particular like the idea of the mag loop sitting a couple of feet away from me ... even though I was only operating 10 watts output.

I extended the distance. The version I built separated the loop from the tuning capacitor/coupling unit by about 8 feet using home brew parallel feed line.The loop was about 3 ft in diameter and I ran 10 watts output (I used a Kenwood TS-50 running at the low power output setting) no

problem. it worked just as well as the same loop fed in the more traditional way at the low impedance side. If I fed the same loop at the low impedance side I could easily run 50 watts .... but then I had the inconvenience of not being able to tune the loop and adjust coupling from the operating position. By the way ... the loop was fastened to the balcony railing and the tuner/coupler was just inside the window to the apartment. Both loop arrangements had the same efficiency (e.g. output). The difference was that feeding the high impedance point dramatically lowers the 'destruction' point hi hi.

It is not a matter of will it work. It works! ... It is just not easily done with traditional components. Modern day Amateurs love coax .... and coax is incompatible with high impedance feed. If Mag loops were popular back in the 1930's I am sure that is how it would have been done (that is tuning and feed at the same point).

Jim, VE3CI

[Non-text portions of this message have been removed]

7535. Re: [loopantennas] Re: balanced line & metal-framed windows

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-03 17:46:41 UTC
From: Jim Dunstan
Topic: 7427 Message: 7535

At 01:54 AM 6/3/2010 +0000, you wrote:
>
>
>With 50+ years of ham radio using twin lead (300Ohm Twin Lead)
>I've run across metal pipes, under metal doors, over filing
>cabinets, under metal window screens, and almost anywhere I had
>to to get a line out of doors. Without any consideration of
>do's and dont's by technical gurus, kind of like the bumblebee
>who the gurus say cannot fly but flies, I have enjoyed countless
>years of fun using this feeder. I've never run more than a hundred watts
>or so, and never worried about distance from other metal
>surfaces. In a pinch I've even used zip cord!
>Get the line out any way you can and get on the air. Then make
>changes if you feel you aren't getting out -- but I think you'll
>be pleased. I sure was!
>
>Irv VE6BP

Hi Irv,

you're absolutely right. 300 ohm twin-lead made it's appearance in the 50's with the advent of TV (at least in my neck of the woods) and it became the miracle feed line. It handles 100 watts to non-resonant multi-band doublets no problem .... if the particular length at a particular band causes a bit of a matching problem ... simply add 10 to 15 feet (rolled up on the floor) and it usually does the trick. If you use it as both the feed line and antenna in a resonant folded dipole you can put the power up to about 500 watts ... I personally have run such an arrangement with 300 watts full Amplitued modulation.

It is non fussy ... lets face it ... it was originally designed to be used with VHF .... so it is guaranteed to be effective at HF.

Jim, VE3CI

7536. Re: [loopantennas] Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-03 18:40:12 UTC
From: toddroberts2001@aol.com
Topic: 7489 Message: 7536

In a message dated 6/3/2010 1:31:57 P.M. Eastern Daylight Time,
jimdunstan@... writes:
> > Hi All,
> > I am wondering if anyone has tried locating the feed loop
> > or Gamma match next to the tuning capacitor and if
> > they had success with this arrangement?
> >>
> > 73 Todd WD4NGG
> >
>
>The portion of the loop opposite the capacitor is the only real
>place to get a low impedance feed point which the gamma match
>requires. You would have difficulty feeding the loop anywhere
>around the capacitor because of the very high voltages there.

Hi Irv,

It is not really difficult to couple to the loop at the tuning
capacitor. The circuitry is simple ... the problem is as you say ...
dealing with the high RF voltages. It also relates to the amount of power
you run. If you run QRP no problem.

>Believe me, it would greatly simplify the construction of the
>magloops if the feedpoint and capacitor could be colocated -- thats
>why you never see it in magloop articles.

The reason you don't see it done is that it requires non-traditional
methods.

MFJ made several versions of a Mag Loop Tuner that operated in this
fashion. Simply connect the loop to the 2 stand-off insulators. the tuner
acted as the base as well as the tuner and it could sit on the table next
to the rig. I didn't particular like the idea of the mag loop sitting a
couple of feet away from me ... even though I was only operating 10 watts
output.

Hi All,
Thanks for the many ideas and suggestions on trying to feed a
magloop next to the tuning capacitor. I had forgotten about the MFJ
loop tuners that use a capacitive match right next to the tuning capacitor.

It looks like the Gamma Match is not really suited to feed a loop with
at a high-impedance point like right near the tuning cap, but works well at
the
low impedance point opposite the loop tuning cap. Plus by its nature one
side
of the Gamma Match is grounded. That would upset the balance of the loop

if placed right next to the loop tuning cap.

About 15 years ago I did successfully feed a balanced, ungrounded loop next to the tuning capacitor once with an unusual arrangement. I was using a QRP transmitter with a tuned tank coil and inductively coupled the tank coil into a corner of a magloop right next to the tuning capacitor. I made the tank coil out of about 3 turns of wire about 1 ft in diameter feeding a loop 10 ft square or 40 ft circumference. This was in the Medfer band about 1645KHz. The tank coil was resonated with its own tuning capacitor. Then I varied the spacing to the loop for best loading. So I was basically coupling one tuned coil into another larger tuned coil (the loop). The tuned tank coil of the Mosfet final was not a real high impedance like you would find in a tube final but I would guess was somewhere in the range of 250-300 ohms.

This makes me think that perhaps stepping up the 50 ohm output of common coax feedline with a 1:2 or 1:3 ratio transformer to start with and feeding that into either a larger-size single-turn feed loop or perhaps a multi-turn feedloop would give a better match at the higher-impedance feedpoint next to the loop tuning capacitor? Then keep experimenting with the step-up turns ratio and size of the feedloop plus spacing to see if best match can be found?

I will report back on this if I can get any success with this method over the summer.
73 Todd WD4NGG

7537. Re: [loopantennas] Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-04 16:30:31 UTC
From: John Hoopes
Topic: 7489 Message: 7537

I'm surprised that no one has mentioned that on electricaly small loops (< .10 lamda) there is no low impedance point. So essentially you can put the matching network where ever it is practicle.

John

--- On Thu, 6/3/10, toddroberts2001@... <toddroberts2001@...> wrote:

From: toddroberts2001@... <toddroberts2001@...>
Subject: Re: [loopantennas] Re: Feeding A Magnetic TX Loop
To: loopantennas@yahoogroups.com
Date: Thursday, June 3, 2010, 2:40 PM

In a message dated 6/3/2010 1:31:57 P.M. Eastern Daylight Time,
jimdunstan@... writes:
> > Hi All,
> > I am wondering if anyone has tried locating the feed loop
> > or Gamma match next to the tuning capacitor and if
> > they had success with this arrangement?
> >>
> > 73 Todd WD4NGG
> >
>
>The portion of the loop opposite the capacitor is the only real
>place to get a low impedance feed point which the gamma match
>requires. You would have difficulty feeding the loop anywhere
>around the capacitor because of the very high voltages there.

Hi Irv,

It is not really difficult to couple to the loop at the tuning
capacitor. The circuitry is simple ... the problem is as you say ...
dealing with the high RF voltages. It also relates to the amount of power
you run. If you run QRP no problem.

>Believe me, it would greatly simplify the construction of the
>magloops if the feedpoint and capacitor could be colocated -- thats
>why you never see it in magloop articles.

The reason you don't see it done is that it requires non-traditional
methods.

MFJ made several versions of a Mag Loop Tuner that operated in this
fashion. Simply connect the loop to the 2 stand-off insulators. the tuner
acted as the base as well as the tuner and it could sit on the table next
to the rig. I didn't particular like the idea of the mag loop sitting a
couple of feet away from me ... even though I was only operating 10 watts

output.

Hi All,
Thanks for the many ideas and suggestions on trying to feed a
magloop next to the tuning capacitor. I had forgotten about the MFJ
loop tuners that use a capacitive match right next to the tuning capacitor.

It looks like the Gamma Match is not really suited to feed a loop with
at a high-impedance point like right near the tuning cap, but works well at
the
low impedance point opposite the loop tuning cap. Plus by its nature one
side
of the Gamma Match is grounded. That would upset the balance of the loop
if placed right next to the loop tuning cap.

About 15 years ago I did successfully feed a balanced, ungrounded loop
next to the tuning capacitor once
with an unusual arrangement. I was using a QRP transmitter with a tuned
tank coil and inductively coupled the tank coil into a corner of a magloop
right
next to the tuning capacitor. I made the tank coil out of about 3 turns of
wire
about 1 ft in diameter feeding a loop 10 ft square or 40 ft circumference.
This
was in the Medfer band about 1645KHz. The tank coil was resonated with its
own tuning capacitor. Then I varied the spacing to the loop for best
loading. So
I was basically coupling one tuned coil into another larger tuned coil (the
loop). The
tuned tank coil of the Mosfet final was not a real high impedance like you
would find in
a tube final but I would guess was somewhere in the range of 250-300 ohms.

This makes me think that perhaps stepping up the 50 ohm output of
common coax feedline with a 1:2 or 1:3 ratio transformer to start with and
feeding
that into either a larger-size single-turn feed loop or perhaps a
multi-turn
feedloop would give a better match at the higher-impedance feedpoint next
to
the loop tuning capacitor? Then keep experimenting with the step-up turns
ratio and
size of the feedloop plus spacing to see if best match can be found?

I will report back on this if I can get any success with this method over
the summer.
73 Todd WD4NGG

[Non-text portions of this message have been removed]

7538. High Performance 90-40m loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-04 18:43:40 UTC
From: ka8zty
Topic: 7538 Message: 7538

This has been working gangbusters for me for the past two years on 3.2-7.6 mhz.

73 George K4MLB/AFA2VI

7539. MFJ Magloop 1786

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-04 20:57:06 UTC
From: Michael
Topic: 7539 Message: 7539

Hi, all. I live in a HOA restricted community. As such, I purchased a MFJ 1786 loop antenna. This purchase was based on what I read on the net and reviews on eham. The antenna is on a 5ft pvc mast held by a umbrella stand. It sits on a deck that is approximately 9' above ground level. I have had some difficulty tuning the loop but am improving. My concern is that reception is poor on all bands(30-10 meters). Contacts are practically nil. I do have a fellow ham that is approximately 2-3 miles from me. He can copy me and I,he. That it is it. I do not know what antenna system he is using. My experience with this antenna does not come close to those who have reported on this antenna.

Is there anyone here who has experience with this antenna who could advise me as to how I might be able to get this antenna to perform for me before I decide to move on and try another stealth system.

Thank you.

73 Mike WB3KBB

7540. Re: MFJ Magloop 1786

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 00:58:56 UTC
From: capntripps2000
Topic: 7539 Message: 7540

Is the loop mounted horizontally or vertically? If it is horizontal at 9ft above the ground your losses will approach 30db on the lower frequencies. A magnetic loop is to be mounted vertically when low to the ground.

If you mount it in the attic, say 20ft or more above ground, you can get away with horizontally mounting it then. I had an AEA Isoloop mounted horizontally at 25ft above ground in my attic and it worked great on stateside and DX.

Overall, the loop will be MUCH quieter than a dipole, even when tuned to resonance.

Are you getting near 1:1 SWR when the loop is tuned? If your rig has an autotuner built it, turn it off, you cannot use any tuner other than that which came with the loop.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "Michael" <rivielms@...> wrote:
>
> Hi, all. I live in a HOA restricted community. As such, I purchased
> a MFJ 1786 loop antenna. This purchase was based on what I read on
> the net and reviews on eham. The antenna is on a 5ft pvc mast held by a umbrella stand. It sits on a deck that is approximately 9' above ground level. I have had some difficulty tuning the loop but am improving. My concern is that reception is poor on all bands(30-10 meters). Contacts are practically nil. I do have a fellow ham that is
> approximately 2-3 miles from me. He can copy me and I,he. That it is it.
> I do not know what antenna system he is using. My experience with this
> antenna does not come close to those who have reported on this antenna.
>
> Is there anyone here who has experience with this antenna who could advise me as to how I might be able to get this antenna to perform for
> me before I decide to move on and try another stealth system.
>
> Thank you.
>
> 73 Mike WB3KBB
>

7541. Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 13:11:37 UTC
From: bm40g
Topic: 7489 Message: 7541

--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:
>
> Hi All,
> I am wondering if anyone has tried locating the feed loop
> or Gamma match next to the tuning capacitor and if
> they had success with this arrangement?
>

Hi Todd,

I am supprised that nobody has mentioned the british ham that has patented this idea. I first learned of him, and his website on this list actually.
http://www.g0cwt.co.uk/magloops/new_page_5.htm

Yes, it does simplify the consturction, as the coupling and tuning can all be put in one box, ala the mentioned MFJ product. Also, check out Ka8zty's pictures.

I did not go that way with my loop, however. I have lots of nearby conducted interferance soures in the vacinity of my antenna. To help reduce electrostatic coupling from these sources, I wanted the shielded loop feed at the magenetic end of the antenna. A dipole here picks up so much of this noise, that its not usable. The Mag loop is much better, can be moved around and oriented for the best signal and signal quality, unlike the Dipole.

7542. 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 14:17:07 UTC
From: shovell68
Topic: 7542 Message: 7542

I just ran across this forum and thought you all would enjoy the pics of my 40m magloop I posted under my callsign. I used 1-5/8" copper pipe in a hexagon shape with a loop diameter of approx 6.3 feet. It's fed with a gamma match, and the capacitor is a 5KV vacuum variable. I have it mounted with the feedpoint at about 7.5 feet above ground vertically polorized. It will outperform my inverted V at 35 feet under some conditions.

Specs @ 100w:
Loop Circumference 21.00 feet
Conductor Diameter 1.63 inches
Frequency 7.20 mHz
Bandwidth 9.6 kHz
Capacitor Value 95.1 pF
Capacitor Voltage 3.9 kV
Conductor Wavelength 0.162 lamda
Efficiency 74.4 %
Inductance 4.456 µH
Inductive Reactance 201.6 ohms
Loop Area 33.3 feet²
Loop Diameter 6.3 feet
Loop Q Value 746.3 Qres
Radiation Resistance 0.101 ohms
Resistance Loss 0.035 ohms

73
AC7AZ

7543. Re: [loopantennas] 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 14:50:17 UTC
From: Chris Trask
Topic: 7542 Message: 7543

>
> I just ran across this forum and thought you all would enjoy
> the pics of my 40m magloop I posted under my callsign. I used
> 1-5/8" copper pipe in a hexagon shape with a loop diameter of
> approx 6.3 feet. It's fed with a gamma match, and the capacitor
> is a 5KV vacuum variable. I have it mounted with the feedpoint
> at about 7.5 feet above ground vertically polorized. It will
> outperform my inverted V at 35 feet under some conditions.
>
>Specs @ 100w:
>Loop Circumference 21.00 feet
>Conductor Diameter 1.63 inches
>Frequency 7.20 mHz
>Bandwidth 9.6 kHz
>Capacitor Value 95.1 pF
>Capacitor Voltage 3.9 kV
>Conductor Wavelength 0.162 lamda
>Efficiency 74.4 %
>Inductance 4.456 µH
>Inductive Reactance 201.6 ohms
>Loop Area 33.3 feet²
>Loop Diameter 6.3 feet
>Loop Q Value 746.3 Qres
>Radiation Resistance 0.101 ohms
>Resistance Loss 0.035 ohms
>

Photos?

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7544. Re: [loopantennas] 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 15:25:15 UTC
From: toddroberts2001@aol.com
Topic: 7542 Message: 7544

In a message dated 6/5/2010 10:43:59 A.M. Eastern Daylight Time,
shovell68@... writes:

I just ran across this forum and thought you all would enjoy the pics of my 40m magloop I posted under my callsign. I used 1-5/8" copper pipe in a hexagon shape with a loop diameter of approx 6.3 feet. It's fed with a gamma match, and the capacitor is a 5KV vacuum variable. I have it mounted with the feedpoint at about 7.5 feet above ground vertically polorized. It will outperform my inverted V at 35 feet under some conditions.

Mark, thanks for sharing your transmitting loop photos with us.
You did a first-class job interfacing your connections to the
vacuum variable. No chincy flying leads there!

Looks like overall first-class construction for lowest
conductor resistance.

73 - Todd WD4NGG

7545. Re: [loopantennas] Re: MFJ Magloop 1786

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 15:32:44 UTC
From: Michael Riviello
Topic: 7539 Message: 7545

On 6/4/2010 8:58 PM, capntripps2000 wrote:
>
> Is the loop mounted horizontally or vertically? If it is horizontal at
> 9ft above the ground your losses will approach 30db on the lower
> frequencies. A magnetic loop is to be mounted vertically when low to
> the ground.
>
> If you mount it in the attic, say 20ft or more above ground, you can
> get away with horizontally mounting it then. I had an AEA Isoloop
> mounted horizontally at 25ft above ground in my attic and it worked
> great on stateside and DX.
>
> Overall, the loop will be MUCH quieter than a dipole, even when tuned
> to resonance.
>
> Are you getting near 1:1 SWR when the loop is tuned? If your rig has
> an autotuner built it, turn it off, you cannot use any tuner other
> than that which came with the loop.
>
> Andrew
> N3LCW
>
> --- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, "Michael" <rivielms@...> wrote:
> >
> > Hi, all. I live in a HOA restricted community. As such, I purchased
> > a MFJ 1786 loop antenna. This purchase was based on what I read on
> > the net and reviews on eham. The antenna is on a 5ft pvc mast held
> by a umbrella stand. It sits on a deck that is approximately 9' above
> ground level. I have had some difficulty tuning the loop but am
> improving. My concern is that reception is poor on all bands(30-10
> meters). Contacts are practically nil. I do have a fellow ham that is
> > approximately 2-3 miles from me. He can copy me and I,he. That it is it.
> > I do not know what antenna system he is using. My experience with this
> > antenna does not come close to those who have reported on this antenna.
> >
> > Is there anyone here who has experience with this antenna who could
> advise me as to how I might be able to get this antenna to perform for
> > me before I decide to move on and try another stealth system.
> >
> > Thank you.
> >
> > 73 Mike WB3KBB
> >
>

>
Hi, Andrew, thank you for your response. I am sorry that I
neglected to state that the
antenna is vertically polarized. The autotuner is off. The
feedpoint is approximately 19'
above ground level. SWR on most frequencies is 1:1 or close.
Several frequencies
2:1

73 Mike WB3KBB

[Non-text portions of this message have been removed]

7546. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 16:00:47 UTC
From: mdgolfbum
Topic: 7542 Message: 7546

Nice job! How do you tune the cap?

What is the silver circular object below the cap?

Have you tried to measure the actual Q to compare to theoretical?

73

Jim ab3cv

7547. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 16:12:05 UTC
From: shovell68
Topic: 7542 Message: 7547

--- In loopantennas@yahoogroups.com, "mdgolfbum" <jim@...> wrote:
>
> Nice job! How do you tune the cap?
>
> What is the silver circular object below the cap?
>
> Have you tried to measure the actual Q to compare to theoretical?
>
> 73
>
> Jim ab3cv
>

I leave the loop tuned to 7.195 and use my inverted V for the rest of the band. The objects below the cap are a 6:1 reduction gear mounted on standoffs, a plastic insulator, and a knurled tuning knob. Without the reduction gear the tuning would be way too sharp. I haven't measured the Q.
Mark AC7AZ

7548. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 16:25:38 UTC
From: shovell68
Topic: 7542 Message: 7548

Link with larger photos. http://www.ar15.com/forums/topic.html?b=10&f=22&t=635818

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
>
> >
> > I just ran across this forum and thought you all would enjoy
> > the pics of my 40m magloop I posted under my callsign. I used
> > 1-5/8" copper pipe in a hexagon shape with a loop diameter of
> > approx 6.3 feet. It's fed with a gamma match, and the capacitor
> > is a 5KV vacuum variable. I have it mounted with the feedpoint
> > at about 7.5 feet above ground vertically polorized. It will
> > outperform my inverted V at 35 feet under some conditions.
> >
> >Specs @ 100w:
> >Loop Circumference 21.00 feet
> >Conductor Diameter 1.63 inches
> >Frequency 7.20 mHz
> >Bandwidth 9.6 kHz
> >Capacitor Value 95.1 pF
> >Capacitor Voltage 3.9 kV
> >Conductor Wavelength 0.162 lamda
> >Efficiency 74.4 %
> >Inductance 4.456 ÂµH
> >Inductive Reactance 201.6 ohms
> >Loop Area 33.3 feetÂ²
> >Loop Diameter 6.3 feet
> >Loop Q Value 746.3 Qres
> >Radiation Resistance 0.101 ohms
> >Resistance Loss 0.035 ohms
> >
>
> Photos?
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

7549. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 16:32:17 UTC
From: mdgolfbum
Topic: 7542 Message: 7549

Mark

Thanks for the info. Where did you find the 6:1 drive? Is it a planetary?

73
Jim ab3cv

7550. Re: MFJ Magloop 1786

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 16:37:43 UTC
From: capntripps2000
Topic: 7539 Message: 7550

This past week the higher bands have been pretty dead except for some sporadic activity. Keep an eye on:
http://www.n3kl.org/sun/noaa.html

With geomagnetic storms around it will stomp HF activities a times. I am listening to 20M right now on a sloping Par EndFedz 1/2w antenna and it is very quiet across the band at noon Saturday.

It sounds like you are set up correctly, I'd give it a week or so and keep trying at various times. 30M in the evening may open up if things remain settled.

It's hard to judge an antenna when band conditions are less than optimal.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, Michael Riviello <rivielms@...> wrote:
> >
> >
> Hi, Andrew, thank you for your response. I am sorry that I
> neglected to state that the
> antenna is vertically polarized. The autotuner is off. The
> feedpoint is approximately 19'
> above ground level. SWR on most frequencies is 1:1 or close.
> Several frequencies
> 2:1
>
> 73 Mike WB3KBB
>
>
> [Non-text portions of this message have been removed]
>

7551. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 16:45:23 UTC
From: capntripps2000
Topic: 7542 Message: 7551

Mark,

That is an example of a textbook perfect magnetic loop, very nicely done!

Lately I have been able to use a hidden inv. vee on 40M but I still use the loop for receive since it is much much quieter with all that summer static on the bands. While everyone else on frequency complains about S8-9 crashes I enjoy the same signal strength on receive but the static is down near S1-3.

Thanks for sharing that with us!

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "shovell68" <shovell68@...> wrote:
>
>
>
>
>
> I leave the loop tuned to 7.195 and use my inverted V for the rest of the band. The objects below the cap are a 6:1 reduction gear mounted on standoffs, a plastic insulator, and a knurled tuning knob. Without the reduction gear the tuning would be way too sharp. I haven't measured the Q.
> Mark AC7AZ
>

7552. Re: [loopantennas] Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 17:20:03 UTC
From: Mark Johnston
Topic: 7542 Message: 7552

It's a ball drive, I'm pretty sure I got it from Surplus Sales.

http://www.surplussales.com/shafthardware/jacksonbro.html

--- On Sat, 6/5/10, mdgolfbum <jim@...> wrote:

From: mdgolfbum <jim@...>
Subject: [loopantennas] Re: 40m magnetic loop
To: loopantennas@yahoogroups.com
Date: Saturday, June 5, 2010, 9:32 AM

Mark

Thanks for the info. Where did you find the 6:1 drive? Is it a planetary?

73
Jim ab3cv

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

7553. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 20:07:52 UTC
From: shovell68
Topic: 7542 Message: 7553

Thanks Andrew,
I have to give credit to Tom/W5QI for putting the idea in my head and Dale/KD7AKV for his plumbing skills during the construction. It's a very expensive antenna to buld, but a fun project that produces pretty good results IMHO.
Mark/AC7AZ

--- In loopantennas@yahoogroups.com, "capntripps2000" <capntripps2000@...> wrote:
>
> Mark,
>
> That is an example of a textbook perfect magnetic loop, very nicely done!
>
> Lately I have been able to use a hidden inv. vee on 40M but I still use the loop for receive since it is much much quieter with all that summer static on the bands. While everyone else on frequency complains about S8-9 crashes I enjoy the same signal strength on receive but the static is down near S1-3.
>
> Thanks for sharing that with us!
>
> Andrew
> N3LCW
>
>
>
>
>
>
> --- In loopantennas@yahoogroups.com, "shovell68" <shovell68@> wrote:
> >
> >
> >
> >
> >
> > I leave the loop tuned to 7.195 and use my inverted V for the rest of the band. The objects below the cap are a 6:1 reduction gear mounted on standoffs, a plastic insulator, and a knurled tuning knob. Without the reduction gear the tuning would be way too sharp. I haven't measured the Q.
> > Mark AC7AZ
> >
>

7554. 10 meter hardline loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 20:17:05 UTC
From: shovell68
Topic: 7554 Message: 7554

I looked in the links and didn't see this page posted. Has anyone tried this design for a 10m loop?

Link <http://www.antennex.com/hws/ws0902/hardline.html>

I have some 7/8" hardline and may give it a try.

Mark/AC7AZ

[Non-text portions of this message have been removed]

7555. Re: [loopantennas] Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 20:49:36 UTC
From: Chris Trask
Topic: 7542 Message: 7555

>
> > Thanks for the info. Where did you find the 6:1 drive? Is it a planetary?
>
> It's a ball drive, I'm pretty sure I got it from Surplus Sales.
>

I got the gear reduction drive motors for mine from Electronics Goldmine. Here's my writeup for that design, which has photos showing the mechanics:

http://www.home.earthlink.net/~christrask/Paper012.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7556. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-05 22:30:50 UTC
From: shovell68
Topic: 7542 Message: 7556

Mine is just a reduction gear for manual tuning, I built the loop optimized for 7.2mHz. You guys that build the motor drives to tune the cap are hardcore. This antenna really started out as just an experiment, but I'm not very active anymore and it is still tuned to my favorite freq and works flawlessly every time I need it even after about 4 years out in the elements.

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > > Thanks for the info. Where did you find the 6:1 drive? Is it a
> planetary?
> >
> > It's a ball drive, I'm pretty sure I got it from Surplus Sales.
> >
>
> I got the gear reduction drive motors for mine from Electronics
> Goldmine. Here's my writeup for that design, which has photos showing the
> mechanics:
>
> http://www.home.earthlink.net/~christrask/Paper012.html
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

7557. Re: 10 meter hardline loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-06 01:18:42 UTC
From: capntripps2000
Topic: 7554 Message: 7557

Mark,

Yes, I've used 7/8" aluminum hardline to make that very loop for 40M. I will say it will make a very small resonant magnetic loop. A 10ft length of hardline resonated below 40M around 6.3MHz and I had to trim several inches to get it up on 40M (I forget the actual final length). The tuning cap made by wrapping the wire around one end of the loop works but at QRP levels only. Using anything over 20w seemed to cause a drift in the frequency likely due to heat. By using a short section of RG8 coax as a tuning stub it stabilized the drift and I was able to run 50+ watts into it. At that frequency the loop will be quite inefficient but it will work.

When you say 10m are you referring to 10M or the length? At 10M the loop will be very small. You would be better off using a small feed loop with a 30inch diameter hardline loop. I made a few very nice fixed frequency mag loops with hardline and they are installed in the attic horizontally.

Andrew
N3LCW

--- In loopantennas@yahoogroups.com, "shovell68" <shovell68@...> wrote:
>
>
> I looked in the links and didn't see this page posted. Has anyone tried
> this design for a 10m loop?
>
> Link <http://www.antennex.com/hws/ws0902/hardline.html>
>
>
>
> I have some 7/8" hardline and may give it a try.
>
> Mark/AC7AZ
>
>
>
> [Non-text portions of this message have been removed]
>

7558. Re: 10 meter hardline loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-06 01:35:37 UTC
From: shovell68
Topic: 7554 Message: 7558

I'm not sure why I had the idea that was for a 10M loop, my mistake. Shoot, it even says it's for 40m in the headline. Senior moment I guess.
AC7AZ
--- In loopantennas@yahoogroups.com, "capntripps2000" <capntripps2000@...> wrote:
>
> Mark,
>
> Yes, I've used 7/8" aluminum hardline to make that very loop for 40M. I will say it will make a very small resonant magnetic loop. A 10ft length of hardline resonated below 40M around 6.3MHz and I had to trim several inches to get it up on 40M (I forget the actual final length). The tuning cap made by wrapping the wire around one end of the loop works but at QRP levels only. Using anything over 20w seemed to cause a drift in the frequency likely due to heat. By using a short section of RG8 coax as a tuning stub it stabilized the drift and I was able to run 50+ watts into it. At that frequency the loop will be quite inefficient but it will work.
>
> When you say 10m are you referring to 10M or the length? At 10M the loop will be very small. You would be better off using a small feed loop with a 30inch diameter hardline loop. I made a few very nice fixed frequency mag loops with hardline and they are installed in the attic horizontally.
>
> Andrew
> N3LCW
>
>
> --- In loopantennas@yahoogroups.com, "shovell68" <shovell68@> wrote:
> >
> >
> > I looked in the links and didn't see this page posted. Has anyone tried
> > this design for a 10m loop?
> >
> > Link <http://www.antennex.com/hws/ws0902/hardline.html>
> >
> >
> >
> > I have some 7/8" hardline and may give it a try.
> >
> > Mark/AC7AZ
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

7560. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-06 03:50:48 UTC
From: shovell68
Topic: 7542 Message: 7560

One thing I'd like to add regarding my 40m loop. Even though the cap is rated at 5kv, it is tuned at the low end of it's capacatance limit and I have given it 800w with my old Henry 2K which pushes the cap up to about 11kv without issues so far.

--- In loopantennas@yahoogroups.com, "shovell68" <shovell68@...> wrote:
>
> Mine is just a reduction gear for manual tuning, I built the loop optimized for 7.2mHz. You guys that build the motor drives to tune the cap are hardcore. This antenna really started out as just an experiment, but I'm not very active anymore and it is still tuned to my favorite freq and works flawlessly every time I need it even after about 4 years out in the elements.
>
> --- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@> wrote:
> >
> > >
> > > > Thanks for the info. Where did you find the 6:1 drive? Is it a
> > planetary?
> > >
> > > It's a ball drive, I'm pretty sure I got it from Surplus Sales.
> > >
> >
> > I got the gear reduction drive motors for mine from Electronics
> > Goldmine. Here's my writeup for that design, which has photos showing the
> > mechanics:
> >
> > http://www.home.earthlink.net/~christrask/Paper012.html
> >
> >
> > Chris Trask
> > N7ZWY / WDX3HLB
> > Senior Member IEEE
> > http://www.home.earthlink.net/~christrask/
> >
>

7561. 40 Metre Delta Loop on 80 metres Severe RF on audio

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-06 20:29:51 UTC
From: david_oxon
Topic: 7561 Message: 7561

I have a 40 metre full wave delta loop antenna. The apex of the triangle is 11 metres high and the base is 2 metres high. I feed it approx 2 metres from one of the base corners on the upward sloping side of the antenna with 50 ohm coax via a 4:1 balun. My rig is the Yaesu FT-950. The antenna works very well on 40, 20 & 10 metres. However, when I try to use it on 80 metres I get severe RF on my audio. I have tried the following all to no avail:
☐ 6 turns of the coax about 150 mm in diameter close to the balun.

☐ Using a large loading coil in the middle of the base of the antenna with several taps to try to resonate the antenna on 80 metres.

☐ Using my Yaesu FC-301 10 to 160 metre selectable ATU.

Any suggestions please?
Best 73
David
G3SBM

7562. 2 meter big wheel antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-06 23:48:47 UTC
From: Bob
Topic: 7562 Message: 7562

I am wanting to stack (8) 2 meter big wheel antenna. Is it better to stack them in 2 bays of 4 or all 8 of them in a straight line??? The only problem that i have is my tower is on 60ft tall.. 73's KC5YHQ BOB

7563. Re: [loopantennas] 40 Metre Delta Loop on 80 metres Severe RF on audio

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-07 08:52:51 UTC
From: M HOLDEN
Topic: 7561 Message: 7563

Hello David. It is highly unlikely that the 4:1 balun is seeing a suitable impedance on it's output side. Ideally it is looking for 200 ohms to match in the 4:1 ratio. The quick solution could be to break the loop at about 63 feet from the feedpoint and use it with the other section as counterpoise. You would then close the break to resume ops on 40 -10M. The balun is not wanted on 80M.
Mike G4HOL

--- On Sun, 6/6/10, david_oxon <david_oxon@...> wrote:

From: david_oxon <david_oxon@...>
Subject: [loopantennas] 40 Metre Delta Loop on 80 metres Severe RF on audio
To: loopantennas@yahoogroups.com
Date: Sunday, 6 June, 2010, 21:29

I have a 40 metre full wave delta loop antenna. The apex of the triangle is 11 metres high and the base is 2 metres high. I feed it approx 2 metres from one of the base corners on the upward sloping side of the antenna with 50 ohm coax via a 4:1 balun. My rig is the Yaesu FT-950. The antenna works very well on 40, 20 & 10 metres. However, when I try to use it on 80 metres I get severe RF on my audio. I have tried the following all to no avail:

• 6 turns of the coax about 150 mm in diameter close to the balun.

• Using a large loading coil in the middle of the base of the antenna with several taps to try to resonate the antenna on 80 metres.

• Using my Yaesu FC-301 10 to 160 metre selectable ATU.

Any suggestions please?

Best 73

David

G3SBM

[Non-text portions of this message have been removed]

7564. Re: Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-07 09:59:37 UTC
From: VK1OO
Topic: 7542 Message: 7564

H Chris,

I enjoyed your article, Transmitting Loop for 40M Band, and am thinking about changing my loop to reflect your design. I sent you a few questions about your article. The main ones were:

In Figure 1 you show the measured resistance of a 1.5m loop. I'm not sure what you are illustrating. The applicable text says the measured impedance, the Figure says resistance. 12ohms at 11MHz seems very high for the resistance. Is the graph showing magnitude of impedance?
Did you graph the impedance of the lumped element model, if so could you send a copy?
How did you guarantee a loop resistance of 3.125 ohms? Or was near enough good enough?
Your capacitor is a dual 50pF, 800V. What is the relationship between the 50pF and the 250pF or so that would otherwise be required to resonate the loop at 7MHz, ie how did you determine 50pF? Also, how does the required voltage change. ie I need 3-4kV at 100W if I use a traditional approach to resonate the loop. What voltage does the capacitor in your design need to be?

Cheers
Mike, VK1OO

> 1k.
>
>
> Re: 40m magnetic loop
> <http://groups.yahoo.com/group/loopantennas/message/7555;_ylc=X3oDMTJyZW5ydXI1BF9TAzk3MzU5NzE1BGdycElkAzEyODUxOTEwBGdycHNwSWQDMTcwODM5NjM3OQRtc2dJZAM3NTU1BHNlYwNkbXNnBHNsawN2bXNnBHN0aW1lAzEyNzU4MzQzMTE->
>
>
>
> Posted by: "Chris Trask" christrask@...
> <mailto:christrask@...?Subject=%20Re%3A%2040m%20magnetic%20loop>
> chris3trask <http://profiles.yahoo.com/chris3trask>
>
>
> Sat Jun 5, 2010 1:49 pm (PDT)
>
>
>
> > > > Thanks for the info. Where did you find the 6:1 drive? Is it a
> planetary?

> >
> > It's a ball drive, I'm pretty sure I got it from Surplus Sales.
> >
>
> I got the gear reduction drive motors for mine from Electronics
> Goldmine. Here's my writeup for that design, which has photos
> showing the
> mechanics:
>
> http://www.home.earthlink.net/~christrask/Paper012.html
> <http://www.home.earthlink.net/%7Echristrask/Paper012.html>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
> <http://www.home.earthlink.net/%7Echristrask/>
>
> Back to top <#toc>
> Reply to sender
> <mailto:christrask@...?Subject=Re%3A%2040m%20magnetic%20loop>
> | Reply to group
> <mailto:loopantennas@yahoogroups.com?Subject=%20Re%3A%2040m%20magnetic%20loop>
> | Reply via web post
> <http://groups.yahoo.com/group/loopantennas/post;_ylc=X3oDMTJyMTZ2Y3FxBF9TAzk3MzU5NzE1BG
dycElkAzEyODUxOTEwBGdycHNwSWQDMTcwODM5NjM3OQRtc2dJZAM3NTU1BHNlYwNkbXNnBHNsawNycGx5BHN0aW1l
AzEyNzU4MzQzMTE-?act=reply&messageNum=7555>
>
> Messages in this topic
> <http://groups.yahoo.com/group/loopantennas/message/7542;_ylc=X3oDMTM2YTMzcWxhBF9TAzk3Mz
U5NzE1BGdycElkAzEyODUxOTEwBGdycHNwSWQDMTcwODM5NjM3OQRtc2dJZAM3NTU1BHNlYwNkbXNnBHNsawN2dHBj
BHN0aW1lAzEyNzU4MzQzMTEEdHBjSWQDNzU0Mg-->
> (13)
>
>

[Non-text portions of this message have been removed]

7565. Re: [loopantennas] Re: Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-07 14:02:13 UTC
From: Chris Trask
Topic: 7542 Message: 7565

>
> I enjoyed your article, Transmitting Loop for 40M Band, and am thinking
> about changing my loop to reflect your design. I sent you a few
> questions about your article. The main ones were:
>
> In Figure 1 you show the measured resistance of a 1.5m loop. I'm not
> sure what you are illustrating. The applicable text says the measured
> impedance, the Figure says resistance. 12ohms at 11MHz seems very high
> for the resistance. Is the graph showing magnitude of impedance?
>

The chart is showing resistance, the real part of the impedance. The 12 ohms at 11MHz is not at all unrealistic as you're approaching the first parallel resonance of the loop.

>
> Did you graph the impedance of the lumped element model, if so could you
> send a copy?
>

I may have, but I have no idea where it is at the moment. That was from another project where I was trying to wideband match a similar loop. That turned into a dead end.

>
> How did you guarantee a loop resistance of 3.125 ohms? Or was near
> enough good enough?
>

Using the same diameter of flexible copper tubing it becomes repeatable.

>
> Your capacitor is a dual 50pF, 800V. What is the relationship between
> the 50pF and the 250pF or so that would otherwise be required to
> resonate the loop at 7MHz, ie how did you determine 50pF? Also, how does
> the required voltage change. ie I need 3-4kV at 100W if I use a
> traditional approach to resonate the loop. What voltage does the
> capacitor in your design need to be?
>

It only needs to be a few hundred volts as it is at a lower voltage and higher current point in the network in relation to the 50-ohm feedline. In this case, the variable capacitors will see a voltage a quarter that of the feedline voltage. The 50pF was derived by first using a dual 365-pf and measuring the capacitance needed to cover the desired bandwidth. Then I rummaged around in my stock and came up with a pair of higher voltage dual variables. The 50pF dual combined with the padding capacitor suited my

desired goal.

The need for the excessive voltage for the capacitor in the traditional approach is that it is placed at the point of the loop where the voltage gradient is highest. The lowest voltage gradient is at the feedpoint, but a dual variable for that approach would present mechanical difficulties. My design started from that point and then I moved the capacitor(s) further away from the feedpoint until it looked practical. Then it came down to how to design the tansformers to minimize the losses.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

7566. Re: 2 meter big wheel antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-07 15:41:30 UTC
From: BriggsL
Topic: 7562 Message: 7566

Bob, you pose an interesting question especially at VHF where this sort of thing is usually done with beams. I suppose I should ask what exactly is your objective with such an array. Have you modeled this in any way?? I wonder if three bays of two vertically stacked Big Wheels (off each side of your tower) wouldn't be more manageable and just as good though that would mean 6 and not 8 antennas. I really need to know your overall objective that call for eight antennas.

Briggs, ab2nj Gloucester, Ma. FN42pp

7567. Re: [loopantennas] Re: 2 meter big wheel antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-07 16:47:08 UTC
From: richard
Topic: 7562 Message: 7567

```
On Mon, 07 Jun 2010 15:41:30 -0000
"BriggsL" <bruggo@...> wrote:

> Bob, you pose an interesting question especially at VHF where this sort of
> thing is usually done with beams. I suppose I should ask what exactly is
> your objective with such an array. Have you modeled this in any way?? I
> wonder if three bays of two vertically stacked Big Wheels (off each side of
> your tower) wouldn't be more manageable and just as good though that would
> mean 6 and not 8 antennas. I really need to know your overall objective that
> call for eight antennas.
>
> Briggs, ab2nj Gloucester, Ma. FN42pp
>
Hi
Yes this is a strange thing to do on 2mtrs, especially now with all the crap
and QRM. You will be at a big disadvantage with an omni directional antenna,
unless you are going to use it for a beacon.
A 60' tower deserves a decent size antenna, something like a box of four
boomers. QRM is such a problem that I'm reducing my array slightly so that I
can bay all the antennas with a clean pattern.
Just my thoughts

--
Best wishes

Richard Bown G8JVM

##########################################################################################
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
GHz
##########################################################################################
```

7568. Re: [loopantennas] Re: Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-07 19:56:53 UTC
From: Chris Trask
Topic: 7542 Message: 7568

>
> You've convinced me. Albeit, I'm not sure what you mean by the first
> parallel resonance of the loop.
>

Loop antennas can be characterized as a shorted length of parallel-wire transmission line. The terminal impedance looks like an open when the equivalent length is a quarter wavelength long (first parallel resonance) and as a short when it is a half wavelength long (first anti-resonance). This then repeats itself for every odd-integral (parallel resonance) and even-integral (anti-resonance) quarter-wave interval.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7569. Re: 40 Metre Delta Loop on 80 metres Severe RF on audio

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-07 19:58:35 UTC
From: david_oxon
Topic: 7561 Message: 7569

Hi Mike, and thank you very much for your very quick response to my plea for help including your comments and suggestion. I will give it a try. Just a thought, I also have a 1:1 balun in my junk box. would this be worth trying for 80 metres albeit the antenna might not be ok on 40 metres then. I guess it would be looking for 50 ohms which is closer to the normal 100 ohms associated with a delta loop antenna--I think. Sorry my antenna theory is not brilliant.

73

David
G3SBM

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> Hello David. It is highly unlikely that the 4:1 balun is seeing a suitable impedance on it's output side. Ideally it is looking for 200 ohms to match in the 4:1 ratio. The quick solution could be to break the loop at about 63 feet from the feedpointÂ and use it with the other section as counterpoise. You would then close the break to resume ops on 40 -10M. The balun is not wanted on 80M.
> Mike G4HOL
>
> --- On Sun, 6/6/10, david_oxon <david_oxon@...> wrote:
>
> From: david_oxon <david_oxon@...>
> Subject: [loopantennas] 40 Metre Delta Loop on 80 metres Severe RF on audio
> To: loopantennas@yahoogroups.com
> Date: Sunday, 6 June, 2010, 21:29
>
>
>
>
>
>
>
> Â
>
>
>
>
>
>
>
>
>
> I have a 40 metre full wave delta loop antenna. The apex of the triangle is 11 metres high and the base is 2 metres high. I feed it approx 2 metres from one of the base corners on the upward sloping side of the antenna with 50 ohm

coax via a 4:1 balun. My rig is the Yaesu FT-950. The antenna works very well on 40, 20 & 10 metres. However, when I try to use it on 80 metres I get severe RF on my audio. I have tried the following all to no avail:
>
> â□¢ 6 turns of the coax about 150 mm in diameter close to the balun.
>
>
>
> â□¢ Using a large loading coil in the middle of the base of the antenna with several taps to try to resonate the antenna on 80 metres.
>
>
>
> â□¢ Using my Yaesu FC-301 10 to 160 metre selectable ATU.
>
>
>
> Any suggestions please?
>
> Best 73
>
> David
>
> G3SBM
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7570. Wideband Active Small Magnetic Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-08 09:00:12 UTC
From: dx11@xs4all.nl
Topic: 7570 Message: 7570

I received following message in soft_radio@yahoogroups.com . I like to share it with the members of this group.

Regards,

Cor Beijersbergen

Hello to everybody,

An article about "Wideband Active Small Magnetic Loop Antenna" (design, experiments and some theory) can be found there:

http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm

It might be interesting to SDR users.

73 Chavdar LZ1AQ

[Non-text portions of this message have been removed]

7571. Wideband Active Small Magnetic Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-08 08:12:01 UTC
From: lz1aq
Topic: 7570 Message: 7571

Hello to everybody,

An article about "Wideband Active Small Magnetic Loop Antenna"
(design, experiments and some theory) can be found there:

http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.\
htm
<http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna\
.htm>

It might be interesting to SDR users.

73 Chavdar LZ1AQ

http://www.lz1aq.signacor.com <http://www.lz1aq.signacor.com/>
Please email me at: lz1aq@ abv.bg <mailto:lz1aq@...>

This message has been send to following forums:

http://groups.yahoo.com/group/softrock40
<http://groups.yahoo.com/group/softrock40>

http://groups.yahoo.com/group/soft_radio/
<http://groups.yahoo.com/group/soft_radio/>

http://groups.yahoo.com/group/perseus_sdr/
<http://groups.yahoo.com/group/perseus_sdr/>
http://groups.yahoo.com/group/loopantennas/
<http://groups.yahoo.com/group/loopantennas/messages>

[Non-text portions of this message have been removed]

7572. Re: [loopantennas] Wideband Active Small Magnetic Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-08 13:21:15 UTC
From: Chris Trask
Topic: 7570 Message: 7572

>
> I received following message in soft_radio@yahoogroups.com . I like
> to share it with the members of this group.
>
>Regards,
>
>Cor Beijersbergen
>
>Hello to everybody,
>
>An article about "Wideband Active Small Magnetic Loop Antenna" (design,
>experiments and some theory) can be found there:
>
>http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
>
>It might be interesting to SDR users.
>
>73 Chavdar LZ1AQ
>

That's an interesting amplifier design, yet another example of what you can do with commonly available, inexpensive devices like the 2N/P2222. I would have done the biasing arrangement(s) quite differently so as to reduce the component count and improve the temperature stability.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7573. RE: [loopantennas] Wideband Active Small Magnetic Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-08 13:54:50 UTC
From: dx11
Topic: 7570 Message: 7573

Hello Chris,
I did expect you to respond to my posting. What is your opinion on the general qualities of this design? Apart from the improvement you mention, do you consider this design to be worth building by the average shortwave listener?

>>> That's an interesting amplifier design, yet another example of what you can do with commonly available, inexpensive devices like the 2N/P2222. I would have done the biasing arrangement(s) quite differently so as to reduce the component count and improve the temperature stability.<<<

Regards,

Cor Beijersbergen

7574. RE: [loopantennas] Wideband Active Small Magnetic Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-08 14:26:13 UTC
From: Chris Trask
Topic: 7570 Message: 7574

>
> > That's an interesting amplifier design, yet another example
> > of what you can do with commonly available, inexpensive devices
> > like the 2N/P2222. I would have done the biasing arrangement(s)
> > quite differently so as to reduce the component count and improve
> > the temperature stability.<<<
>
>
> Hello Chris,
> I did expect you to respond to my posting. What is your opinion on
> the general qualities of this design? Apart from the improvement
> you mention, do you consider this design to be worth building by
> the average shortwave listener?
>

Yes, very much so. I like the balanced common-base input stage as it is a more suitable termination impedance for the loop rather than the more typical high-impedance input, and the use of readily available parts is a very big plus. Designers who use scarce parts, and especially obsolete devices, can only discourage those with moderate building interest.

At the same time, I might add a centre-tapped inductor in the collectors of the input stage so as to normalize the signal gain over the desired bandwidth and retain the signal balance. I've tried using active negative inductors to cancel the loop inductance, but so far have had no success with that approach due to instabilities with common NIC circuitry.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7575. Re: 40m magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-08 15:05:14 UTC
From: VK1OO
Topic: 7542 Message: 7575

Chris,

Thanks for helping my understanding.

Mike
VK1OO

7576. Question about a 50 cm loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-09 14:57:55 UTC
From: Horacio
Topic: 7576 Message: 7576

A radio friend -me too - owns a Kenwood R600. He has finished building a loop 50 cm with 12 turns.

I am asking to this group which is the impedance of this antenna and how to connect it to the receiver and where to connect it (to the 500 ohm input or the 50 ohm?.) To use twin wire or a flat ribbon TV (300 ohm) piece of cable?

73

Horacio Nigro
Uruguay

7577. Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-09 15:30:52 UTC
From: Bill
Topic: 7577 Message: 7577

I have been considering a Wellbrook 1530+ for quite some time. Now I see an American made 38" loop called the Pixel RF Pro-1. Has anyone heard of this antenna? Have any of you tried it?

http://www.pixelsatradio.com/

Thanks,

Bill

7578. Re: [loopantennas] Wideband Active Small Magnetic Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-09 19:05:02 UTC
From: Chris Trask
Topic: 7570 Message: 7578

>
> >
> > > That's an interesting amplifier design, yet another example
> > > of what you can do with commonly available, inexpensive devices
> > > like the 2N/P2222. I would have done the biasing arrangement(s)
> > > quite differently so as to reduce the component count and improve
> > > the temperature stability.<<<
> >
> >
> > Hello Chris,
> > I did expect you to respond to my posting. What is your opinion on
> > the general qualities of this design? Apart from the improvement
> > you mention, do you consider this design to be worth building by
> > the average shortwave listener?
> >
>
> Yes, very much so. I like the balanced common-base input stage as it
> is a more suitable termination impedance for the loop rather than the more
> typical high-impedance input, and the use of readily available parts is a
> very big plus. Designers who use scarce parts, and especially obsolete
> devices, can only discourage those with moderate building interest.
>
> At the same time, I might add a centre-tapped inductor in the
collectors
> of the input stage so as to normalize the signal gain over the desired
> bandwidth and retain the signal balance. I've tried using active negative
> inductors to cancel the loop inductance, but so far have had no success
with
> that approach due to instabilities with common NIC circuitry.
>

Now that I've had the opportunity to look at this design in detail, I
can see that by looking at the loop antenna as a current source rather than
a voltage source there is a very credible wideband solution available that
will retain the radiation pattern characteristics, especially the null,
without the need for wideband matching circuitry. With that in mind, I've
initiated the design of an amplifier of my own similar in concept to that of
LZ1AQ but which includes a number of performance enhancements.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7579. Re: Question about a 50 cm loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-10 23:30:32 UTC
From: tenorman1952
Topic: 7576 Message: 7579

--- In loopantennas@yahoogroups.com, "Horacio" <hanigrodx@...> wrote:
>
> A radio friend -me too - owns a Kenwood R600. He has finished building a loop 50 cm with 12 turns.
>
> I am asking to this group which is the impedance of this antenna and how to connect it to the receiver and where to connect it (to the 500 ohm input or the 50 ohm?.) To use twin wire or a flat ribbon TV (300 ohm) piece of cable?
>
> 73
>
> Horacio Nigro
> Uruguay
>

Horacio, see how the "pickup loop" is attached to this antenna:

http://www.mtmscientific.com/loop.html

http://www.mtmscientific.com/pickup.html

I have attached it with 300 ohm TV twinlead, with twisted pair of wires, and with small diameter audio coax cable. It works well in all cases.

This is my loop, and there is one turn of wire forming the "pickup loop" just inside of the main loop. The wire goes through small holes drilled, and lead to the binding posts on the rear leg of the X in that photo.

http://www.mtmscientific.com/amcust.html

73
Paul - AE5JU

7580. Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-11 02:11:15 UTC
From: Jonny Boy
Topic: 7577 Message: 7580

Well it's high time somebody did this, glad to see it. I have a Wellbrook loop, am not entirely pleased. All of these loop snake-oil hustlers always hype the figure-8 pattern and the nulls. Excuse me, if you don't have the loop on a rotator, what good are these nulls? Speaking from personal experience, mind you. And if you add a rotator, congratulations, now you've blown $500-$600 on a single lousy little antenna. You could have bought TWO active whips and put them on a phaser for less money. This is exactly what I intend to do next time, already have the phaser. This arrangement delivers 360 degrees of uniform coverage with a single HUGE sweepable null to play with, nice simple exterior setup (no rotors or rotor cable), maximum stealth... This is the smarter way to burn up 600 smackers for nulling and active antennas, I'm pretty sure.

That said, these Pixel antennas are different from Wellbrooks in some promising ways. I like that the amp and loop are separable so you can filter the amp input if you want. I would opt for the Pixel product for this reason alone (if somebody held a gun to my head and said I had to pick one or the other). As for the whole "Moebius" thing (see http://www.ece.unm.edu/summa/notes/SSN/note7.pdf) it's certainly intriguing. It means that this is a SHIELDED loop (sort of) which I understand do work better, i.e. somewhat less gain but more developed nulls. This "moebius" geometry is in a class all its own, like a hybrid of shielded and two-turn designs.

note: Pixel's own copy does NOT state or otherwise document that their product actually uses shielded construction. They just try to hypnotize me by repeating the word "moebius" over and over. They state "the RF PRO-1 Moebius Loop Antenna consists of a rigid light-weight ¾" diameter anodized aluminum 1 meter loop..." That is all. No mention of any internal, shielded conductive elements inside the tubing. No pictures of any such thing. Building their antennas this way would complicate construction, i.e. would make them more expensive. In other words, I need to SEE that they're actually doing this, and HOW they're doing it, before I'll believe it or put any stock in it. Does it even matter? Yeah sure it's "neat-o" and all but does it actually matter? I HATE marketing. The worst thing about hell is that all the marketers will be there.

--- In loopantennas@yahoogroups.com, "Bill" <willscarlett@...> wrote:
>
> I have been considering a Wellbrook 1530+ for quite some time. Now I see an American made 38" loop called the Pixel RF Pro-1. Has anyone heard of this antenna? Have any of you tried it?
>
> http://www.pixelsatradio.com/
>
> Thanks,
>
> Bill
>

7581. Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-11 15:06:40 UTC
From: james
Topic: 7577 Message: 7581

yup, thats how i feel, 299 bucks for a three foot diameter loop? no way would i blow that kind of cabbage on an antenna, i would sooner go to the hardware store and buy a 500 foot roll of #12 stranded copper wire (about 50 bucks) and make my own loop strung up in the trees, Disclaimer: you dont have to use all 500 feet, make it using a formula (i think 1005 divided by the desired frequency for a full wave loop)

or...

if you want to use copper pipe or tubing that would work fine too, slightly more expensive than wire but pipe is rigid and can be configured in a more self supporting antenna.

i know some CBers that made half wave dipoles out of 3/4 inch diameter thin walled galvanized electrical conduit, they last about 5 years before the galvanized gives in to weathering and starts to rust.

even cheaper than copper wire is that aluminum electric fence wire found in any farm & ranch/feed store, you can get a 1 mile long roll for about 25 bucks.

7582. I'm a Ham!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-11 16:24:52 UTC
From: Steve Greenfield
Topic: 7582 Message: 7582

No, not that kind... well, OK, I'm that kind of a ham, too.

Tuesday I took my Technician Class license test. They kept handing me tests, so I kept taking them.

So I'm now an Extra Class Amateur Radio operator! Everyone there shook my hand.

Steve Greenfield
Electronic Engineering Technician AT
Electronic Technician 20+ years
CET Computers and Consumer Electronics
IPC-A-610D CIS Specialist
http://www.linkedin.com/in/stevenjgreenfield

7583. Re: [loopantennas] I'm a Ham!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-11 17:53:37 UTC
From: Horacio Nigro
Topic: 7582 Message: 7583

congrats OM! but where is ur call?

73

Horacio A. Nigro
Montevideo
Uruguay

De: Steve Greenfield <alienrelics@...>
Para: Loop Antennas Mailing List <loopantennas@yahoogroups.com>
Enviado: vie,11 junio, 2010 13:24
Asunto: [loopantennas] I'm a Ham!

No, not that kind... well, OK, I'm that kind of a ham, too.

Tuesday I took my Technician Class license test. They kept handing me tests, so I kept taking them.

So I'm now an Extra Class Amateur Radio operator! Everyone there shook my hand.

Steve Greenfield
Electronic Engineering Technician AT
Electronic Technician 20+ years
CET Computers and Consumer Electronics
IPC-A-610D CIS Specialist
http://www.linkedin.com/in/stevenjgreenfield

[Non-text portions of this message have been removed]

7584. Re: I'm a Ham!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-11 21:25:13 UTC
From: alienrelics
Topic: 7582 Message: 7584

It isn't in the FCC database yet.... Wah!

Steve Greenfield

--- In loopantennas@yahoogroups.com, Horacio Nigro <hanigrodx@...> wrote:
>
> congrats OM! but where is ur call?
>
> 73
>
>
> Horacio A. Nigro
> Montevideo
> Uruguay
>
>
>
>
>
>
>
>
>
>
>
> _____
> De: Steve Greenfield <alienrelics@...>
> Para: Loop Antennas Mailing List <loopantennas@yahoogroups.com>
> Enviado: vie,11 junio, 2010 13:24
> Asunto: [loopantennas] I'm a Ham!
>
>
> No, not that kind... well, OK, I'm that kind of a ham, too.
>
> Tuesday I took my Technician Class license test. They kept handing me tests, so I kept taking them.
>
> So I'm now an Extra Class Amateur Radio operator! Everyone there shook my hand.
>
> Steve Greenfield
> Electronic Engineering Technician AT
> Electronic Technician 20+ years
> CET Computers and Consumer Electronics
> IPC-A-610D CIS Specialist
> http://www.linkedin.com/in/stevenjgreenfield

>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7585. Hello , new here

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-11 04:27:12 UTC
From: HooNz
Topic: 7585 Message: 7585

Hi Group , Paul is the name , in Australia , i have been studying loop's for a month or so , i am also into Sw listening.

Made up a simple one a few day's ago out of a leftover piece of 21mm 8ft length(total-33"dia) house plastic water-pipe 4 turns inside with a 110pf fixed capacitor with a 10-60pf variable in parallel and a 1 turn pickup on the inside edge with 1 leg to shield and the other a 1000pf tap off , and trying it out , it's at fixed frequency of 1701khz .

I have just grabbed hold of some things to read in the files section .

Good to have a group , for Loop's.

Cheer's , Paul.

7586. Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 03:17:12 UTC
From: Dean Wayman
Topic: 7577 Message: 7586

--- In loopantennas@yahoogroups.com, "Jonny Boy" <ny911truth@...> wrote:
>
And if you add a rotator, congratulations, now you've blown $500-$600 on a single lousy little antenna. You could have bought TWO active whips and put them on a phaser for less money.
>
I think it's been a while since you looked at antenna prices? that set-up from the engineering place will cost about 1500 smackers $$

As for the whole "Moebius" thing (see http://www.ece.unm.edu/summa/notes/SSN/note7.pdf) it's certainly intriguing. It means that this is a SHIELDED loop (sort of) which I understand do work better, i.e. somewhat less gain but more developed nulls. This "moebius" geometry is in a class all its own, like a hybrid of shielded and two-turn designs.
>
I dunno but i suspect it's hype ,,a name that sounds cool?

Anyway i would like to hear from anyone who has the Pixel loop? I am almost ready to pull the trigger and get the wellbrook ,but i think i like the pixel one better.

I dont have trees ,or room for 500 feet of wire ,no place to string any length up so the loop looks like a good idea .

Dean_0

7587. Re: [loopantennas] Hello , new here

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 07:38:19 UTC
From: marc
Topic: 7585 Message: 7587

HooNz schreef:
>
>
> Hi Group , Paul is the name , in Australia , i have been studying loop's
> for a month or so , i am also into Sw listening.
>
> Made up a simple one a few day's ago out of a leftover piece of 21mm 8ft
> length(total-33"dia) house plastic water-pipe 4 turns inside with a
> 110pf fixed capacitor with a 10-60pf variable in parallel and a 1 turn
> pickup on the inside edge with 1 leg to shield and the other a 1000pf
> tap off , and trying it out , it's at fixed frequency of 1701khz .
>
> I have just grabbed hold of some things to read in the files section .
>
> Good to have a group , for Loop's.
>
> Cheer's , Paul.

Hello,

You have a collegue there:

http://www.amradioantennas.com/

Makes Am and SW loops....

Marc

--
What's on Shortwave guide: choose an hour, go!
http://shortwave.tk
700+ Radio Stations on SW http://swstations.tk
300+ languages on SW http://radiolanguages.tk

7588. Re: I'm a Ham!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 16:37:21 UTC
From: tenorman1952
Topic: 7582 Message: 7588

And a very heartfelt CONGRATULATIONS!!!

73
Paul C.
AE5JU

--- In loopantennas@yahoogroups.com, Steve Greenfield <alienrelics@...> wrote:
>
> No, not that kind... well, OK, I'm that kind of a ham, too.
>
> Tuesday I took my Technician Class license test. They kept handing me tests, so I kept taking them.
>
> So I'm now an Extra Class Amateur Radio operator! Everyone there shook my hand.
>
> Steve Greenfield
> Electronic Engineering Technician AT
> Electronic Technician 20+ years
> CET Computers and Consumer Electronics
> IPC-A-610D CIS Specialist
> http://www.linkedin.com/in/stevenjgreenfield
>

7589. Re: I'm a Ham!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 17:18:51 UTC
From: tenorman1952
Topic: 7582 Message: 7589

In the USA, just as soon as a new ham is listed in the Federal Communications Commission (FCC) database he may operate on the air.

A new ham needs only the NVEC form in his possession showing he passed, and then he can operate using the call sign listed for his name in the FCC database.

The new ham should go here and register:

http://wireless.fcc.gov/uls/index.htm?job=home

There the ham obtains a "FRN" or Federal Registration Number.

Once he has the FRN he can log in and search for his name, find his new call sign, and operate.

73
Paul C. - AE5JU

7590. Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 18:11:21 UTC
From: Jonny Boy
Topic: 7577 Message: 7590

Dean said:
> I think it's been a while since you looked at antenna prices? that > set-up from the engineering place will cost about 1500 smackers $$

I guess you must mean DX Engineering's AAPS-1P Electronically Rotatable Receive Antenna System, which they offer as a package for, uh, 1200 smackers minus a nickel.
http://www.dxengineering.com/Parts.asp?ID=2474&PLID=215&SecID=114&DeptID=12&PartNo=DXE-AAPS-1P
I'm sure this array is fantastic□ the phaser is probably the nicest ever made□ but that's not what I meant. In fact the ARAV2 active whips that go into this system are a lousy value, in my opinion (too expensive, limited bandwidth).

The system I have in mind is two LF Engineering H-900 Gain Probes (bandwidth 10 KHz - 60 MHz; 189 smackers apiece)
http://www.grove-ent.com/h900.html
combined with Timewave's ANC-4 phaser (199 smackers)
http://www.eham.net/reviews/detail/1138
which, while not equal to DX Engineering's NCC-1 (600 smackers all by itself), is both adequate and built like a tank.

Now, I may not have "looked at antenna prices lately" and all, but even a mouth-breathing jackass like me can see that these parts come in at less than 600 smackers total.

"Anyway i would like to hear from anyone who has the Pixel loop?"
Actually, what you really seem to want is people who have purchased BOTH Wellbrooks AND Pixels. I mean, who else is "fully qualified" to give you meaningful advice? I've owned one of the two, and here's my sage hard-won advice: forget about the loopster's marketing mumbo-jumbo; untuned active loops as a class are not what they're cracked up to be. That is, there are better more cost-effective ways to actually experience the benefits the loop manufacturers only pretend they're selling you.

TUNED loops are a different matter, but to get a manufactured one now you're really talking crazy money. For most hobbyists, the sensible place of loop technology is among hardcore geeks who love to build their own stuff and experiment. The further you stray from this, the more you're being a buck-toothed dork in Times Square buying the Brooklyn Bridge. This is bitter experience speaking. Screw me once, shame on you; screw me TWICE, shame on ME...

The one possibility I still find tantalizing for Wellbrook-type loops is building a "loop-sense cardioid array" (LSCA) by combining an ALA1530-plus with an LF Engineering H-900. The LSCA radiation pattern is MUCH more useful / discriminative than that of a simple loop. In fact, if Pixel is really serious about offering the world a better loop, they should look into building an LSCA *package*. The PRO-1 would make a perfectly good foundation. No physical separation is needed between the loop and whip, so the e-probe vertical could be integrated into the vertical support they're already using. The resulting whip-loop array would be practically identical to the PRO-1 and should achieve yagi-like performance in a physically sturdier package. Such a "loop" would actually be worthy of all the hype.

--- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "Jonny Boy" <ny911truth@> wrote:
> >
> And if you add a rotator, congratulations, now you've blown $500-$600 on a single lousy little antenna. You could have bought TWO active whips and put them on a phaser for less money.
> >
> I think it's been a while since you looked at antenna prices? that set-up from the engineering place will cost about 1500 smackers $$
>
> As for the whole "Moebius" thing (see http://www.ece.unm.edu/summa/notes/SSN/note7.pdf) it's certainly intriguing. It means that this is a SHIELDED loop (sort of) which I understand do work better, i.e. somewhat less gain but more developed nulls. This "moebius" geometry is in a class all its own, like a hybrid of shielded and two-turn designs.
> >
> I dunno but i suspect it's hype ,,a name that sounds cool?
>
> Anyway i would like to hear from anyone who has the Pixel loop? I am almost ready to pull the trigger and get the wellbrook ,but i think i like the pixel one better.
>
> I dont have trees ,or room for 500 feet of wire ,no place to string any length up so the loop looks like a good idea .
>
> Dean_0
>

7591. Re: [loopantennas] Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 18:34:06 UTC
From: richard
Topic: 7577 Message: 7591

On Sat, 12 Jun 2010 18:11:21 -0000
"Jonny Boy" <ny911truth@...> wrote:

> Dean said:
> > I think it's been a while since you looked at antenna prices? that > set-up
> > from the engineering place will cost about 1500 smackers $$
>
> I guess you must mean DX Engineering's AAPS-1P Electronically Rotatable
> Receive Antenna System, which they offer as a package for, uh, 1200 smackers
> minus a nickel.
> http://www.dxengineering.com/Parts.asp?ID=2474&PLID=215&SecID=114&DeptID=12&PartNo=DXE-AAPS-1P
> I'm sure this array is fantastic— the phaser is probably the nicest ever
> made— but that's not what I meant. In fact the ARAV2 active whips that go
> into this system are a lousy value, in my opinion (too expensive, limited
> bandwidth).
>
> The system I have in mind is two LF Engineering H-900 Gain Probes (bandwidth
> 10 KHz - 60 MHz; 189 smackers apiece) http://www.grove-ent.com/h900.html
> combined with Timewave's ANC-4 phaser (199 smackers)
> http://www.eham.net/reviews/detail/1138
> which, while not equal to DX Engineering's NCC-1 (600 smackers all by
> itself), is both adequate and built like a tank.
>
> Now, I may not have "looked at antenna prices lately" and all, but even a
> mouth-breathing jackass like me can see that these parts come in at less than
> 600 smackers total.
>
> "Anyway i would like to hear from anyone who has the Pixel loop?"
> Actually, what you really seem to want is people who have purchased BOTH
> Wellbrooks AND Pixels. I mean, who else is "fully qualified" to give you
> meaningful advice? I've owned one of the two, and here's my sage hard-won
> advice: forget about the loopster's marketing mumbo-jumbo; untuned active
> loops as a class are not what they're cracked up to be. That is, there are
> better more cost-effective ways to actually experience the benefits the loop
> manufacturers only pretend they're selling you.
>
> TUNED loops are a different matter, but to get a manufactured one now you're
> really talking crazy money. For most hobbyists, the sensible place of loop
> technology is among hardcore geeks who love to build their own stuff and
> experiment. The further you stray from this, the more you're being a
> buck-toothed dork in Times Square buying the Brooklyn Bridge. This is bitter
> experience speaking. Screw me once, shame on you; screw me TWICE, shame on
> ME...
>

> The one possibility I still find tantalizing for Wellbrook-type loops is
> building a "loop-sense cardioid array" (LSCA) by combining an ALA1530-plus
> with an LF Engineering H-900. The LSCA radiation pattern is MUCH more
> useful / discriminative than that of a simple loop. In fact, if Pixel is
> really serious about offering the world a better loop, they should look into
> building an LSCA *package*. The PRO-1 would make a perfectly good foundation.
> No physical separation is needed between the loop and whip, so the e-probe
> vertical could be integrated into the vertical support they're already using.
> The resulting whip-loop array would be practically identical to the PRO-1 and
> should achieve yagi-like performance in a physically sturdier package. Such a
> "loop" would actually be worthy of all the hype.
>
> --- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@...> wrote:
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "Jonny Boy" <ny911truth@> wrote:
> > >
> > And if you add a rotator, congratulations, now you've blown $500-$600 on a
> > single lousy little antenna. You could have bought TWO active whips and put
> > them on a phaser for less money.
> > >
> > I think it's been a while since you looked at antenna prices? that set-up
> > from the engineering place will cost about 1500 smackers $$
> > As for the whole "Moebius" thing (see
> > http://www.ece.unm.edu/summa/notes/SSN/note7.pdf) it's certainly
> > intriguing. It means that this is a SHIELDED loop (sort of) which I
> > understand do work better, i.e. somewhat less gain but more developed
> > nulls. This "moebius" geometry is in a class all its own, like a hybrid of
> > shielded and two-turn designs.
> > >
> > I dunno but i suspect it's hype ,,a name that sounds cool?
> >
> > Anyway i would like to hear from anyone who has the Pixel loop? I am
> > almost ready to pull the trigger and get the wellbrook ,but i think i like
> > the pixel one better.
> >
> > I dont have trees ,or room for 500 feet of wire ,no place to string any
> > length up so the loop looks like a good idea .
> >
> > Dean_0
> >
>
>
Hi
why not try a steerable array, using phasor software.

Instead of verticals in a square pattern, use 4 loops.
Google on Phasor and you should find details of Victors software.
You would need a sound card with a minimum of 8 inputs , and 4 softrock lite

Rx's , one for each antenna, now I know that the software will cope with a concentric antenna pattern using another 4 antennas inside the 4 , but that requires more softrock lites and a second sound card.
It works well, as I've helped a Ham in the UK get it all running.
It is not a project for a novice with little knowledge of electronics.
But I t would give you a steerable array, and I can't see any reason why you cant replace a large vertical with a loop. The radiation pattern needs to be as oval as possible, so close to the ground

Phasor is not a project to jump into without giving it a lot thought.

HTH
--
Best wishes

Richard Bown G8JVM

##
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
##

7592. Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 19:06:06 UTC
From: Jonny Boy
Topic: 7577 Message: 7592

--- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:

> Instead of verticals in a square pattern, use 4 loops.
> Google on Phasor and you should find details of Victors software.
> You would need a sound card with a minimum of 8 inputs , and 4 softrock lite
> Rx's , one for each antenna, now I know that the software will cope with a
> concentric antenna pattern using another 4 antennas inside the 4 , but that
> requires more softrock lites and a second sound card.
> It works well, as I've helped a Ham in the UK get it all running.
> It is not a project for a novice with little knowledge of electronics.
> But I t would give you a steerable array, and I can't see any reason why you
> cant replace a large vertical with a loop. The radiation pattern needs to be as
> oval as possible, so close to the ground
>
> Phasor is not a project to jump into without giving it a lot thought.
>
> HTH
> --
> Best wishes
>
> Richard Bown G8JVM

And this is for buck-toothed dorks in Times Square buying the Brooklyn Bridge who think they're Guglielmo Marconi.

7593. Re: I'm a Ham!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 19:55:16 UTC
From: airchecklover
Topic: 7582 Message: 7593

Hey Steve - Congrats to you!!!

-Mark (x-WB9AQI, perhaps to re-license one day)

++++++++++++++++++++++++

--- In loopantennas@yahoogroups.com, Steve Greenfield <alienrelics@...> wrote:
>
> No, not that kind... well, OK, I'm that kind of a ham, too.
>
> Tuesday I took my Technician Class license test. They kept handing me tests, so I kept taking them.
>
> So I'm now an Extra Class Amateur Radio operator! Everyone there shook my hand.
>
> Steve Greenfield
> Electronic Engineering Technician AT
> Electronic Technician 20+ years
> CET Computers and Consumer Electronics
> IPC-A-610D CIS Specialist
> http://www.linkedin.com/in/stevenjgreenfield
>

7594. Re: [loopantennas] Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-12 22:37:22 UTC
From: richard
Topic: 7577 Message: 7594

```
On Sat, 12 Jun 2010 19:06:06 -0000
"Jonny Boy" <ny911truth@...> wrote:

> --- In loopantennas@yahoogroups.com, richard <richard.bown@...> wrote:
>
> > Instead of verticals in a square pattern, use 4 loops.
> > Google on Phasor and you should find details of Victors software.
> > You would need a sound card with a minimum of 8 inputs , and 4 softrock lite
> > Rx's , one for each antenna, now I know that the software will cope with a
> > concentric antenna pattern using another 4 antennas inside the 4 , but that
> > requires more softrock lites and a second sound card.
> > It works well, as I've helped a Ham in the UK get it all running.
> > It is not a project for a novice with little knowledge of electronics.
> > But I t would give you a steerable array, and I can't see any reason why you
> > cant replace a large vertical with a loop. The radiation pattern needs to
> > be as oval as possible, so close to the ground
> >
> > Phasor is not a project to jump into without giving it a lot thought.
> >
> > HTH
> > --
> > Best wishes
> >
> > Richard Bown G8JVM
>
> And this is for buck-toothed dorks in Times Square buying the Brooklyn Bridge
> who think they're Guglielmo Marconi.
>
Webster has a lot to answer for !, it obviously would require an IQ 100 times
greater than yours to understand the software, written by someone your side of
the pond and a few hundred miles to the north, BTW north is the direction the
sun doesn't shine from.

--
Best wishes

Richard Bown G8JVM

##########################################################################################
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
GHz
##########################################################################################
```

7595. Re: Feeding A Magnetic TX Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-13 04:00:19 UTC
From: Irv F
Topic: 7489 Message: 7595

Ah Yes -- now I recall the capacitive tuning/matching
network using two caps, one a dual section. That's what
MFJ uses in their loop tuners. I may just
build one up someday. I run an FT-817ND and always was
an advocate of low power. It sure simplifies capacitor
procurement ;-)

As a result of recent illness I have given up my house
which was ham heaven and moved into an assisted living
residence where towers and wires are out of the question,
but a loop will provide a very satisfactory antenna.
I've got most of the materials ready and just need spring
to arrive -- it's late this year in Calgary!

Irv VE6BP

--- In loopantennas@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 01:41 AM 6/3/2010 +0000, you wrote:
> >
> >
> >
> >
> >--- In
> ><mailto:loopantennas%40yahoogroups.com>loopantennas@yahoogroups.com,
> >toddroberts2001@ wrote:
> > >
> > > Hi All,
> > > I am wondering if anyone has tried locating the feed loop
> > > or Gamma match next to the tuning capacitor and if
> > > they had success with this arrangement?
> > >>
> > > 73 Todd WD4NGG
> > >
> >
> >The portion of the loop opposite the capacitor is the only real
> >place to get a low impedance feed point which the gamma match
> >requires. You would have difficulty feeding the loop anywhere
> >around the capacitor because of the very high voltages there.
>
> Hi Irv,
>
> It is not really difficult to couple to the loop at the tuning
> capacitor. The circuitry is simple ... the problem is as you say ...
> dealing with the high RF voltages. It also relates to the amount of power
> you run. If you run QRP no problem.

>
> >Believe me, it would greatly simplify the construction of the
> >magloops if the feedpoint and capacitor could be colocated -- thats
> >why you never see it in magloop articles.
>
> The reason you don't see it done is that it requires non-traditional methods.
>
>
> MFJ made several versions of a Mag Loop Tuner that operated in this
> fashion. Simply connect the loop to the 2 stand-off insulators. the tuner
> acted as the base as well as the tuner and it could sit on the table next
> to the rig. I didn't particular like the idea of the mag loop sitting a
> couple of feet away from me ... even though I was only operating 10 watts
> output.
>
> I extended the distance. The version I built separated the loop from the
> tuning capacitor/coupling unit by about 8 feet using home brew parallel
> feed line.The loop was about 3 ft in diameter and I ran 10 watts output (I
> used a Kenwood TS-50 running at the low power output setting) no
> problem. it worked just as well as the same loop fed in the more
> traditional way at the low impedance side. If I fed the same loop at the
> low impedance side I could easily run 50 watts .... but then I had the
> inconvenience of not being able to tune the loop and adjust coupling from
> the operating position. By the way ... the loop was fastened to the
> balcony railing and the tuner/coupler was just inside the window to the
> apartment. Both loop arrangements had the same efficiency (e.g.
> output). The difference was that feeding the high impedance point
> dramatically lowers the 'destruction' point hi hi.
>
> It is not a matter of will it work. It works! ... It is just not easily
> done with traditional components. Modern day Amateurs love coax .... and
> coax is incompatible with high impedance feed. If Mag loops were popular
> back in the 1930's I am sure that is how it would have been done (that is
> tuning and feed at the same point).
>
>
> Jim, VE3CI
>
>
> [Non-text portions of this message have been removed]
>

7596. Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-13 04:02:18 UTC
From: Jonny Boy
Topic: 7577 Message: 7596

> Webster has a lot to answer for !, it obviously would require an IQ 100 times
> greater than yours to understand the software, written by someone your side of
> the pond and a few hundred miles to the north, BTW north is the direction the
> sun doesn't shine from.

Am I to understand that you're offended now because your previous "suggestion" was actually ... serious?? I was sure you were being sarcastic. I take back the Marconi jibe. Why don't you tell me more about these tiny Softrock SDRs. I've never heard of them before and I'm amazed.

7597. Re: [loopantennas] Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-13 09:43:12 UTC
From: richard
Topic: 7577 Message: 7597

On Sun, 13 Jun 2010 04:02:18 -0000
"Jonny Boy" <ny911truth@...> wrote:

> > Webster has a lot to answer for !, it obviously would require an IQ 100
> > times greater than yours to understand the software, written by someone
> > your side of the pond and a few hundred miles to the north, BTW north is
> > the direction the sun doesn't shine from.
>
> Am I to understand that you're offended now because your previous
> "suggestion" was actually ... serious?? I was sure you were being sarcastic.
> I take back the Marconi jibe. Why don't you tell me more about these tiny
> Softrock SDRs. I've never heard of them before and I'm amazed.
>

OK
The softrock Rx is a small beast using an on board xtal oscillator running usually about X3 the receive frequency, although a ratio of 3/4 can be used as well, that is applied to a H mode mixer producing a I & Q output, Q being in quadrature to I.
That feed into the sound card on you PC, the faster the sampling rate the greater bandwidth you can see when using the core software and display software.

The receivers are about $20 ish in kit form, there are kits to cover most of the Ham bands up to 6 mtrs there is also a transceive version which is shipping now. For that price try one, there are several FREE programs to control your sound card and produce a display as a sprectrgram, ie. a panoramic frequency display. go to the main site and follow the links from there

www.softrockradio.org this link will take to to the main site

For a discretion of the phasor software and what it does goes to the ARRL QEX archives, the acticle was printed last year.

Best wishes

Richard Bown G8JVM

###
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
###

7598. Re: [loopantennas] Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-13 19:53:46 UTC
From: Jim
Topic: 7577 Message: 7598

Dean, I'm intrigued also by the Pixel antenna.
But I've had a Wellbrook 1530 loop about 5 years now, and I'm very happy with it. I also have an Eavesdropper Sloper, about 67 feet, sloping from a second floor window, 30 feet high, to a tree branch about 8 feet high, oriented NE to SW.
I can't honestly say that one is better than the other, because there are so many variables. But if I were forced to have only one antenna, it would be the Wellbrook. It's a very good product. Maybe the Pixel is as good or better, but I don't have the space or resources to buy it and conduct an antenna "shootout" !
If you get the Pixel, we'd all be interested in your comments.
--jim

As for the whole "Moebius" thing (see http://www.ece.unm.edu/summa/notes/SSN/note7.pdf) it's certainly intriguing. It means that this is a SHIELDED loop (sort of) which I understand do work better, i.e. somewhat less gain but more developed nulls. This "moebius" geometry is in a class all its own, like a hybrid of shielded and two-turn designs.
I dunno but i suspect it's hype ,,a name that sounds cool?
Anyway i would like to hear from anyone who has the Pixel loop? I am almost ready to pull the trigger and get the wellbrook ,but i think i like the pixel one better.
I dont have trees ,or room for 500 feet of wire ,no place to string any length up so the loop looks like a good idea .
Dean_0

--
I am using the free version of SPAMfighter.
We are a community of 7 million users fighting spam.
SPAMfighter has removed 2242 of my spam emails to date.
Get the free SPAMfighter here: http://www.spamfighter.com/len

The Professional version does not have this message

[Non-text portions of this message have been removed]

7599. Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-13 22:28:11 UTC
From: Dean Wayman
Topic: 7577 Message: 7599

--- In loopantennas@yahoogroups.com, "Jim" <jimbo304@...> wrote:
>
> Dean, I'm intrigued also by the Pixel antenna.
> But I've had a Wellbrook 1530 loop about 5 years now, and I'm very happy with it. I also have an Eavesdropper Sloper, about 67 feet, sloping from a second floor window, 30 feet high, to a tree branch about 8 feet high, oriented NE to SW.
> I can't honestly say that one is better than the other, because there are so many variables. But if I were forced to have only one antenna, it would be the Wellbrook. It's a very good product. Maybe the Pixel is as good or better, but I don't have the space or resources to buy it and conduct an antenna "shootout" !
> If you get the Pixel, we'd all be interested in your comments.
> --jim
>
>
>
>Thanks Jim;

Finally ! A decent post ,without all the insult's and drama-
A little more about my situation ,there are several local station's that i would like to get most of the time ,i get them in my vehicle's so i see no reason that i should'nt get them at home ,but first i think i need to get an antenna as from the house a possible,not easy to do with only feet, instead of yards or miles around the house :)
anyway i would prefer a cheaper home built wire etc. but it's not possible and i really want to be able to steer the reception pattern,one of the big probs with wire setups. I even entertained the thought of buying a quad vertical setup but i think that's too much dough too spend on an antenna.
I'm pretty sure the wellbrook is a good system from what i've heard .
I'm also sure that any antenna system isn't perfect,so some ppl could be very dissapointed for some reason or other with any one of them.
I already have a short tower and a rotator so a loop looks like a good idea .
I've deployed several types of wire antennas ,some where more of a success than others but always have the same problem of directionality ,again the loop seems a good alternative,sry for going on forever here .
I'd rather get the facts before i just throw money and time at some thing ,that's why i keep bringin it up .

Thanks Jim

Dean_0

7600. Moebius shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-13 22:33:05 UTC
From: Andy Ikin
Topic: 7600 Message: 7600

Hello Folks

Having read Chris Trask's paper "Mastering the Art of Shielded Loop Aerials" plus Dr Carl Baum's original paper on the "moibous strip loop". I decided to try out this loop architecture to see if there was any benefit compared to the use of a single turn low inductance balanced loop/ amplifier combination. My inital thoughts were; that the E-field noise imunity would be the same, but there may be a problem with HF gain.

My reasoning being:

1. With Moebius shielded loop, the outer tube is 2 halves of one turn of the loop (The loop is effectively 2 turns). Hence, the E-Field is not screened from the outer. Therefore, I don't believe that this loop is shielded in the conventional sense.

2. If my reasoning is incorrect (the Loop is shielded), does it make any difference compared to a single turn un-screen balanced loop? The answer is no; with a single turn balanced loop, any induced E-Field cancels out due the 180 degree output phase difference, providing that the antenna aperture is small in terms of wavelength. The reduction in E field rejection is also afforded by using a low input impedance/balanced amplifier.

3. Many years ago, I compared E -Field rejection of an ALA1530 loop verses a shielded version. I couldn't detect any difference.

4. Single and multi-turn loops deliver the same power output, providing that they have the same area/volume. Only the Current/Voltage and impedance relationship is different. This feature is often missed by loop antenna constructors!!

5. Therefore the Moebius shielded loop provides 2 x the Voltage and 1/2 the Current and 4 x the impedance of single turn loop .

6. The capacitance of the Moebius is an order of magitude higher than a 1 turn loop, this combined with higher loop impedance may affect the HF responce.

7. It may not be a good idea to surround a loop antenna with a screen that is connected directly to the antenna feeder screen that could have high common mode noise or powerline noise!!!!!!

Notwithstanding the above. The Moebius shielded loop was constructed using 38inch diam. aluminium tube, 3/4inch OD. with a split at the top of the loop, the inner wire was made from the outer braid of RG58c. This loop is effectively 2 turns with a loop inductance of 10uH (res. freq is 5.1MHz). This compares to 2.2uH for a 1 turn loop with above size of tube.

Both loops were compared using a test set-up that provides a H -field from 50kHz to 30MHz.

The amplifier used on the Modebius loop was a New high gain ALA1530 loop amplifier with the FM band filter caps removed so as not to slug the HF response. The single turn loop used the same loop amplifier with the FM band filter caps fitted.

Note. compared to the current production ALA1530+, the new ALA1530 amplifier increased the LW and MW gain by approx. 10dB and 4dB respectively. The upper HF gain is increased by approx. 5dB. Also there is an increase in the OIP2/3.

To summarise the results.

Between 50 and 200kHz the Moebius provided 3.5 to 6dB gain increase. This was only due because the amplifier input z was more closely matched to the loop z.

From 500kHz to 10MHz the New ALA1530 has 1.6-4dB gain increase

Between 12MHz and 16MHz the Moebius gain peaked about 1dB above the new ALA1530

Between 18MHz and 30MHz the gain of the Moebius drops off significantly by 2-12dB.

I also performed some on tests with both loop types mounted directly under 11kV power lines (a noisy E Field source). Both antennas provided a similar noise reduction compared to an active dipole antenna.

From the above, it is quite clear that the Moebius shielded loop is not suitable for an LF to HF broadband loop. The loops' HF responce drops off due a too a high Inductance and capacitance.

Other issues; the split in the shield of the Moebius loop mechanically weakens the loop. Hence, a top support is mandatory. This would add to production cost and shipping costs.

Regards

Andrew Ikin

[Non-text portions of this message have been removed]

7601. Re: [loopantennas] Moebius shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-13 23:07:33 UTC
From: Chris Trask
Topic: 7600 Message: 7601

>
> To summarise the results.
>
> Between 50 and 200kHz the Moebius provided 3.5 to 6dB gain increase. This
was
> only due because the amplifier input z was more closely matched to the
loop z.
>
> From 500kHz to 10MHz the New ALA1530 has 1.6-4dB gain increase
>
> Between 12MHz and 16MHz the Moebius gain peaked about 1dB above the new
ALA1530
>
> Between 18MHz and 30MHz the gain of the Moebius drops off significantly
by 2-12dB.
>
> I also performed some on tests with both loop types mounted directly under
11kV
> power lines (a noisy E Field source). Both antennas provided a similar
noise
> reduction compared to an active dipole antenna.
>
> From the above, it is quite clear that the Moebius shielded loop is not
suitable
> for an LF to HF broadband loop. The loops' HF responce drops off due a
too a high
> Inductance and capacitance.
>
> Other issues; the split in the shield of the Moebius loop mechanically
weakens the
> loop. Hence, a top support is mandatory. This would add to production cost
and
> shipping costs.
>

Andrew,
Thank you for going to all the trouble to provide us with an actual test
of the Moebius Strip Loop. That had been lacking in the literature.

You'll notice in my paper (which you mentioned) that I provided a
description of a top support for the Moebius Strip Loop which can be
interchanged with a top support for a "normal" shielded loop.

I wonder now how the performace of a Moebius Strip Loop of a given
diameter would compare with a "normal" shielded loop of twice the diameter?
My take when looking at the two was that the Moebius Strip Loop could

deliver comparable performace, so that there is a saving in both size and material cost.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7602. Re: Pixel AM loop???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-14 00:49:49 UTC
From: Jonny Boy
Topic: 7577 Message: 7602

--- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@...> wrote:
> Finally ! A decent post ,without all the insult's and drama-

mm. Musta been this that did it:
"I HATE marketing. The worst thing about hell is that all the marketers will be there."

I wonder why he took it personally?

7603. Re: Moebius shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-14 02:48:27 UTC
From: Alex P
Topic: 7600 Message: 7603

Several years ago I compared a split shield loop to a non-shielded version and found no significant difference in the electrical noise immunity or gain. If anyone has actual empirical and numerical results of the two versions please advise. Thanks. Regards.
Alex

--- In loopantennas@...m, "Chris Trask" <christrask@...> wrote:
>
> >
> > To summarise the results.
> >
> > Between 50 and 200kHz the Moebius provided 3.5 to 6dB gain increase. This
> was
> > only due because the amplifier input z was more closely matched to the
> loop z.
> >
> > From 500kHz to 10MHz the New ALA1530 has 1.6-4dB gain increase
> >
> > Between 12MHz and 16MHz the Moebius gain peaked about 1dB above the new
> ALA1530
> >
> > Between 18MHz and 30MHz the gain of the Moebius drops off significantly
> by 2-12dB.
> >
> > I also performed some on tests with both loop types mounted directly under
> 11kV
> > power lines (a noisy E Field source). Both antennas provided a similar
> noise
> > reduction compared to an active dipole antenna.
> >
> > From the above, it is quite clear that the Moebius shielded loop is not
> suitable
> > for an LF to HF broadband loop. The loops' HF responce drops off due a
> too a high
> > Inductance and capacitance.
> >
> > Other issues; the split in the shield of the Moebius loop mechanically
> weakens the
> > loop. Hence, a top support is mandatory. This would add to production cost
> and
> > shipping costs.
> >
>
> Andrew,
> Thank you for going to all the trouble to provide us with an actual test
> of the Moebius Strip Loop. That had been lacking in the literature.

>
> You'll notice in my paper (which you mentioned) that I provided a
> description of a top support for the Moebius Strip Loop which can be
> interchanged with a top support for a "normal" shielded loop.
>
> I wonder now how the performace of a Moebius Strip Loop of a given
> diameter would compare with a "normal" shielded loop of twice the diameter?
> My take when looking at the two was that the Moebius Strip Loop could
> deliver comparable performace, so that there is a saving in both size and
> material cost.
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

7604. Re: [loopantennas] Moebius shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-14 21:59:18 UTC
From: Andy Ikin
Topic: 7600 Message: 7604

Chris wrote on June the 14:

"Andrew,
Thank you for going to all the trouble to provide us with an actual test
of the Moebius Strip Loop. That had been lacking in the literature.

You'll notice in my paper (which you mentioned) that I provided a
description of a top support for the Moebius Strip Loop which can be
interchanged with a top support for a "normal" shielded loop.

I wonder now how the performace of a Moebius Strip Loop of a given
diameter would compare with a "normal" shielded loop of twice the diameter?
My take when looking at the two was that the Moebius Strip Loop could
deliver comparable performace, so that there is a saving in both size and
material cost."

Chris,

Unfortunately, my aluminium bending jigs are limited to loops of 38 inches and 43 inches diameter. So I can't do what you ask. I don't honestly believe there would be any gain advantage.

Getting back to the results, I didn't fully explain the reason for the apparent gain increase of the Moebius between 50-200kHz.

The ALA1530 amplifier input impedance is designed to track the loop reactance over 6 octaves from approx. 500kHz to 32MHz.
Hence, the amp. z-in at 500kHz is about 10 Ohms (loop reactance is about 7 Ohms). As the loop reactance rises with frequency so does the amp. z-in. So over this design bandwidth, the loop/amplifier is approximately Power matched. You may ask why I have done it this way, as apposed treating the loop as a current source and using a very low z-in trans-impedance amplifier (eg. Rhode and Schwarz HFH-22).
The reason is; when the loop reactance is high compared to the amp. z-in, this high reactance limits the available current to the amplifier i.e. there is a miss-match. Hence, this why designers using current amplifiers try to make the loop reactance as low as possible. So you can see that by having an amplifier tracking the loops reactance has considerable advantages. As far as I know this is a unique feature.

However, the z-in of the ALA1530 amplifier starts rise below 200kHz to about 30 Ohms down to 50kHz, hence there is an loop/amplifier miss-match that reduces the loop sensitivity on the LW band. For the ALA1530 this is a positive feature to prevent antenna/receiver overload or IMD from Mega Watt Broadcast stations.

As the Moebius loop has 4 x the loop reactance as the 1 turn loop, then the higher z-in of the amplifier at LF will see the moebius as a better match. Hence the apparent gain increase.

Kind regards

Andrew

[Non-text portions of this message have been removed]

7605. Attn: Andy Ikin

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-15 01:45:39 UTC
From: Jonny Boy
Topic: 7600 Message: 7605

Mr. Ikin:

Have you done any experiments with the "loop-sense cardioid array" concept pioneered by Ron Schatz in the 1960s (NRC reprint A20; DX News magazine)? From what I gather, if a loop and a matched vertical are phased together using a common "splitter," this somehow transforms the loop's inherent "figure 8" pattern into a single unidirectional lobe, which has its uses. This lobe can then be swept by physically turning the array. No physical separation between the loop and whip is necessary, unlike with phased arrays of identical antennas. The main design challenge is scaling the loop and whip so that this effect is maximized and consistent throughout their shared bandwidth.

Also, I believe loops benefit from shielding not because their gain is increased but because shielding makes the nulls wider and more absolute; I seem to remember this from the ARRL Antenna Book chapter on loops.

7606. Moebius Loop Antenna of Dr. Carl Baum

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-15 02:39:30 UTC
From: pvbirke
Topic: 7606 Message: 7606

I had thought the shielding to an incident (and I think symmetrical) interfering RF dielectric field E was active in the M=2 version (and M=3). Here the loop voltages induced from the E field effectively cancel and one is left with only (or nearly only) magnetic field H voltage induce of the intended signal.

Thus the shielding should be effective and noticeable.

best wishes
Paul V Birke PEng
Guelph ON Canda

7607. Re: [loopantennas] Attn: Andy Ikin

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-15 12:20:10 UTC
From: Andy Ikin
Topic: 7600 Message: 7607

Jonny Boy wrote on the 15 June.

"Mr. Ikin:

Have you done any experiments with the "loop-sense cardioid array" concept pioneered by Ron Schatz in the 1960s (NRC reprint A20; DX News magazine)? From what I gather, if a loop and a matched vertical are phased together using a common "splitter," this somehow transforms the loop's inherent "figure 8" pattern into a single unidirectional lobe, which has its uses. This lobe can then be swept by physically turning the array. No physical separation between the loop and whip is necessary, unlike with phased arrays of identical antennas. The main design challenge is scaling the loop and whip so that this effect is maximized and consistent throughout their shared bandwidth.

Also, I believe loops benefit from shielding not because their gain is increased but because shielding makes the nulls wider and more absolute; I seem to remember this from the ARRL Antenna Book chapter on loops."

Jonny, I an not familiar with Ron Schatz's work. However, I have done some work with "loop-sense cardioid array" for LW and MW only. This used an ALA1530 plus an Datong AD370 Active dipole. Both items were mounted on the same antenna rotator!! These were phased using a Wellbrook APU100 phasing unit (no longer in production). The problem with type of set-up is the Phase and Amplitude adjustment is very critical. Replacing the AD370 with a 30m longwire appeared the provide more stable nulls. Also the set-up requires constant adjustment even for small frequency changes. To put it an other way, it is pain in the butt to use. The critical problem is the requirement for a 90 degree phase shift across a wide bandwidth. To try overcome the critical phasing issue I did experiment with an up-conversion phasing system, this used two Mini-Circuits Double Balance Mixers (DBM), with a 90 degree phase phase shift (+/- some variation) on the local oscillator. Then both DBM outputs were combined and down converted by to LW/MW using another DBM. It did provide the wideband phase shift, but it needs some more work to finish it off. However, I don't see that this type phasing system providing the performance of a 2 loop phased array using a variable cross-fire phasing, providing you can accommodate 30-40m antenna spacing. The Wellbrook variable cross-fire phasing unit can also be used 2 active whip, active Flag and active K9AY antennas. This is the only commercial phasing system to provide a near constant F/B from 500kHz to 2MHz without endless knob twiddling. The directivity of the dual K9AY array is on par with 4 square array or a 600ft beverage. The down side of the K9AY array is that is needs a lot clear space so that nearby structures don't disturb the antenna E/H field relationship. The price of this system may seem high but is a fraction of the cost the dual whip phaser system mentioned in recent post (Pixel am loop). So if the above sounds bit complicated, consider a 2 loop K9AY with remote variable termination, this will give 360 degree coverage and optimum nulling and relatively small foot print. I still make them order and it works from 60kHz to 2MHz, it is dream to use compared to pair of antennas using a standard phasing controller, however, the absolute null depth may not be as good especially for high angle skywave.

My experience suggests that Shielding only improves the loops "nullability" if the loop or its amplifier are not balanced properly. Maintaining the balance of a tuned loop can be difficult, hence the use of a shield.

Kind regards

Andrew

[Non-text portions of this message have been removed]

7608. Re: Moebius shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-15 11:02:41 UTC
From: lexluthor6969
Topic: 7600 Message: 7608

In the tests that you ran on the Moebius, what was the gain and NF of the amplifier as function of frequency?

73

Lex

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
> Chris wrote on June the 14:
>
> "Andrew,
> Thank you for going to all the trouble to provide us with an actual test
> of the Moebius Strip Loop. That had been lacking in the literature.
>
> You'll notice in my paper (which you mentioned) that I provided a
> description of a top support for the Moebius Strip Loop which can be
> interchanged with a top support for a "normal" shielded loop.
>
> I wonder now how the performace of a Moebius Strip Loop of a given
> diameter would compare with a "normal" shielded loop of twice the diameter?
> My take when looking at the two was that the Moebius Strip Loop could
> deliver comparable performace, so that there is a saving in both size and
> material cost."
>
> Chris,
>
> Unfortunately, my aluminium bending jigs are limited to loops of 38 inches and 43 inches diameter. So I can't do what you ask. I don't honestly believe there would be any gain advantage.
>
> Getting back to the results, I didn't fully explain the reason for the apparent gain increase of the Moebius between 50-200kHz.
>
> The ALA1530 amplifier input impedance is designed to track the loop reactance over 6 octaves from approx. 500kHz to 32MHz.
> Hence, the amp. z-in at 500kHz is about 10 Ohms (loop reactance is about 7 Ohms). As the loop reactance rises with frequency so does the amp. z-in. So over this design bandwidth, the loop/amplifier is approximately Power matched. You may ask why I have done it this way, as apposed treating the loop as a current source and using a very low z-in trans-impedance amplifier (eg. Rhode and Schwarz HFH-22).
> The reason is; when the loop reactance is high compared to the amp. z-in, this high reactance limits the available current to the amplifier i.e. there is a miss-match. Hence, this why designers using current amplifiers try to make the loop reactance as low as possible. So you can see that by having an amplifier tracking the loops reactance has considerable advantages. As far as I know this is a unique feature.

>
> However, the z-in of the ALA1530 amplifier starts rise below 200kHz to about 30 Ohms down to 50kHz, hence there is an loop/amplifier miss-match that reduces the loop sensitivity on the LW band. For the ALA1530 this is a positive feature to prevent antenna/receiver overload or IMD from Mega Watt Broadcast stations.
>
> As the Moebius loop has 4 x the loop reactance as the 1 turn loop, then the higher z-in of the amplifier at LF will see the moebius as a better match. Hence the apparent gain increase.
>
> Kind regards
>
> Andrew
>
>
>
>
> [Non-text portions of this message have been removed]
>

7609. Re: [loopantennas] Re: Moebius shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-15 17:18:10 UTC
From: Andy Ikin
Topic: 7600 Message: 7609

Lex wrote on the 15th June

"In the tests that you ran on the Moebius, what was the gain and NF of the amplifier as function of frequency?

73

Lex"

Lex, the nominal amplifier gain as measured in a 50 Ohm system is approx. 29dB at 500kHz. the NF is about 2dB. I just don't have the time to measure the power gain or NF at difference freqs. with differing input z.

73

Andrew

[Non-text portions of this message have been removed]

7610. It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-16 00:51:30 UTC
From: Steve Greenfield
Topic: 7610 Message: 7610

OK, I'll stop being so obnoxious about this as soon as I'm over the initial thrill. That's right, my callsign is in High Definition!

For now, I'm excited as I've just today shown up in the FCC database. Yay!

Now I have to figure out where all the "action" is on the bands so I can build, buy, or trade for a suitable radio or radios.

Steve Greenfield AE7HD
Electronic Engineering Technician AT
Electronic Technician 20+ years
CET Computers and Consumer Electronics
IPC-A-610D CIS Specialist
http://www.linkedin.com/in/stevenjgreenfield

7611. Re: [loopantennas] It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-16 01:00:02 UTC
From: Horacio Nigro
Topic: 7610 Message: 7611

It's sounds great both in phonetical as in morse!
Congratulations again OM. Have fun and lots of DX!

Horacio A. Nigro
Montevideo
Uruguay

_____
De: Steve Greenfield <alienrelics@...>
Para: Electronics_101 Mailing List <electronics_101@yahoogroups.com>; pQRP Mailing List <pQRP@yahoogroups.com>; W7DK Tacoma Amateur Radio Mailing List <w7dk@yahoogroups.com>; Loop Antennas Mailing List <loopantennas@yahoogroups.com>; IKV T'Mar Mailing List <ikvtmar@yahoogroups.com>
Enviado: mar,15 junio, 2010 21:51
Asunto: [loopantennas] It's official! I'm AE7HD

OK, I'll stop being so obnoxious about this as soon as I'm over the initial thrill. That's right, my callsign is in High Definition!

For now, I'm excited as I've just today shown up in the FCC database. Yay!

Now I have to figure out where all the "action" is on the bands so I can build, buy, or trade for a suitable radio or radios.

Steve Greenfield AE7HD
Electronic Engineering Technician AT
Electronic Technician 20+ years
CET Computers and Consumer Electronics
IPC-A-610D CIS Specialist
http://www.linkedin.com/in/stevenjgreenfield

[Non-text portions of this message have been removed]

7612. Re: [loopantennas] It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-16 02:21:38 UTC
From: Jim Miller
Topic: 7610 Message: 7612

Steve

Congratulations! Drop by the QRP-L list if you haven't done so already.

jim ab3cv

[Non-text portions of this message have been removed]

7613. Re: [loopantennas] It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-16 08:28:30 UTC
From: richard
Topic: 7610 Message: 7613

On Tue, 15 Jun 2010 17:51:30 -0700 (PDT)
Steve Greenfield <alienrelics@...> wrote:

> OK, I'll stop being so obnoxious about this as soon as I'm over the initial
> thrill. That's right, my callsign is in High Definition!
>
> For now, I'm excited as I've just today shown up in the FCC database. Yay!
>
> Now I have to figure out where all the "action" is on the bands so I can
> build, buy, or trade for a suitable radio or radios.
>
>
> Steve Greenfield AE7HD
> Electronic Engineering Technician AT
> Electronic Technician 20+ years
> CET Computers and Consumer Electronics
> IPC-A-610D CIS Specialist
> http://www.linkedin.com/in/stevenjgreenfield
>
GM
Have a play with a softrock kit depending on which you get, It will give you a
taste of SDR. Now if you like what you see, have a serious look at HPSDR,
If you use the HPSDR off the TAPR group you will have full transceive with up
to 100W, there is Open HPSDR as well this group broke away and there are some
ver good boards there.
HPSDR uses a back plane board so all the other boards plug into it.
Its good, but too expensive for me :(

As your in the stage of not having a radio its worth taking stock of your
options, do you go and buy an expensive HF or VHF rig or go down the SDR route.
Softrock is low cost, and I guess you should know which end of the soldering
iron gets hot.
You should be able to get a softrock Rx for about $20.
Dont run into it splashing $ everywhere, take your time and evaluate you
options.
Borrow a rig for a short while if you are really excited and raring to go.

HTH

--
Best wishes

Richard Bown G8JVM

##
Registered Linux User 36561

OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
###

7614. Re: Moebius shielded loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-16 10:57:55 UTC
From: lexluthor6969
Topic: 7600 Message: 7614

Andy:
Thanks for your response. Can we roughly assume that your amplifier has relatively flat response up to 30 MHz or is it shaped to go down as a function of frequency since the loop's output voltage goes up as direct function of frequency?

Also can you elaborate on your test setup for the tests you did on the Moebius loop vs the ALA1530+? For example, what did you use to generate the magnetic field from 50 kHz to 30 MHz? What was the distance between the magnetic source and antenna under test? How did you deal with standing waves, etc ?

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
> Lex wrote on the 15th June
>
> "In the tests that you ran on the Moebius, what was the gain and NF of the amplifier as function of frequency?
>
> 73
>
> Lex"
>
> Lex, the nominal amplifier gain as measured in a 50 Ohm system is approx. 29dB at 500kHz. the NF is about 2dB. I just don't have the time to measure the power gain or NF at difference freqs. with differing input z.
>
> 73
>
> Andrew
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7615. Re: It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-17 00:47:37 UTC
From: tenorman1952
Topic: 7610 Message: 7615

> Now I have to figure out where all the "action" is on the bands so I can build, buy, or trade for a suitable radio or radios.
>
>
> Steve Greenfield AE7HD

First, Congratulations on the new call!

First, the convention is, all bands below 10 Mhz are Lower Sideband, except for the five 60 meters frequencies. (an aside, they are a waste of time, don't get too concerned over 60 meters, there are better places to hang out).

Frequencies over 10 Mhz are all Upper Sideband.

10 Mhz (30 meters) is CW and digital only, no phone at all.

Morning 40 meters, Lower Sideband. Sometimes this band closes in the middle of the day. It opens again the the mid to late afternoon and stays open into the early evening, sometimes an hour or more after dark.

20 meters, Upper Sideband, is open in the middle of the day. The more sun that heats up the upper atmosphere, the better. To a lesser extent, 17 and 15 meters, too, though there are times that 20 meters is open, 17 and 15 meters not.

15 meters is a great place to QSO South America on days when the band is open. Getting 5-9 reports back when you only have 100 watts and a simple dipole is pretty common.

10 meters is rarely open these days.

Beginning about sundown, it's time for 80/75 meters, Lower Sideband. And this band stays open until just after sunrise. Most of the nets are concentrated in the 3.870 - 3.950 Mhz area, but some are lower.

Of course, this is all phone.

PSK31, on 20 meters, 14.070 Mhz. On 40 meters, 7.070 (mostly US) and 7.035 Mhz (lots of European and other dx users). Same times as above. Often you will see 20 meters begin to close down, and then see the same hams down on 40 meters as that band opens.

Right in the middle of 40 meters we still have the African AM broadcast station, but they were supposed to have vacated the frequency.

You can stay busy with just 80/75, 40, 20, and 15 meters. If you work days, and can only play radio at night, you should put your effort and wire into 40 and 80 meters. If you only play radio on the weekends, during the day, you'd want at least 20 meters.

Once I knew WHERE (freq) to look, and what MODE to listen to, I was picking up a lot more stations. So, a waste of time checking out 80 meters FM during the middle of the day, or

Lower Sideband on 17 meters at night.

73
Paul
AE5JU

7616. RE: [loopantennas] Re: It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-17 02:49:35 UTC
From: Brent G DeWitt
Topic: 7610 Message: 7616

Great summary Paul! I'm sure many folks who have not explored will appreciate it as much as I do.

73,

Brent - AB1LF

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of tenorman1952
Sent: Wednesday, June 16, 2010 8:48 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: It's official! I'm AE7HD

> Now I have to figure out where all the "action" is on the bands so I can build, buy, or trade for a suitable radio or radios.
>
>
> Steve Greenfield AE7HD

First, Congratulations on the new call!

First, the convention is, all bands below 10 Mhz are Lower Sideband, except for the five 60 meters frequencies. (an aside, they are a waste of time, don't get too concerned over 60 meters, there are better places to hang out).

Frequencies over 10 Mhz are all Upper Sideband.

10 Mhz (30 meters) is CW and digital only, no phone at all.

Morning 40 meters, Lower Sideband. Sometimes this band closes in the middle of the day. It opens again the the mid to late afternoon and stays open into the early evening, sometimes an hour or more after dark.

20 meters, Upper Sideband, is open in the middle of the day. The more sun that heats up the upper atmosphere, the better. To a lesser extent, 17 and 15 meters, too, though there are times that 20 meters is open, 17 and 15 meters not.

15 meters is a great place to QSO South America on days when the band is open. Getting 5-9 reports back when you only have 100 watts and a simple dipole is pretty common.

10 meters is rarely open these days.

Beginning about sundown, it's time for 80/75 meters, Lower Sideband. And this band stays open until just after sunrise. Most of the nets are concentrated in the 3.870 - 3.950 Mhz area, but some are lower.

Of course, this is all phone.

PSK31, on 20 meters, 14.070 Mhz. On 40 meters, 7.070 (mostly US) and 7.035 Mhz (lots of European and other dx users). Same times as above. Often you will see 20 meters begin to close down, and then see the same hams down on 40 meters as that band opens.

Right in the middle of 40 meters we still have the African AM broadcast station, but they were supposed to have vacated the frequency.

You can stay busy with just 80/75, 40, 20, and 15 meters. If you work days, and can only play radio at night, you should put your effort and wire into 40 and 80 meters. If you only play radio on the weekends, during the day, you'd want at least 20 meters.

Once I knew WHERE (freq) to look, and what MODE to listen to, I was picking up a lot more stations. So, a waste of time checking out 80 meters FM during the middle of the day, or Lower Sideband on 17 meters at night.

73
Paul
AE5JU

[Non-text portions of this message have been removed]

7617. Re: [loopantennas] It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-17 16:18:58 UTC
From: Timothy-Allen Albertson
Topic: 7610 Message: 7617

congrats

On Tue, Jun 15, 2010 at 7:51 PM, Steve Greenfield <alienrelics@yahoo.com>wrote:

>
>
> OK, I'll stop being so obnoxious about this as soon as I'm over the initial
> thrill. That's right, my callsign is in High Definition!
>
> For now, I'm excited as I've just today shown up in the FCC database. Yay!
>
> Now I have to figure out where all the "action" is on the bands so I can
> build, buy, or trade for a suitable radio or radios.
>
> Steve Greenfield AE7HD
> Electronic Engineering Technician AT
> Electronic Technician 20+ years
> CET Computers and Consumer Electronics
> IPC-A-610D CIS Specialist
> http://www.linkedin.com/in/stevenjgreenfield
>
>
>

--
Timothy-Allen Albertson
Member, The Church of Jesus Christ of
Latter-day Saints
Facebook: http://www.facebook.com/home.php?ref=home
Registered Linux User No. 482284
Registered Ubuntu User No. 25839
Amateur Radio Station KG6IRH/0
Technician Class License
Since 06 November 2001
Member, American Radio Relay League (ARRL)
Member, Mercury Amateur Radio Association-
MidWest (MARA-MW)
Member, Fremont Amateur Radio Transmitter
Society (FARTS) (Club Station WI6QW)
Member, SouthWest Iowa Amateur Radio Club
(SWIARC) (Repeater Callsign K0SWI)
Echolink Node No. 48255
Citizens Band Radio Station KTAA51501
(CB Rule 17(b)(2), 47 C.F.R. 915.417(b)(2))
Latitude: 41.254887 (41? 15' 17'' N)
Longitude: -95.852753 (95? 51' 9'' W)

Grid Square: EN21bg
12 ...In memory of our God, our religion, and freedom, and our peace, our wives, and our children... Book of Mormon--Alma 46:12
8 Let his days be few; and let another take his office.
Pslams 109, Verse 8.

[Non-text portions of this message have been removed]

7618. Re: It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-17 20:13:47 UTC
From: tenorman1952
Topic: 7610 Message: 7618

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> > Now I have to figure out where all the "action" is on the bands so I can build, buy, or trade for a suitable radio or radios.
> >
> >
> > Steve Greenfield AE7HD
>
> First, Congratulations on the new call!
>
> First, the convention is, all bands below

And First, it's official, I can't count.

73
Paul - AE5JU

7619. Re: It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-18 18:49:11 UTC
From: alienrelics
Topic: 7610 Message: 7619

Thanks!

I'd read somewhere the reason for the convention about USB/LSB was from 20/40m SSB radios built using an IF around 10MHz, so USB on 20m inverts to LSB on 40m.

I'm still trying to get a radio... I'm still recovering from two years as a Starving Student(tm) so I'm trying to either sell some tools or trade them for ham radio gear.

Steve Greenfield
AE7HD

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> > Now I have to figure out where all the "action" is on the bands so I can build, buy, or trade for a suitable radio or radios.
> >
> >
> > Steve Greenfield AE7HD
>
> First, Congratulations on the new call!
>
> First, the convention is, all bands below 10 Mhz are Lower Sideband, except for the five 60 meters frequencies. (an aside, they are a waste of time, don't get too concerned over 60 meters, there are better places to hang out).
>
> Frequencies over 10 Mhz are all Upper Sideband.
>
> 10 Mhz (30 meters) is CW and digital only, no phone at all.
>
> Morning 40 meters, Lower Sideband. Sometimes this band closes in the middle of the day. It opens again the the mid to late afternoon and stays open into the early evening, sometimes an hour or more after dark.
>
> 20 meters, Upper Sideband, is open in the middle of the day. The more sun that heats up the upper atmosphere, the better. To a lesser extent, 17 and 15 meters, too, though there are times that 20 meters is open, 17 and 15 meters not.
>
> 15 meters is a great place to QSO South America on days when the band is open. Getting 5-9 reports back when you only have 100 watts and a simple dipole is pretty common.
>
> 10 meters is rarely open these days.
>
> Beginning about sundown, it's time for 80/75 meters, Lower Sideband. And this band stays open until just after sunrise. Most of the nets are concentrated in the 3.870 - 3.950 Mhz area, but some are lower.
>

> Of course, this is all phone.
>
> PSK31, on 20 meters, 14.070 Mhz. On 40 meters, 7.070 (mostly US) and 7.035 Mhz (lots of European and other dx users). Same times as above. Often you will see 20 meters begin to close down, and then see the same hams down on 40 meters as that band opens.
>
> Right in the middle of 40 meters we still have the African AM broadcast station, but they were supposed to have vacated the frequency.
>
> You can stay busy with just 80/75, 40, 20, and 15 meters. If you work days, and can only play radio at night, you should put your effort and wire into 40 and 80 meters. If you only play radio on the weekends, during the day, you'd want at least 20 meters.
>
> Once I knew WHERE (freq) to look, and what MODE to listen to, I was picking up a lot more stations. So, a waste of time checking out 80 meters FM during the middle of the day, or Lower Sideband on 17 meters at night.
>
> 73
> Paul
> AE5JU
>

7620. Re: [loopantennas] Re: It's official! I'm AE7HD

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-18 21:50:26 UTC
From: richard
Topic: 7610 Message: 7620

On Fri, 18 Jun 2010 18:49:11 -0000
"alienrelics" <alienrelics@...> wrote:

> Thanks!
>
> I'd read somewhere the reason for the convention about USB/LSB was from
> 20/40m SSB radios built using an IF around 10MHz, so USB on 20m inverts to
> LSB on 40m.
>
> I'm still trying to get a radio... I'm still recovering from two years as a
> Starving Student(tm) so I'm trying to either sell some tools or trade them
> for ham radio gear.
>
> Steve Greenfield
> AE7HD
>
>

Hi Steve
If your skint have a lock at softrock, if you dont mind building it and its a cheap way to get on air, you all ready have a comnputer, so why not have a look at Software defined Radio.
Depending on whos software you use you have the receive capability of rigs costing as mush as your in debt with your student days, and softrock has transmit capability as well

Best wishes

Richard Bown G8JVM

###
Registered Linux User 36561
OS: Mandriva 2010.0 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10 GHz
###

7621. Magnetic half loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-21 12:38:11 UTC
From: vk6mb
Topic: 7621 Message: 7621

Hi everyone,
My 1st post here.
I would like to find out if any of the members have been successful in constructing a Magnetic half loop similar to this -

http://www.stealth.ae/plugins/custompages/detinf.php?id=372&id_categories=136

73 Mike VK6MB

7622. Re: Magnetic half loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-22 10:55:38 UTC
From: vk6mb
Topic: 7621 Message: 7622

In addition, I have a 20-300pF 7.5kV Vacuum Cap and a 3.5m x 1.2m 'groundplane' roofrack on my Toyota Troop carrier and I can make the vertical part from 25mm copper pipe, but then I need to know formula for working out placement of the gamma match etc. I can drive the cap with a screwdriver motor, then I need to find a controller for that as well.
So any help appreciated
73 Mike VK6MB

--- In loopantennas@yahoogroups.com, "vk6mb" <beally@...> wrote:
>
> Hi everyone,
> My 1st post here.
> I would like to find out if any of the members have been successful in constructing a Magnetic half loop similar to this -
>
> http://www.stealth.ae/plugins/custompages/detinf.php?id=372&id_categories=136
>
> 73 Mike VK6MB
>

7623. Multi-Turn Mag Loop Data.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-23 00:12:33 UTC
From: rich3x
Topic: 7623 Message: 7623

Can anyone point to articles, books or any other source of data that discusses multi turn magnetic loop antenna design and results?

Intrigued by the idea of constructing a 1 meter diameter loop for 30 & 40 the meter bands.

de Rich/N2JR

7624. Re: [loopantennas] Multi-Turn Mag Loop Data.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-23 00:20:00 UTC
From: Chris Trask
Topic: 7623 Message: 7624

>
> Can anyone point to articles, books or any other source of data that
discusses
> multi turn magnetic loop antenna design and results?
>
> Intrigued by the idea of constructing a 1 meter diameter loop for 30 & 40
the
> meter bands.
>

I wrote a two-part article about that:

"Active Loop Aerials for HF Reception, Part 1: Practical Loop Aerial
Design," QEX, Jul/Aug 2003, pp. 35-42.

"Active Loop Aerials for HF Reception, Part 2: High Dynamic Range
Aerial Amplifier Design," QEX, Sep/Oct 2003, pp. 44-49.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7625. Re: [loopantennas] Multi-Turn Mag Loop Data.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-23 00:58:21 UTC
From: Richard Harrison
Topic: 7623 Message: 7625

Thanks Chris: Will find and dig into those articles ASAP.

de Rich/N2JR

Sent from my iPad...R. Harrison

7626. SGC tuners

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-24 01:34:38 UTC
From: ZephyrNYC
Topic: 7626 Message: 7626

Hello,

Do a lot of you use an SGC tuner with your wire loops? How do you connect the wire to the tuner for temporary applications? Thanks.

73, Frank

--
"Security is mostly a superstition. Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure or nothing."

- Helen Keller (1880-1968), The Open Door

Join the largest Yahoo group for helping hams (amateur radio operators) and non-hams alike at http://groups.yahoo.com/group/HamRadioHelpGroup/ or email HamRadioHelpGroup-subscribe@yahoogroups.com .

Join the largest Yaesu FT-857 group on Yahoo at http://groups.yahoo.com/group/FT-857/ or email FT-857-subscribe@yahoogroups.com .

7627. Re: SGC tuners

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-24 07:54:07 UTC
From: ZephyrNYC
Topic: 7626 Message: 7627

I found this on the SGC site. This file contains a lot of good photos. Do you connect your loops to your SGC tuner in the same way? How large are your loops?

http://sgcworld.com/Publications/Manuals/stealthman.pdf

73,
Frank

On Wed, Jun 23, 2010 at 21:34, ZephyrNYC <zephyrnyc@...> wrote:

> Hello,
>
> Do a lot of you use an SGC tuner with your wire loops? How do you
> connect the wire to the tuner for temporary applications? Thanks.
>
> 73, Frank
>
> --
> "Security is mostly a superstition. Avoiding danger is no safer in the
> long run than outright exposure. Life is either a daring adventure or
> nothing."
>
> - Helen Keller (1880-1968), The Open Door
>
>
> Join the largest Yahoo group for helping hams (amateur radio
> operators) and non-hams alike at
> http://groups.yahoo.com/group/HamRadioHelpGroup/ or email
> HamRadioHelpGroup-subscribe@yahoogroups.com .
>
> Join the largest Yaesu FT-857 group on Yahoo at
> http://groups.yahoo.com/group/FT-857/ or email
> FT-857-subscribe@yahoogroups.com .
>

[Non-text portions of this message have been removed]

7628. Re: SGC tuners

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-24 15:31:27 UTC
From: m0dvo
Topic: 7626 Message: 7628

Hi Frank,

I have a 237 which I use with a portable loop (ripped off SGC's "Stealth" Antenna!). Not liking the connection arrangement provided by SGC, I did a mod. to fit two 4mm binding posts on the cover where the "hot" terminal is. Much quicker and neater.

It's not rocket science, but you have to be careful removing the cover to minimise damage to the sealing gasket. Once inside, you have to provide an additional "cold" wire to the pcb. If you want more info and/or pics, contact me off list.

Mike M0DVO

--- In loopantennas@yahoogroups.com, ZephyrNYC <ZephyrNYC@...> wrote:
>
> Hello,
>
> Do a lot of you use an SGC tuner with your wire loops? How do you
> connect the wire to the tuner for temporary applications? Thanks.
>
> 73, Frank

7629. Active loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-30 04:59:13 UTC
From: vbifyz
Topic: 7629 Message: 7629

I'm going to try and assemble something like this:
http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
Anybody tried a different amplifier for such loop? I've found a nice opamp from Intersil, EL2125 that has amazingly low voltage noise and enough bandwidth. Ordered samples today. Any experience here with this or similar parts?

7630. Re: [loopantennas] Active loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-30 13:41:26 UTC
From: Chris Trask
Topic: 7629 Message: 7630

>
> I'm going to try and assemble something like this:
>http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
> Anybody tried a different amplifier for such loop? I've found a
> nice opamp from Intersil, EL2125 that has amazingly low voltage
> noise and enough bandwidth. Ordered samples today.
> Any experience here with this or similar parts?
>

I'm in the process of designing an amplifier similar to this that should have better noise and IMD performance. The progress of this has been hampered by other obligations. I'm using this project as a basis for the mechanical design of shielded loops and Moebius Strip loops.

Avoid using opamps for active antenna design. Despite their low noise and distortion specs, they still do not compare with those of discrete devices.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7631. Re: [loopantennas] Active loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-30 20:03:24 UTC
From: Patrick Reynaert
Topic: 7629 Message: 7631

Hi Chris,

I don't fully agree with your statement that OPAMPs are not good for active antenna's . I made some active whip amps with a standard FET-input Opamp from AD with very good results regarding linearity.

Enclosed is a document that gives an idea of the results.

Best regards,
Patrick Reynaert

--- On Wed, 6/30/10, Chris Trask <christrask@...> wrote:

> From: Chris Trask <christrask@...>
> Subject: Re: [loopantennas] Active loop amplifier
> To: loopantennas@yahoogroups.com, loopantennas@yahoogroups.com
> Date: Wednesday, June 30, 2010, 3:41 PM
>
> >
> > I'm going to try and assemble something like this:
> >http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
> > Anybody tried a different amplifier for such loop?
> I've found a
> > nice opamp from Intersil, EL2125 that has amazingly
> low voltage
> > noise and enough bandwidth. Ordered samples today.
> > Any experience here with this or similar parts?
> >
>
>   I'm in the process of designing an
> amplifier similar to this that should have better noise and
> IMD performance. The progress of this has been
> hampered by other obligations. I'm using this project
> as a basis for the mechanical design of shielded loops and
> Moebius Strip loops.
>
>   Avoid using opamps for active
> antenna design. Despite their low noise and distortion
> specs, they still do not compare with those of discrete
> devices.
>
>
>
>
> Chris Trask
> N7ZWY / WDX3HLB

> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>
>
> ----------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please
> put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos.
> Upload JPG and GIF into Photos. Please convert BMP or TIF to
> JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>   loopantennas-fullfeatured@yahoogroups.com
>
>
>

[Non-text portions of this message have been removed]

7632. Re: Active loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-30 20:57:13 UTC
From: vbifyz
Topic: 7629 Message: 7632

Hi Chris,

I understand that this requires proper analysis, but in my case the design goal is not only the wide dynamic range, but the deep null as well. From what I've read so far, this requires the loop to be "ideally magnetic", i.e. insensitive to the electrical field. This is achieved by using Alford loops (http://www.pa0sim.nl/Alford%20loop.htm), or reducing the amplifier input impedance, or both.

Reducing the input impedance requires high open-loop gain and flat phase response of the amplifier. I think opamps can be better for this particular application (deep null), but again, detailed analysis is required.

Mike
VE3YXA

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:

> Avoid using opamps for active antenna design. Despite their low noise and distortion specs, they still do not compare with those of discrete devices.
>

7633. RE: [loopantennas] Active loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-30 20:20:17 UTC
From: Mike Mayer
Topic: 7629 Message: 7633

Patrick,

It looks like attachments get removed from emails to the list. Can you put the document in the files section?

Thanks!

==========
Mike Mayer
mwmayer@...
-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Patrick Reynaert
Sent: Wednesday, June 30, 2010 3:03 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Active loop amplifier

Hi Chris,

I don't fully agree with your statement that OPAMPs are not good for active antenna's . I made some active whip amps with a standard FET-input Opamp from AD with very good results regarding linearity.

Enclosed is a document that gives an idea of the results.

Best regards,
Patrick Reynaert

--- On Wed, 6/30/10, Chris Trask <christrask@...> wrote:

> From: Chris Trask <christrask@...>
> Subject: Re: [loopantennas] Active loop amplifier
> To: loopantennas@yahoogroups.com, loopantennas@...m
> Date: Wednesday, June 30, 2010, 3:41 PM
>
> >
> > I'm going to try and assemble something like this:
>
>http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
> > Anybody tried a different amplifier for such loop?
> I've found a
> > nice opamp from Intersil, EL2125 that has amazingly
> low voltage
> > noise and enough bandwidth. Ordered samples today.
> > Any experience here with this or similar parts?
> >
>

> I'm in the process of designing an
> amplifier similar to this that should have better noise and
> IMD performance. The progress of this has been
> hampered by other obligations. I'm using this project
> as a basis for the mechanical design of shielded loops and
> Moebius Strip loops.
>
> Avoid using opamps for active
> antenna design. Despite their low noise and distortion
> specs, they still do not compare with those of discrete
> devices.
>
>
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please
> put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos.
> Upload JPG and GIF into Photos. Please convert BMP or TIF to
> JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
> loopantennas-fullfeatured@yahoogroups.com
>
>
>

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7634. Re: [loopantennas] Re: Active loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-06-30 22:00:52 UTC
From: Chris Trask
Topic: 7629 Message: 7634

>
> I understand that this requires proper analysis, but in my case the design goal
> is not only the wide dynamic range, but the deep null as well. From what I've read
> so far, this requires the loop to be "ideally magnetic", i.e. insensitive to the
> electrical field. This is achieved by using Alford loops, or reducing the amplifier
> input impedance, or both.
>
> Reducing the input impedance requires high open-loop gain and flat phase response
> of the amplifier. I think opamps can be better for this particular application
> (deep null), but again, detailed analysis is required.
>

No, reducing the input impedance has absolutely nothing to do with high open-loop gain. I achieve exceptionally low input impedances with common-base amplifiers using a very simple technique that I patented:

http://www.home.earthlink.net/~christrask/MWSCAS99.pdf

"Common Base Amplifier Linearization Using Augmentation," RF Design, October 1999, pp. 30-34.

"High Efficiency Broadband Linear Push-Pull Power Amplifiers Using Linearity Augmentation," Proceedings of the 2002 International Symposium on Circuits and Systems (ISCAS 2002), 28 May 2002, Phoenix, Arizona, Vol. 2, pp. 432-435.

Common-Base Amplifiers with Linearity Augmentation, US Patent 6,271,721, 7 August 2001.

And it will outperform your monolithic devices any day of the week.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7635. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-01 07:09:41 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7635

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Broadband Whip amplifiers for VLF.pdf
Uploaded by : preynaert <preynaert@...>
Description : a small document about using opamps for active whip antennas

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Broadband%20Whip%20amplifiers%20for%20VLF
.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

preynaert <preynaert@...>

7636. Making a "CLONE" to the RF Systems DX-1 (Mark 2) Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-03 00:19:09 UTC
From: gareywittich2000
Topic: 7636 Message: 7636

Has anybody tried to make their own equivalent RF systems DX-1 Mk 2 Loop antenna ??

I like to build things and see this as a good project.

RECENTLY saw an article about tuning a Loop Antenna using Varactor Diodes (which enables REMOTE TUNING). Looking for Article again but can not find it. Do you know where it was ??

MANY THANKS,

Garey Wittich Santa Monica, CA

7637. Re: [loopantennas] Making a "CLONE" to the RF Systems DX-1 (Mark 2) Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-03 01:17:09 UTC
From: Chris Trask
Topic: 7636 Message: 7637

>
> Has anybody tried to make their own equivalent RF systems DX-1 Mk 2 Loop antenna ??
>
> I like to build things and see this as a good project.
>
> RECENTLY saw an article about tuning a Loop Antenna using Varactor Diodes (which
> enables REMOTE TUNING). Looking for Article again but can not find it. Do you
> know where it was ??
>

You may be refering to this:

http://www.home.earthlink.net/~christrask/Paper011.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7638. Re: [loopantennas] Making a "CLONE" to the RF Systems DX-1 (Mark 2) Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-03 01:18:33 UTC
From: Chris Trask
Topic: 7636 Message: 7638

>
> Has anybody tried to make their own equivalent RF systems DX-1 Mk 2 Loop
> antenna ??
>
> I like to build things and see this as a good project.
>
> RECENTLY saw an article about tuning a Loop Antenna using Varactor Diodes
> (which enables REMOTE TUNING). Looking for Article again but can not
> find it.
>
> Do you know where it was ??
>

You may be refering to this:

http://www.home.earthlink.net/~christrask/Paper011.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7639. Re: [loopantennas] Making a "CLONE" to the RF Systems DX-1 (Mark 2) Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-03 10:49:31 UTC
From: Andy Ikin
Topic: 7636 Message: 7639

Garey Wittich Santa Monica, CA Wrote on July 3.

"Has anybody tried to make their own equivalent RF systems DX-1 Mk 2 Loop antenna ??

I like to build things and see this as a good project.

RECENTLY saw an article about tuning a Loop Antenna using Varactor Diodes (which enables REMOTE TUNING). Looking for Article again but can not find it. Do you know where it was ??

MANY THANKS,

Garey Wittich Santa Monica, CA"

Gary, the RF Systems DX-1 Mk2 is not a loop antenna, the so called crossed loops are a just a capacity hat for an active whip antenna. I believe the reason for the use of the capacity hat was to overcome signal loss due to the use of high input capacitance FET. If you are interested in building active whip antennas join the 2N5160-Antenna group and have look in the files section. I believe that Chris Trask has some designs on his excellent web site.

Chris has already mentioned the Loop Antenna using Varactor Diodes.

I think that Richard (Rick) Karlquist has also written on article on the above, but I can't lay my hands on the web link.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

7640. Re: [loopantennas] Making a "CLONE" to the RF Systems DX-1 (Mark 2) Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-03 14:55:16 UTC
From: Richard (Rick) Karlquist
Topic: 7636 Message: 7640

My National Contest Journal article on loop antennas is available at:

http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf

Rick N6RK

Andy Ikin wrote:
>
> I think that Richard (Rick) Karlquist has also written on article on the
> above, but I can't lay my hands on the web link.
>
> Kind regards
>
> Andrew Ikin
>

7641. Re: [loopantennas] Making a "CLONE" to the RF Systems DX-1 (Mark 2) Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-05 22:05:23 UTC
From: Richard (Rick) Karlquist
Topic: 7636 Message: 7641

Andy Ikin wrote:

>
> I think that Richard (Rick) Karlquist has also written on article on the
> above, but I can't lay my hands on the web link.
>

I have fixed a broken link to this article and fixed an error on
the BOM (SW1).

For the article, see:

http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf

For the Bill of Materials (BOM) and other supplementary technical
details see:

http://www.n6rk.com/forsale/pcboards/loop_antenna.html

This link also tells how to order PC boards, which are still available.

Rick N6RK

7644. New ALA1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-09 19:34:33 UTC
From: Dominique Kremp
Topic: 7644 Message: 7644

Hi all,

There is a new antenna in the Wellbrook catalogue: a re-designed ALA1530 !

http://tinyurl.com/2fkenpp

I could test it and compare it to the "old" version of the ALA1530.

It's very impressive indeed. It has more gain on LW-MW (approx. 10dB and 4dB respectively) and the real improvement is above 9MHz (5dB gain). I'm just hearing RFI at the moment (1930) on 15300KHz. The signal is clear and comfortable with the new version whereas the old one brings out 50% hiss ! Incredible !

Fine antenna indeed !

The new ALA1530L is its sister. It has less gain on LW-MW than the new ALA1530 and the same gain above 9MHz. It should be a good compromise for receiving stations which MW transmitters are close by.

I didn"t test it.

See you

Dominique KREMP

Normandy, France

dominique.kremp@...

-PERSEUS

-IC-R75 + 250Hz CW filters

-AOR7030 Plus + 300Hz CW filter

-Wellbrook antennas

[Non-text portions of this message have been removed]

7646. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 14:03:15 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7646

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Wideband Active Loop Amplifier.pdf
Uploaded by : chris3trask <christrask@...>
Description : High Dynamic Range Active Wideband Loop Amplifier

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Wideband%20Active%20Loop%20Amplifier.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7647. Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 14:08:35 UTC
From: Chris Trask
Topic: 7647 Message: 7647

I just posted the schematic of an amplifier for wideband active loop antennas. The design is complete, and testing shows that OIP3 performance is around +45dBm. I have not yet done a NF test. I will have a full write-up of this design later, and it will include the details for winding the various transformers as well as Mini-Circuits substitutes where suitable.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7648. RE: [loopantennas] Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 14:13:45 UTC
From: Mike Mayer
Topic: 7647 Message: 7648

Chris,

Thanks for posting this. It looks very interesting and I hope to have time later in the year to put one together and do some testing.

==========
Mike Mayer
mwmayer@...
-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: Friday, July 16, 2010 9:09 AM
To: Loop Antennas
Subject: [loopantennas] Wideband Active Loop Amplifier

I just posted the schematic of an amplifier for wideband active loop antennas. The design is complete, and testing shows that OIP3 performance is around +45dBm. I have not yet done a NF test. I will have a full write-up of this design later, and it will include the details for winding the various transformers as well as Mini-Circuits substitutes where suitable.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7649. RE: [loopantennas] Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 14:20:32 UTC
From: Mike Mayer
Topic: 7647 Message: 7649

Chris,

Sorry for the multiple replies, but I don't seem to be able to find the power input on the schematic. Am I overlooking the obvious or is it missing?

Thanks!

==========
Mike Mayer
mwmayer@...

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: Friday, July 16, 2010 9:09 AM
To: Loop Antennas
Subject: [loopantennas] Wideband Active Loop Amplifier

I just posted the schematic of an amplifier for wideband active loop antennas. The design is complete, and testing shows that OIP3 performance is around +45dBm. I have not yet done a NF test. I will have a full write-up of this design later, and it will include the details for winding the various transformers as well as Mini-Circuits substitutes where suitable.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7650. RE: [loopantennas] Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 14:37:15 UTC
From: Chris Trask
Topic: 7647 Message: 7650

>
> > I just posted the schematic of an amplifier for wideband
> > active loop antennas. The design is complete, and testing
> > shows that OIP3 performance is around +45dBm. I have not yet
> > done a NF test. I will have a full write-up of this design
> > later, and it will include the details for winding the various
> > transformers as well as Mini-Circuits substitutes where
> > suitable.
>
>
> Sorry for the multiple replies, but I don't seem to be able to
> find thepower input on the schematic. Am I overlooking the
> obvious or is it missing?
>

Power (+12V to +15V) is supplied by way of the feed cable. I like to have all of my active antenna designs use the cable for power and/or tuning so as to simplify the installation. The PN4416 (Q6) provides noise immunity for the biasing reference and is quieter than using a 3-terminal regulator. Transistor Q5 provides thermal compensation for the biasing point.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7651. RE: [loopantennas] Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 14:58:00 UTC
From: Mike Mayer
Topic: 7647 Message: 7651

Chris,

Thanks. I figured it was something obvious.

==========
Mike Mayer
mwmayer@...

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: Friday, July 16, 2010 9:37 AM
To: loopantennas@yahoogroups.com; loopantennas@yahoogroups.com
Subject: RE: [loopantennas] Wideband Active Loop Amplifier

>
> > I just posted the schematic of an amplifier for wideband
> > active loop antennas. The design is complete, and testing
> > shows that OIP3 performance is around +45dBm. I have not yet
> > done a NF test. I will have a full write-up of this design
> > later, and it will include the details for winding the various
> > transformers as well as Mini-Circuits substitutes where
> > suitable.
>
>
> Sorry for the multiple replies, but I don't seem to be able to
> find thepower input on the schematic. Am I overlooking the
> obvious or is it missing?
>

Power (+12V to +15V) is supplied by way of the feed cable. I like to have all of my active antenna designs use the cable for power and/or tuning so as to simplify the installation. The PN4416 (Q6) provides noise immunity for the biasing reference and is quieter than using a 3-terminal regulator. Transistor Q5 provides thermal compensation for the biasing point.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7652. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 15:41:49 UTC
From: d29602960
Topic: 7647 Message: 7652

Hi Chris and the group,

I just downloaded the schematic of your wideband loop antenna amplifier and at the risk of sounding a little juvenile it looks truly "awsome" with some very interesting features.

The idea of using a low impedance loop antenna with wide bandwidth as a "utility" receiving antenna for general SW and ham listening has been a topic of interest here for some time. The nearest I came to filling these requirements was to adapt a loop design by John (G8CQX) which has served very well for a number of years now.

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

I have been looking for something to replace my version of Johns loop for some time with a view to improving OIP3 performance and linearity in general. Your design looks very exciting and I look forward to trying it out soon.

If I may I should like to ask a couple of questions?

Would I be correct in assuming that because of the negative active feedback that this design will work well with other devices such as 2N3904 or 2N2222 etc?

How "critical" is the layout likely to be? For example, would this design lend itself to "dead bug" style construction over a ground plane providing device leads etc are kept short and direct?

And finally, under the list of components in the schematic the transformers listed as "T5, T7-2:2:1 on T50-6 toroid", should this read "T4, T7" or have I miss-read the diagram?

Thanks for sharing your expertise with the group and I look forward to trying this one out.

73,s to everyone on the list.

Des (M0AYF)

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> I just posted the schematic of an amplifier for wideband active loop antennas. The design is complete, and testing shows that OIP3 performance is around +45dBm. I have not yet done a NF test. I will have a full write-up of this design later, and it will include the details for winding the various transformers as well as Mini-Circuits substitutes where suitable.
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

7653. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 18:23:59 UTC
From: Chris Trask
Topic: 7647 Message: 7653

>
> I have been looking for something to replace my version of Johns loop for
some
> time with a view to improving OIP3 performance and linearity in general.
Your
> design looks very exciting and I look forward to trying it out soon.
>

The goal was to design an amplifier that would equal or exceed the performance of the Wellbrook AL1530, while at the same time keeping the cost down. Many of the passive components (resistors and capacitors) were necessary in order to provide temperature stability without requiring that all five transistors be matched. That would not have bee received well.

>
> Would I be correct in assuming that because of the negative active
feedback
> that this design will work well with other devices such as 2N3904 or
2N2222 etc?
>

First, there is no negative feedback here. Transformers T2, T3, T5, and T6 amplify and invert the error voltage at the emitter and apply it to the base. It's a method I patented called "augmentation". It improves the IMD performance and dramatically decreases the emitter input resistance. I tried other transistors such as the 2N2222 and 2N4401, but the higher gain of the MPS6521 provides about 10dB of OIP3 performance.

>
> How "critical" is the layout likely to be? For example, would this design
lend
> itself to "dead bug" style construction over a ground plane providing
device
> leads etc are kept short and direct?
>

I built the rototype on 1/10" grid board, which you can see in my earlier publications. You can easily cut out the circuit on double-sided PC board material. The circuit was laid out so as to facilitate a one-sided PCB layout with a solid ground plane.

>
> And finally, under the list of components in the schematic the
transformers
> listed as "T5, T7-2:2:1 on T50-6 toroid", should this read "T4, T7" or
have

> I miss-read the diagram?
>

No, that is a mistake on my part. Thank you for pointing that out.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7654. RE: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 19:18:56 UTC
From: Mike Mayer
Topic: 7647 Message: 7654

Chris,

What about the voltage rating for C2, etc.? It says 2V. If they are ceramic is the temperature coefficient important?

Thanks!

==========
Mike Mayer
mwmayer@...

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: Friday, July 16, 2010 1:24 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Wideband Active Loop Amplifier

>
> I have been looking for something to replace my version of Johns loop for some
> time with a view to improving OIP3 performance and linearity in general. Your
> design looks very exciting and I look forward to trying it out soon.
>

The goal was to design an amplifier that would equal or exceed the performance of the Wellbrook AL1530, while at the same time keeping the cost down. Many of the passive components (resistors and capacitors) were necessary in order to provide temperature stability without requiring that all five transistors be matched. That would not have bee received well.

>
> Would I be correct in assuming that because of the negative active feedback
> that this design will work well with other devices such as 2N3904 or 2N2222 etc?
>

First, there is no negative feedback here. Transformers T2, T3, T5, and T6 amplify and invert the error voltage at the emitter and apply it to the base. It's a method I patented called "augmentation". It improves the IMD performance and dramatically decreases the emitter input resistance. I tried other transistors such as the 2N2222 and 2N4401, but the higher gain of the MPS6521 provides about 10dB of OIP3 performance.

>
> How "critical" is the layout likely to be? For example, would this design
lend
> itself to "dead bug" style construction over a ground plane providing
device
> leads etc are kept short and direct?
>

I built the rototype on 1/10" grid board, which you can see in my
earlier publications. You can easily cut out the circuit on double-sided PC
board material. The circuit was laid out so as to facilitate a one-sided
PCB layout with a solid ground plane.

>
> And finally, under the list of components in the schematic the
transformers
> listed as "T5, T7-2:2:1 on T50-6 toroid", should this read "T4, T7" or
have
> I miss-read the diagram?
>

No, that is a mistake on my part. Thank you for pointing that out.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7655. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-16 20:27:33 UTC
From: Chris Trask
Topic: 7647 Message: 7655

>
> What about the voltage rating for C2, etc.? It says 2V. If they are
ceramic
> is the temperature coefficient important?
>

Hmmm... That should have said 25V. Temperature coefficient is not im
portant, but ESR (equivalent series resistance) should be low.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7656. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-17 03:51:03 UTC
From: circlotron
Topic: 7647 Message: 7656

Have you tried anything like the ZTX690B or a FZT491A? The Diodes/Zetex transistors have really impressive Betas, higher power dissipation capability, low resistances and are potentially very low noise. I found one application note about a low noise amplifier (audio) on the Diodes website:
http://www.diodes.com/_files/design_note_pdfs/zetex/dn11.pdf

Both parts have a minimum ft of 150MHz. Cobo is 16pF and 10pF respectively.

Also, what is the target base bias supply voltage? I'm thinking I might want to select the value of R5 to account for part-to-part variation in Q6.

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
> I
> tried other transistors such as the 2N2222 and 2N4401, but the higher gain
> of the MPS6521 provides about 10dB of OIP3 performance.
>

7657. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-17 13:49:31 UTC
From: Chris Trask
Topic: 7647 Message: 7657

>
> Have you tried anything like the ZTX690B or a FZT491A? The
> Diodes/Zetex transistors have really impressive Betas, higher
> power dissipation capability, low resistances and are
> potentially very low noise. I found one application note about
> a low noise amplifier (audio) on the Diodes website:
> http://www.diodes.com/_files/design_note_pdfs/zetex/dn11.pdf
>
> Both parts have a minimum ft of 150MHz. Cobo is 16pF and 10pF
> respectively.
>

Haven't tried either of those. To get the best IMD even when using augmentation, a higher hfe helps. I'm still experimenting with this, trying to get better performance. Yesterday I removed transformer T1 and connected the antenna directly to the Q1 and Q2 emitters, which improved the low frequency performance.

>
> Also, what is the target base bias supply voltage? I'm thinking I
> might want to select the value of R5 to account for part-to-part
> variation in Q6.
>

Supply voltag is 12-15V. I presently have a 100-ohm potenetiometer for R5 so as to see the effects of changing the bias current. Going from 15-20mA has little effect on OIP3.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7658. Re: [loopantennas] Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-17 21:40:09 UTC
From: Andy Ikin
Topic: 7647 Message: 7658

Chris Trask wrote on the July 16.

"I just posted the schematic of an amplifier for wideband active loop antennas. The design is complete, and testing shows that OIP3 performance is around +45dBm. I have not yet done a NF test. I will have a full write-up of this design later, and it will include the details for winding the various transformers as well as Mini-Circuits substitutes where suitable."

Hello Chris,

I have looked at your schematic and I think there are a couple of errors:

The emitters of Q1/Q2 and Q3/Q4 are DC connected via the T1 and T4, so we may have a thermal runaway problem i.e. the transistors are sharing the same RC bias. So I think you need to make sure that each transistor have individual RC bias.

T7 may saturated and cause low frequency IMD as it has the DC power running through the secondary winding. A simple way to avoid this would be to use 1 uF cap to dc isolate the secondary of T7 and feed the dc from the coax via a 470-1000uH choke to T7 centre tap.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

7659. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-18 00:54:50 UTC
From: vbifyz
Topic: 7647 Message: 7659

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:

> The emitters of Q1/Q2 and Q3/Q4 are DC connected via the T1 and T4, so we may
> have a thermal runaway problem i.e. the transistors are sharing the same RC bias. So I think you need to make sure that each transistor
have individual RC bias.

I don't think there will be a thermal runaway, but any mismatch between transistors will result in unequal currents through them, affecting the symmetry of the amplifier.

My question is about the second stage: Chris, do you really want its input impedance to be very low? I think this will result in non-optimal load for the first stage.

Regards,
Mike

7660. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-18 02:52:37 UTC
From: Chris Trask
Topic: 7647 Message: 7660

>
>> The emitters of Q1/Q2 and Q3/Q4 are DC connected via the T1 and T4, so we may
>> have a thermal runaway problem i.e. the transistors are sharing the same RC bias.
>> So I think you need to make sure that each transistor have individual RC bias.
>
>I don't think there will be a thermal runaway, but any mismatch between transistors
> will result in unequal currents through them, affecting the symmetry of the amplifier.
>

Nice thing about the augmentation is that it helps even out any small imbalances between the two transistors. And ensuring good DC balance and avoiding thermal runaway is a fairly simple task that won't require any matching of transistors. It will make the construction of the coupling transformers a bit unusual.

>
>My question is about the second stage: Chris, do you really want its input impedance to
>be very low? I think this will result in non-optimal load for the first stage.
>

Yes, but not necessarily as low as it is as shown in the present schematic. The reason for keeping it low at this point of the design is to determine if the basic configuration will give me the desired high frequency performance. With the upper 3dB limit presently at 45MHz, I can afford to sacrifice some bandwidth at the interstage transformer T4, and the scheme I have in mind will relieve some construction requirements of that transformer. The collector loads presented to Q3 and Q4 by T7 pretty much dominate the high frequency cutoff.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7661. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-18 10:35:04 UTC
From: d29602960
Topic: 7647 Message: 7661

Hi again Chris and the group,

Many thanks for answering my questions about the loop amplifier and for clarification of the "augmentation" function.

Following your posting I re-read your paper "High Efficiency Broadband Linear Push-Pull Power Amplifiers Using Linearity Augmentation," and think I have a better understanding of the circuit funcion now.

http://home.earthlink.net/~christrask/ISCAS02B.pdf

Having said that I suspect more questions may follow when I assemble and test the circuit for the first time :-)

Thanks again.

73,s to all.

Des (M0AYF)

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > I have been looking for something to replace my version of Johns loop for
> some
> > time with a view to improving OIP3 performance and linearity in general.
> Your
> > design looks very exciting and I look forward to trying it out soon.
> >
>
> The goal was to design an amplifier that would equal or exceed the
> performance of the Wellbrook AL1530, while at the same time keeping the cost
> down. Many of the passive components (resistors and capacitors) were
> necessary in order to provide temperature stability without requiring that
> all five transistors be matched. That would not have bee received well.
>
> >
> > Would I be correct in assuming that because of the negative active
> feedback
> > that this design will work well with other devices such as 2N3904 or
> 2N2222 etc?
> >
>
> First, there is no negative feedback here. Transformers T2, T3, T5, and
> T6 amplify and invert the error voltage at the emitter and apply it to the
> base. It's a method I patented called "augmentation". It improves the IMD
> performance and dramatically decreases the emitter input resistance. I

> tried other transistors such as the 2N2222 and 2N4401, but the higher gain
> of the MPS6521 provides about 10dB of OIP3 performance.
>
> >
> > How "critical" is the layout likely to be? For example, would this design
> lend
> > itself to "dead bug" style construction over a ground plane providing
> device
> > leads etc are kept short and direct?
> >
>
> I built the rototype on 1/10" grid board, which you can see in my
> earlier publications. You can easily cut out the circuit on double-sided PC
> board material. The circuit was laid out so as to facilitate a one-sided
> PCB layout with a solid ground plane.
>
> >
> > And finally, under the list of components in the schematic the
> transformers
> > listed as "T5, T7-2:2:1 on T50-6 toroid", should this read "T4, T7" or
> have
> > I miss-read the diagram?
> >
>
> No, that is a mistake on my part. Thank you for pointing that out.
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

7662. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-18 06:09:07 UTC
From: John Kolb
Topic: 7647 Message: 7662

What sort of loop do you see working well with your amp? 1 turn 1
meter diameter unshielded?
Shielded? Larger? Multiturn?

John

At 11:23 AM 7/16/2010, you wrote:

> The goal was to design an amplifier that would equal or exceed the
>performance of the Wellbrook AL1530, while at the same time keeping the cost
>down. Many of the passive components (resistors and capacitors) were
>necessary in order to provide temperature stability without requiring that
>all five transistors be matched. That would not have bee received well.

7663. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-18 14:01:38 UTC
From: Chris Trask
Topic: 7647 Message: 7663

>
>What sort of loop do you see working well with your amp? 1 turn 1
>meter diameter unshielded?
>Shielded? Larger? Multiturn?
>

Among the goals of this design was the need to make it suitable for all forms of magnetic loops, including shielded and Moebius Strip. The Moebius Strip loop presented a drving point in the design as the antenna proper is connected to ground, whereas the antenna proper in a shielded loop is isolated from ground, same as with an unshielded loop.

There is also a strong need to avoid any form of circuitry that would introduce an arbitrary phase shift or amplitude variation, such as matching capacitors for transformer leakage inductance. The untimate goal of the amplifier is for use in an array for wideband interference cancelling and/or electronic steering, and it would be desireable to keep relative phase and amplitude variation between two amplifiers to less than 5 degrees and 0.5dB, respectively. I designed the control head for that a year and a half ago, but a suitable wideband antenna array has been elusive until now.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7664. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-19 16:01:48 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7664

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Reynaert_wideband_active_loop_amplifier.pdf
Uploaded by : preynaert <preynaert@...>
Description : Another wideband loop amplifier based on Chris Trask's patent

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Reynaert_wideband_active_loop_amplifier.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

preynaert <preynaert@...>

7665. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-20 09:47:05 UTC
From: john_9v1vv
Topic: 7647 Message: 7665

Hi Chris,

I would appreciate any comments you may have on this design;

http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.html

It is not an original - the circuit has been around for years.

In my noisy urban and tropical environment I can detect no difference when switching to my ALA 100L-1 amplifier.

Some Finnish hams reported that the design was pretty good in quiet environments compared with the Wellbrook.

I now use both amps on separate loops orientated 90 degs and switch between the two.

73

John / 9 V 1 V V

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> >What sort of loop do you see working well with your amp? 1 turn 1
> >meter diameter unshielded?
> >Shielded? Larger? Multiturn?
> >
>
> Among the goals of this design was the need to make it suitable for all forms of magnetic loops, including shielded and Moebius Strip. The Moebius Strip loop presented a drving point in the design as the antenna proper is connected to ground, whereas the antenna proper in a shielded loop is isolated from ground, same as with an unshielded loop.
>
> There is also a strong need to avoid any form of circuitry that would introduce an arbitrary phase shift or amplitude variation, such as matching capacitors for transformer leakage inductance. The untimate goal of the amplifier is for use in an array for wideband interference cancelling and/or electronic steering, and it would be desireable to keep relative phase and amplitude variation between two amplifiers to less than 5 degrees and 0.5dB, respectively. I designed the control head for that a year and a half ago, but a suitable wideband antenna array has been elusive until now.
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

7666. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-20 13:45:54 UTC
From: Chris Trask
Topic: 7647 Message: 7666

>
>I would appreciate any comments you may have on this design;
>
>http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.html
>
>It is not an original - the circuit has been around for years.
>
>In my noisy urban and tropical environment I can detect no difference
>when switching to my ALA 100L-1 amplifier.
>
>Some Finnish hams reported that the design was pretty good in quiet
>environments compared with the Wellbrook.
>
>I now use both amps on separate loops orientated 90 degs and switch
>between the two.
>

I've seen a number of amplifiers similar to that. The first one that comes to mind is that of the British fellow who has an extensive online presentation of a large loop antenna. Can't recall his name or the URL at the moment, but I'm certain that there are list members who will readily recognize who I'm refering to.

It would be interesting to compare the radiation patterns that result between high input impedance and low input impedance amplifiers used for wideband active loop antenna applications. I suspect that the former approach would deteriorate the null.

One item I find missing from this design is an input BalBal transformer. Such a transformer would serve a number of uses, in particular providing a degree of immunity from common-mode interference such as lightning strikes. It would also provide a ground reference for the antenna proper, and in addition would allow the two transistors to have an identical base voltage. The limiting diodes would be placed across the primary side of the transformer.

I would also disconnect the two emitters, have a separate biasing resistor from each emitter to ground, and then a suitable capacitor between the two emitters. Then the two capacitors from the collectors to the output transformer primary winding can be eliminated. The 1:1 UnUn output transformer could be replaced with a 1:1:1 BalUn, the centre tap of the primary connected to the supply line. This would increase the P1dB a bit plus raise the gain by an additional 6dB.

Chris

7667. RE: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-20 15:05:27 UTC
From: dx11
Topic: 7647 Message: 7667

Hello Chris,

You mean this one?
http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

regards,

Cor Beijersbergen

>>I've seen a number of amplifiers similar to that. The first one that comes to mind is that of the British fellow who has an extensive online presentation of a large loop antenna. Can't recall his name or the URL at the moment, but I'm certain that there are list members who will readily recognize who I'm refering to.<<

7668. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-20 15:24:53 UTC
From: vbifyz
Topic: 7647 Message: 7668

I tried a similar design of my own. Linearity wasn't good, maybe because I only had about 5ma current through each transistor. I could hear products from nearby AM band stations up to 7-10MHz. It was a quick prototype without proper shielding, so it also suffered from instability because of the feedback from the output transformer (on a toroid, not a binocular core) back to the loop.
Nulling wasn't good because of the common mode electrical component pickup.
I guess when properly done, the design can work acceptably.

Mike

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> I would also disconnect the two emitters, have a separate biasing resistor from each emitter to ground, and then a suitable capacitor between the two emitters. Then the two capacitors from the collectors to the output transformer primary winding can be eliminated. The 1:1 UnUn output transformer could be replaced with a 1:1:1 BalUn, the centre tap of the primary connected to the supply line. This would increase the P1dB a bit plus raise the gain by an additional 6dB.
>
> Chris
>

7669. RE: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-20 15:27:37 UTC
From: Chris Trask
Topic: 7647 Message: 7669

```
>
> > I've seen a number of amplifiers similar to that. The first
> > one that comes to mind is that of the British fellow who has
> > an extensive online presentation of a large loop antenna.
> > Can't recall his name or the URL at the moment, but I'm certain
> > that there are list members who will readily recognize who I'm
> > refering to.<<
>
>
>You mean this one?
>http://www.qrss.thersgb.net/active-loop-receiving-antenna.html
>

Yes, that's it exactly.

Chris

Regards,
Chris
```

7670. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-20 15:58:15 UTC
From: Chris Trask
Topic: 7647 Message: 7670

>
> > I would also disconnect the two emitters, have a separate
> > biasing resistor from each emitter to ground, and then a suitable
> > capacitor between the two emitters. Then the two capacitors from
> > the collectors to the output transformer primary winding can be
> > eliminated. The 1:1 UnUn output transformer could be replaced
> > with a 1:1:1 BalUn, the centre tap of the primary connected to
> > the supply line. This would increase the P1dB a bit plus raise
> > the gain by an additional 6dB.
> >
>
> I tried a similar design of my own. Linearity wasn't good, maybe
> because I only had about 5ma current through each transistor. I
> could hear products from nearby AM band stations up to 7-10MHz.
> It was a quick prototype without proper shielding, so it also
> suffered from instability because of the feedback from the output
> transformer (on a toroid, not a binocular core) back to the loop.
> Nulling wasn't good because of the common mode electrical
> component pickup.
> I guess when properly done, the design can work acceptably.
>

IMD is a serious problem for active antennas near broadcast stations. I have a 10kW AM station less than 10 miles from me that can be easily picked up with a scope probe shorted to the ground lead. Common-mode interference suppression dictates using balanced circuitry, even to the point of using twinax cable for the feedline.

Chris

7671. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-20 17:12:32 UTC
From: Paul V Birke PEng
Topic: 7647 Message: 7671

I would replace the 47 ohm emitter resistance with a J310 fet with gate connected to ground to make a nice simple constant current source.

This should improve the signal.

Paul

From: john_9v1vv <couperin@...>
To: loopantennas@yahoogroups.com
Sent: Tue, July 20, 2010 5:47:05 AM
Subject: [loopantennas] Re: Wideband Active Loop Amplifier

Hi Chris,

I would appreciate any comments you may have on this design;

http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.html

[Non-text portions of this message have been removed]

7672. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-20 17:17:31 UTC
From: Paul V Birke PEng
Topic: 7647 Message: 7672

Mike Underhill

From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com; loopantennas@yahoogroups.com
Sent: Tue, July 20, 2010 9:45:54 AM
Subject: Re: [loopantennas] Re: Wideband Active Loop Amplifier

>
>I would appreciate any comments you may have on this design;
>
>http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.html
>
>It is not an original - the circuit has been around for years.
>
>In my noisy urban and tropical environment I can detect no difference
>when switching to my ALA 100L-1 amplifier.
>
>Some Finnish hams reported that the design was pretty good in quiet
>environments compared with the Wellbrook.
>
>I now use both amps on separate loops orientated 90 degs and switch
>between the two.
>

I've seen a number of amplifiers similar to that. The first one that comes to mind is that of the British fellow who has an extensive online presentation of a large loop antenna. Can't recall his name or the URL at the moment, but I'm certain that there are list members who will readily recognize who I'm refering to.

[Non-text portions of this message have been removed]

7673. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-21 04:08:46 UTC
From: john_9v1vv
Topic: 7647 Message: 7673

Thanks Chris

If I get time I will build another with a Bal Bal input as you suggest. First I will probably stick with the conventional long-tailed pair config, perhaps incorporating a constant current source as someone else suggested. At present the current drain is about 30mA in each transistor.

(I always tend to pot my amps because they quickly corrode in the tropics nomatter how careful you are. Although this means once potted never again accessible !)

73

John

> I've seen a number of amplifiers similar to that. The first one that comes to mind is that of the British fellow who has an extensive online presentation of a large loop antenna. Can't recall his name or the URL at the moment, but I'm certain that there are list members who will readily recognize who I'm refering to.
>
> It would be interesting to compare the radiation patterns that result between high input impedance and low input impedance amplifiers used for wideband active loop antenna applications. I suspect that the former approach would deteriorate the null.
>
> One item I find missing from this design is an input BalBal transformer. Such a transformer would serve a number of uses, in particular providing a degree of immunity from common-mode interference such as lightning strikes. It would also provide a ground reference for the antenna proper, and in addition would allow the two transistors to have an identical base voltage. The limiting diodes would be placed across the primary side of the transformer.
>
> I would also disconnect the two emitters, have a separate biasing resistor from each emitter to ground, and then a suitable capacitor between the two emitters. Then the two capacitors from the collectors to the output transformer primary winding can be eliminated. The 1:1 UnUn output transformer could be replaced with a 1:1:1 BalUn, the centre tap of the primary connected to the supply line. This would increase the P1dB a bit plus raise the gain by an additional 6dB.
>
> Chris
>

7674. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-21 12:43:58 UTC
From: Chris Trask
Topic: 7647 Message: 7674

>
> If I get time I will build another with a Bal Bal input as you
> suggest. First I will probably stick with the conventional
> long-tailed pair config, perhaps incorporating a constant
> current source as someone else suggested. At present the
> current drain is about 30mA in each transistor.
>

You'll probably notice an improvement in the IMD performance when you make that change as it will help bring the amplifier into closer balance.

>
> (I always tend to pot my amps because they quickly corrode in
> the tropics nomatter how careful you are. Although this means
> once potted never again accessible !)
>

I was wondering what the purpose of the potting was. Have you considered using stud-mounted insulated heat sinks in place of the radiating fins?

Chris

7675. Re: [loopantennas] Active loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-21 18:18:33 UTC
From: Vahe ohanian
Topic: 7629 Message: 7675

Hello Chris

With your experience should the board be Through Hole design or surface mount

Would the Through hole make a difference in RF ?

I checked quick and MPS6521SM seems not to be available but I did not spend too much time

I will go with through hole design for now since that would be the easiest to make and provide as a kit .. for most.

Vahe

From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com; loopantennas@yahoogroups.com
Sent: Wed, June 30, 2010 8:41:26 AM
Subject: Re: [loopantennas] Active loop amplifier

>
> I'm going to try and assemble something like this:
>http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
> Anybody tried a different amplifier for such loop? I've found a
> nice opamp from Intersil, EL2125 that has amazingly low voltage
> noise and enough bandwidth. Ordered samples today.
> Any experience here with this or similar parts?
>

I'm in the process of designing an amplifier similar to this that should have better noise and IMD performance. The progress of this has been hampered by other obligations. I'm using this project as a basis for the mechanical design of shielded loops and Moebius Strip loops.

Avoid using opamps for active antenna design. Despite their low noise and distortion specs, they still do not compare with those of discrete devices.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

[Non-text portions of this message have been removed]

7676. Re: [loopantennas] Active loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-21 19:44:36 UTC
From: Chris Trask
Topic: 7629 Message: 7676

>
> With your experience should the board be Through Hole design or surface mount
>

I've used both. The transformers, connector, 47uF capacitor, and transistors (plus a snall 10-turn pot used for R5) are all through hole. Everything else is surface mount. There's little to be gained in the way of board space going from a TO-92 to SOT-23 transistor package. There is, however, much to be gained using 1206 capacitors and resistors. I did this in order to get the best cost and performance. There is also a specific need for this to fit inside an electrical conduit fitting, which is far cheaper and stronger than an electrical utility box.

>
> Would the Through hole make a difference in RF ?
>

Not for HF and below.

>
> I checked quick and MPS6521SM seems not to be available but I did not spend
> too much time
>

Another reason for using through hole for that part.

Chris

7677. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-22 13:14:24 UTC
From: d29602960
Topic: 7647 Message: 7677

Hi Chris and the group,

Regarding your recent posting(s) for the active loop amplifier design. I have now obtained some of the MPS6521 devices and intend to proceed with a first attempt at building your design.

Before I begin I should like to ask you a couple of questions and verify a couple of points if I may?

1) Transformers T1, T4 and T7. I propose to use T37-43 cores here with tri-filer windings. Will this type of core be suitable here?

2) I think you hinted in an earlier posting that a single turn loop could be connected between the emitters of Q1 and Q2 such that transformer T1 is no longer required. Are there any serious penalties if this is done?

3) For transformers T2, T3, T5 and T6 I propose to try a pair of matching ferrite beads side-by-side or more of the T37-43 cores listed above. Again using a tri-filar windings suitably connected. Anything to watch out for?

4 and 5) And my final two questions relate to Q5/Q6 in the schematic. I understand the use of Q5 to act as temperature compensation for the base bias supply but I am slightly unsure about the preferable device parameters for Q6. Since I do not have the device specified I would propose to use a J310 or similar. Is this likely to be OK and if so, what Voltage should I expect to see at the junction of R5, R6 and the gate of Q6?

I am hoping to have a prototype built over the w/end and will keep the group posted with the results.

BTW. Chris wrote:
I've seen a number of amplifiers similar to that. The first one that comes to mind is that of the British fellow who has an extensive online presentation of a large loop antenna.
*****

That would be my humble effort which I am hoping your new design will upgrade.

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

Thanks for your postings so far.

73,s to all.

Des (M0AYF)

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> >I would appreciate any comments you may have on this design;

> >
> >http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.html
> >
> >It is not an original - the circuit has been around for years.
> >
> >In my noisy urban and tropical environment I can detect no difference
> >when switching to my ALA 100L-1 amplifier.
> >
> >Some Finnish hams reported that the design was pretty good in quiet
> >environments compared with the Wellbrook.
> >
> >I now use both amps on separate loops orientated 90 degs and switch
> >between the two.
> >
>
> I've seen a number of amplifiers similar to that. The first one that comes to mind is that of the British fellow who has an extensive online presentation of a large loop antenna. Can't recall his name or the URL at the moment, but I'm certain that there are list members who will readily recognize who I'm refering to.
>
> It would be interesting to compare the radiation patterns that result between high input impedance and low input impedance amplifiers used for wideband active loop antenna applications. I suspect that the former approach would deteriorate the null.
>
> One item I find missing from this design is an input BalBal transformer. Such a transformer would serve a number of uses, in particular providing a degree of immunity from common-mode interference such as lightning strikes. It would also provide a ground reference for the antenna proper, and in addition would allow the two transistors to have an identical base voltage. The limiting diodes would be placed across the primary side of the transformer.
>
> I would also disconnect the two emitters, have a separate biasing resistor from each emitter to ground, and then a suitable capacitor between the two emitters. Then the two capacitors from the collectors to the output transformer primary winding can be eliminated. The 1:1 UnUn output transformer could be replaced with a 1:1:1 BalUn, the centre tap of the primary connected to the supply line. This would increase the P1dB a bit plus raise the gain by an additional 6dB.
>
> Chris
>

7678. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-22 13:32:38 UTC
From: Chris Trask
Topic: 7647 Message: 7678

>
>Regarding your recent posting(s) for the active loop amplifier design.
>I have now obtained some of the MPS6521 devices and intend to proceed
>with a first attempt at building your design.
>
>Before I begin I should like to ask you a couple of questions and
>verify a couple of points if I may?
>
>1) Transformers T1, T4 and T7. I propose to use T37-43 cores here
>with tri-filer windings. Will this type of core be suitable here?
>

I would avoid using 43 material, especially for T1 and T4. It is very lossy, especially in low impedance circuitry. I got much better performance with 61 material, especially at low frequencies. You could use 43 material for T7.

>
>2) I think you hinted in an earlier posting that a single turn loop
>could be connected between the emitters of Q1 and Q2 such that
>transformer T1 is no longer required. Are there any serious penalties
>if this is done?
>

I did try that, but then the issue of isolating the bias of the transistors came up and it became a nonviable solution.

>
>3) For transformers T2, T3, T5 and T6 I propose to try a pair of
>matching ferrite beads side-by-side or more of the T37-43 cores
>listed above. Again using a tri-filar windings suitably connected.
>Anything to watch out for?
>

The T37-43 cores would be the better choice. That's fairly high impedance circuitry there so you won't suffer losses as you would for T1 and T4.

>
>4 and 5) And my final two questions relate to Q5/Q6 in the schematic.
>I understand the use of Q5 to act as temperature compensation for the
>base bias supply but I am slightly unsure about the preferable device
>parameters for Q6. Since I do not have the device specified I would
>propose to use a J310 or similar. Is this likely to be OK and if so,
>what Voltage should I expect to see at the junction of R5, R6 and the
>gate of Q6?
>

The PN4416 has superb current stability with changing drain-source voltage (Vds) variations. See my evaluation of JFET devices at:

http://www.home.earthlink.net/~christrask/Paper016.html

You could use other JFETs such as the J310, but your supply noise immunity will degrade. They will, however, serve the purpose of getting the amplifier up and running. You should see about 1.65V at that junction, so that there will be 1.0V at the emitters of Q1 through Q4. It helps to use a 10-turn potentiometer for R6.

Also, I've changed the value of R3 and R4 to 33 ohms. This makes the collector current of Q3 qnd Q4 30mA, which takes full advantage of the collector load impedance of 400 ohms, improving the P1dB by 3dBm and a noticable improvement in the IMD products as you approach saturation.

Chris

7679. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-22 15:39:52 UTC
From: d29602960
Topic: 7647 Message: 7679

Hi again Chris and the group,

Many thanks for your swift and in-depth response to my qestions regarding your loop-amp design.

After reading your reference located at ...

http://www.home.earthlink.net/~christrask/JFET%20Evaluation.pdf

I now understand the significance of the device you used for Q6 and will make renewed efforts to source this device for the final version. I will accept the reduced noise immunity due to the use of a J310 at this stage of testing in order to progress the test build.

Thanks also for your recommendations regarding ferrite types for the transformers.

I look forward to building/testing the loop amplifier antenna combination shortly and will keep everyone posted.

73,s

Des (M0AYF)

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
>
> >
> >Regarding your recent posting(s) for the active loop amplifier design.
> >I have now obtained some of the MPS6521 devices and intend to proceed
> >with a first attempt at building your design.
> >
> >Before I begin I should like to ask you a couple of questions and
> >verify a couple of points if I may?
> >
> >1) Transformers T1, T4 and T7. I propose to use T37-43 cores here
> >with tri-filer windings. Will this type of core be suitable here?
> >
>
> I would avoid using 43 material, especially for T1 and T4. It is very lossy, especially in low impedance circuitry. I got much better performance with 61 material, especially at low frequencies. You could use 43 material for T7.
>
> >
> >2) I think you hinted in an earlier posting that a single turn loop
> >could be connected between the emitters of Q1 and Q2 such that
> >transformer T1 is no longer required. Are there any serious penalties
> >if this is done?

> >
>
> I did try that, but then the issue of isolating the bias of the transistors came up and it became a nonviable solution.
>
> >
> >3) For transformers T2, T3, T5 and T6 I propose to try a pair of
> >matching ferrite beads side-by-side or more of the T37-43 cores
> >listed above. Again using a tri-filar windings suitably connected.
> >Anything to watch out for?
> >
>
> The T37-43 cores would be the better choice. That's fairly high impedance circuitry there so you won't suffer losses as you would for T1 and T4.
>
> >
> >4 and 5) And my final two questions relate to Q5/Q6 in the schematic.
> >I understand the use of Q5 to act as temperature compensation for the
> >base bias supply but I am slightly unsure about the preferable device
> >parameters for Q6. Since I do not have the device specified I would
> >propose to use a J310 or similar. Is this likely to be OK and if so,
> >what Voltage should I expect to see at the junction of R5, R6 and the
> >gate of Q6?
> >
>
> The PN4416 has superb current stability with changing drain-source voltage (Vds) variations. See my evaluation of JFET devices at:
>
> http://www.home.earthlink.net/~christrask/Paper016.html
>
> You could use other JFETs such as the J310, but your supply noise immunity will degrade. They will, however, serve the purpose of getting the amplifier up and running. You should see about 1.65V at that junction, so that there will be 1.0V at the emitters of Q1 through Q4. It helps to use a 10-turn potentiometer for R6.
>
> Also, I've changed the value of R3 and R4 to 33 ohms. This makes the collector current of Q3 qnd Q4 30mA, which takes full advantage of the collector load impedance of 400 ohms, improving the P1dB by 3dBm and a noticable improvement in the IMD products as you approach saturation.
>
> Chris
>

7680. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-23 05:40:20 UTC
From: John Kolb
Topic: 7647 Message: 7680

I have a sack of MPS6521's (TO-92's) picked up at a swap meet years ago.

If anyone needs some, I can give some matched sets of 4.
Matching is done using my handy-dandy Harbor Freight $3.99
multimeter which reads hFE, so it may not be much of a match
but better than a random assortment.

USA addresses only as postage would probably be excessive to
others. Please reply directly to jlkolb@.... No need
to clutter up the group with a bunch of "I want one" messages.

John

At 06:14 AM 7/22/2010, you wrote:
>Hi Chris and the group,
>
>Regarding your recent posting(s) for the active loop amplifier
>design. I have now obtained some of the MPS6521 devices and intend
>to proceed with a first attempt at building your design.

7681. New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-23 11:57:09 UTC
From: cannonmandolin
Topic: 7681 Message: 7681

Greetings all. At the risk of sounding pretty stupid: I've been reading posts and searching around and want to make a loop, but I really don't understand the need for and design of amps/grounds/resistors in the loop, etc.....

I have a longwire and while that is basically understandable, I'm lost when it comes to the need for anything else to make a LOOP function.

Now, I'll stand back while you real experts throw pencil stubs and wire trimmings at me. But, if you mix in some basic facts or links where i can get smarter, I'll be most appreciative.

Thanks! keith

7682. RE: [loopantennas] New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-23 13:27:56 UTC
From: dx11
Topic: 7681 Message: 7682

Hello Keith,

On the web many answers can be found for the questions you may have. For a start you might take a look in the groups archive section.

But getting entrance to a lot (perhaps too much) information is by doing a Google search. You could use the search terms:

Loop antenna

Passive loop vs. Active loop (that is the kind with the resistors, capacitors and transistors!)

Tuned loop vs. Untuned or broadband loop

Single turn loop vs. Multi-turn loop

Box loop, coax loop

When searching for loop antenna thes two came up immediately:

http://www.frontiernet.net/~jadale/Loop.htm

http://www.dxzone.com/catalog/Antennas/Loop/

These will give days of reading, both theory, practical examples and lots of other useful links.

>if you mix in some basic facts or links where i can get smarter, I'll be most appreciative.

Thanks! Keith<

Regards,

Cor Beijersbergen

[Non-text portions of this message have been removed]

7683. Re: New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-23 14:40:58 UTC
From: tenorman1952
Topic: 7681 Message: 7683

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:
>
> Greetings all. At the risk of sounding pretty stupid: I've been reading posts and searching around and want to make a loop, but I really don't understand the need for and design of amps/grounds/resistors in the loop, etc........

Keith, some good reading here:

http://www.hamuniverse.com/n4jaantennabook.html

You need to be careful... one day you'll wake up and find you are a ham.

73
Paul - AE5JU

7684. Re: [loopantennas] New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-23 13:42:55 UTC
From: Steve Ellington
Topic: 7681 Message: 7684

Good question and I wonder if anyone has seen a book dedicated to loops? Information is spotty at best.

Steve
N4LQ
----- Original Message -----
From: cannonmandolin
To: loopantennas@yahoogroups.com
Sent: Friday, July 23, 2010 7:57 AM
Subject: [loopantennas] New to SWL, trying to learn

Greetings all. At the risk of sounding pretty stupid: I've been reading posts and searching around and want to make a loop, but I really don't understand the need for and design of amps/grounds/resistors in the loop, etc.....

I have a longwire and while that is basically understandable, I'm lost when it comes to the need for anything else to make a LOOP function.

Now, I'll stand back while you real experts throw pencil stubs and wire trimmings at me. But, if you mix in some basic facts or links where i can get smarter, I'll be most appreciative.

Thanks! keith

[Non-text portions of this message have been removed]

7685. Re: New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-23 14:45:34 UTC
From: cannonmandolin
Topic: 7681 Message: 7685

Thanks, Cor. Let's see.....days of reading and nights of sitting with the phones on my head......yup, that'll just about do it.
--- In loopantennas@yahoogroups.com, "dx11" <dx11@...> wrote:
>
> Hello Keith,
>
> On the web many answers can be found for the questions you may have. For a
> start you might take a look in the groups archive section.
>
>
>
> But getting entrance to a lot (perhaps too much) information is by doing a
> Google search. You could use the search terms:
>
>
>
> Loop antenna
>
> Passive loop vs. Active loop (that is the kind with the resistors,
> capacitors and transistors!)
>
> Tuned loop vs. Untuned or broadband loop
>
> Single turn loop vs. Multi-turn loop
>
> Box loop, coax loop
>
>
>
> When searching for loop antenna thes two came up immediately:
>
>
>
> http://www.frontiernet.net/~jadale/Loop.htm
>
>
>
> http://www.dxzone.com/catalog/Antennas/Loop/
>
>
>
> These will give days of reading, both theory, practical examples and lots of
> other useful links.
>
>

>
>
>
> >if you mix in some basic facts or links where i can get smarter, I'll be
> most appreciative.
>
>
>
> Thanks! Keith<
>
>
>
> Regards,
>
>
>
> Cor Beijersbergen
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7686. Re: [loopantennas] New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-23 17:50:30 UTC
From: Christopher E. Brown
Topic: 7681 Message: 7686

On Fri, 23 Jul 2010, cannonmandolin wrote:

> Greetings all. At the risk of sounding pretty stupid: I've been reading posts and searching around and want to make a loop, but I really don't understand the need for and design of amps/grounds/resistors in the loop, etc.....
>
> I have a longwire and while that is basically understandable, I'm lost when it comes to the need for anything else to make a LOOP function.
>
> Now, I'll stand back while you real experts throw pencil stubs and wire trimmings at me. But, if you mix in some basic facts or links where i can get smarter, I'll be most appreciative.
>
> Thanks! keith

The first thing about small loop is the pattern. A figure 8 with deep nulls off the sides that can be pointed at any bothersome noise sources.

The pattern only holds if the loop is balanced. There are a number of factors there, including physical proximity to things, shielded vs unshielded, matching methods, feed methods (all these can unbalance the loop).

Then there is selectivity, a small tuned loop is very narrow band. Can be built fixed tune, or with a variable capaciter. May be air variable tune by hand on side, remote tune by moror, or even remote via voltage if varactor. An untuned loop is wideband (no tuning).

The tradeoff here is signal strength. Loops are not high gain, the untuned loop is low output across the range. You may be using a nice receiver with very good internal pre-amps, or you may need to use an external pre-amp to get the signal up to the point your receiver is happy. With an untuned loop, you are taking everything equal, and amping and are more likely to have receiver overload issues due to strong local stations. With a tuned loop, you get a much higher (but still low) level on the tuned segment, and the rest of the loops range is much weaker. Tends to make overload less of an issue.

My 2c, I favor a varactor tuned shielded loop without pre-amp.

My reasons...

I am a HAM, so I already have multiple receivers with front ends much better than anything but the absolute best desktop or rackmount high end high $$$ SW receivers I have ever seen. I have good resistance to front end overload and multiple onboard pre-amps if needed, and receivers that will happily produce clean audio on signals so week the needle doesn't

move even with both pre-amps kicked in (provided there is a good S/N).

Shielded because it helps decouple from the environ and makes it easier to maintain balance (and the pattern). I am in a fairly urban environ, and plan to aim the null along the path of my street, putting the top dozen local noise sources in the null.

Tuned for better S/N, with my tuned segment 10 - 20db up from the out of tune background (should help with preventing overload from very strong local stations if I use the pre-amps, I have at least a dozen local stations that are S9+60 with pre-amps off and 18db atten on my main antenna)

Varactor tuned, so that I can control the tuning from the shack, with the actual loop sitting out behind the house.

7687. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-24 13:10:58 UTC
From: Lex Luthor
Topic: 7647 Message: 7687

To Chris Trask:
What is the measured gain, NF and OIP2 of your new loop amp?

73
Lex

From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com; loopantennas@yahoogroups.com
Sent: Thu, July 22, 2010 7:32:38 AM
Subject: Re: [loopantennas] Re: Wideband Active Loop Amplifier

>
>Regarding your recent posting(s) for the active loop amplifier design.
>I have now obtained some of the MPS6521 devices and intend to proceed
>with a first attempt at building your design.
>
>Before I begin I should like to ask you a couple of questions and
>verify a couple of points if I may?
>
>1) Transformers T1, T4 and T7. I propose to use T37-43 cores here
>with tri-filer windings. Will this type of core be suitable here?
>

I would avoid using 43 material, especially for T1 and T4. It is very lossy, especially in low impedance circuitry. I got much better performance with 61 material, especially at low frequencies. You could use 43 material for T7.

>
>2) I think you hinted in an earlier posting that a single turn loop
>could be connected between the emitters of Q1 and Q2 such that
>transformer T1 is no longer required. Are there any serious penalties
>if this is done?
>

I did try that, but then the issue of isolating the bias of the transistors came up and it became a nonviable solution.

>
>3) For transformers T2, T3, T5 and T6 I propose to try a pair of
>matching ferrite beads side-by-side or more of the T37-43 cores
>listed above. Again using a tri-filar windings suitably connected.
>Anything to watch out for?
>

The T37-43 cores would be the better choice. That's fairly high impedance circuitry there so you won't suffer losses as you would for T1 and T4.

>
>4 and 5) And my final two questions relate to Q5/Q6 in the schematic.
>I understand the use of Q5 to act as temperature compensation for the
>base bias supply but I am slightly unsure about the preferable device
>parameters for Q6. Since I do not have the device specified I would
>propose to use a J310 or similar. Is this likely to be OK and if so,
>what Voltage should I expect to see at the junction of R5, R6 and the
>gate of Q6?
>

The PN4416 has superb current stability with changing drain-source voltage (Vds) variations. See my evaluation of JFET devices at:

http://www.home.earthlink.net/~christrask/Paper016.html

You could use other JFETs such as the J310, but your supply noise immunity will degrade. They will, however, serve the purpose of getting the amplifier up and running. You should see about 1.65V at that junction, so that there will be 1.0V at the emitters of Q1 through Q4. It helps to use a 10-turn potentiometer for R6.

Also, I've changed the value of R3 and R4 to 33 ohms. This makes the collector current of Q3 qnd Q4 30mA, which takes full advantage of the collector load impedance of 400 ohms, improving the P1dB by 3dBm and a noticable improvement in the IMD products as you approach saturation.

Chris

[Non-text portions of this message have been removed]

7688. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-24 14:57:37 UTC
From: Chris Trask
Topic: 7647 Message: 7688

>
>What is the measured gain, NF and OIP2 of your new loop amp?
>

Gain is presently 24dB. Haven't had the time to do the NF and OIP2 measurements, and the OIP3 is down in the spectrum analyzer noise. I need to set up an IMD bridge test setup to do the OIP2 and OIP3. Too many other unavoidable obligations getting in the way.

Chris

Regards,
Chris

7689. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-25 13:10:02 UTC
From: circlotron
Topic: 7647 Message: 7689

Chris,

I've been doing some SPICE simulations of the DC bias conditions using slightly mismatched transistors. At DC the bases and emitters of Q1-Q2 and Q3-Q4 are in parallel. For a Q1-Q2 Vbe mismatch of 11mV I get collector currents of 45mA and 27mA for Q1-Q2.

If the Q1, Q2, Q3 and Q4 bases are fed through four individual 2.2k resistors from the positive terminal of C16 I now get collector currents of 29mA and 31mA for the same mismatch. Probably C5, C6, C12 and C13 would need to be increased after this modification. I don't think this would degrade matching and might actually improve power supply rejection.

While augmentation minimizes errors due to transistor mismatch it seems that better bias point matching can only improve things further.

7690. Re: [loopantennas] Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-25 17:58:07 UTC
From: Chris Trask
Topic: 7647 Message: 7690

>
> I've been doing some SPICE simulations of the DC bias conditions using
> slightly mismatched transistors. At DC the bases and emitters of Q1-Q2 and
> Q3-Q4 are in parallel. For a Q1-Q2 Vbe mismatch of 11mV I get collector
> currents of 45mA and 27mA for Q1-Q2.
>
> If the Q1, Q2, Q3 and Q4 bases are fed through four individual 2.2k
> resistors from the positive terminal of C16 I now get collector currents
> of 29mA and 31mA for the same mismatch. Probably C5, C6, C12 and C13 would
> need to be increased after this modification. I don't think this would
> degrade matching and might actually improve power supply rejection.
>
> While augmentation minimizes errors due to transistor mismatch it seems
> that better bias point matching can only improve things further.
>

Thank you for that input. I solved the matching problem by way of rearranging the windings on T1 and T4 in a way that does not add any additional components and which simplifies the construction of T1, T4, and T7. I'm presently working on a full writeup of this design and I should have that plus the needed NF, OIP3, OIP2, and P1dB measurements completed by the end of this week.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7691. antenna question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-25 19:40:21 UTC
From: Keith Davis
Topic: 7681 Message: 7691

Paul, there is some Ham DNA in the family. My dad was WB9YWL for decades. My older bro. is an inactive ham. I don't know if my wife will let me have another real hobby.
  OK......on with the stupid beginner questions, if you can take a minute and help me out I'll appreciate it. I have this shiny new ATS 909 and want to make a loop antenna for SWL late at night when i should be sleeping. I have the Sangean wind - up longwire strung across the bedroom ceiling now and my popularity index is falling by the day. Further, if a loop could be made that would sit behind the window blinds and pull in some more stations that would be fun.
Now, is there a design that a violinmaker could build with found materials? i can cough up some wire, perhaps a switch or two, any sort of frame needed and some discreet components like capacitors and resistors salvaged off old PC boards from old, dead electronics, etc.

I'm betting that there is more to a loop than just winding a loop. Right? I've been looking at the Kaito loop available different places but I'd rather not have to come up with the $40 or so to get one......unless it is NECESSARY.
Further, i have poked around online looking for and at loop designs but most of them seem to be for rather specific bands and needing very specific components.
So......if you can point me in the right direction i'll really appreciate it. Wish i could ask my Dad but he's been gone three years now. Thanks, keith

--- On Fri, 7/23/10, tenorman1952 <tenorman1952@...> wrote:

From: tenorman1952 <tenorman1952@...>
Subject: [loopantennas] Re: New to SWL, trying to learn
To: loopantennas@yahoogroups.com
Date: Friday, July 23, 2010, 9:40 AM

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:

>

> Greetings all. At the risk of sounding pretty stupid: I've been reading posts and searching around and want to make a loop, but I really don't understand the need for and design of amps/grounds/resistors in the loop, etc........

Keith, some good reading here:

http://www.hamuniverse.com/n4jaantennabook.html

You need to be careful... one day you'll wake up and find you are a ham.

73

Paul - AE5JU

[Non-text portions of this message have been removed]

7692. Re: antenna question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-26 15:31:40 UTC
From: tenorman1952
Topic: 7681 Message: 7692

For the AM broadcast band:

http://www.mtmscientific.com/loop.html

If you have a ferrite bar antenna in your radio, you need no other connection, just orient the antenna with the radio for best reception. If you have Ant and Gnd connections for an external antenna, which is what I need with my stereo gear tuners, you will need to add a pickup loop to the antenna. What I did was drill 1/16" holes about 1/2" in from the ends of each of the four arms, and ran wire through them to make a one turn loop, and connected the ends to a pair of binding posts (visible in the photo).

Connection can by by 300 ohm twinlead, twisted pair or coax.

This is my actual antenna in the photo:

http://www.mtmscientific.com/amcust.html

For SW, I did not build the kit from MTM, but built one just like it from parts around the shop.

http://www.mtmscientific.com/swloop.html

Also, if you have a SO-239 socket on your radio you can make a pickup loop from a piece of coax by forming the end of the coax (RG-58 or RG-6 is just fine) into a loop 10" - 12" diameter, and soldering the center connection from the tip back to the shield.

73
Paul - AE5JU

--- In loopantennas@yahoogroups.com, Keith Davis <cannonmandolin@...> wrote:
>
> Paul, there is some Ham DNA in the family. Â My dad was WB9YWL for decades. Â My older bro. is an inactive ham. Â Â I don't know if my wife will let me have another real hobby. Â Â OK......on with the stupid beginner questions, if you can take a minute and help me out I'll appreciate it. Â Â I have this shiny new ATS 909 and want to make a loop antenna for SWL late at night when i should be sleeping. Â I have the Sangean wind - up longwire strung across the bedroom ceiling now and my popularity index is falling by the day. Â Further, if a loop could be made that would sit behind the window blinds and pull in some more stations that would be fun. Â Â
> Now, is there a design that a violinmaker could build with found materials? Â i can cough up some wire, perhaps a switch or two, any sort of frame needed and some discreet components like capacitors and resistors salvaged off old PC boards from old, dead electronics, etc. Â Â
> I'm betting that there is more to a loop than just winding a loop. Â Right? Â I've been looking at the Kaito loop available different places but I'd rather not have to come up with the $40 or so to get one......unless it is NECESSARY. Â Â
> Further, i have poked around online looking for and at loop designs but most of them seem

to be for rather specific bands and needing very specific components. Â
> So......if you can point me in the right direction i'll really appreciate it. Â Wish i could ask my Dad but he's been gone three years now. Â Thanks, keith
>
> --- On Fri, 7/23/10, tenorman1952 <tenorman1952@...> wrote:
>
> From: tenorman1952 <tenorman1952@...>
> Subject: [loopantennas] Re: New to SWL, trying to learn
> To: loopantennas@yahoogroups.com
> Date: Friday, July 23, 2010, 9:40 AM
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Â
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> --- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@> wrote:
>
> >
>
> > Greetings all. At the risk of sounding pretty stupid: I've been reading posts and searching around and want to make a loop, but I really don't understand the need for and design of amps/grounds/resistors in the loop, etc........
>
>
>
> Keith, some good reading here:

> http://www.hamuniverse.com/n4jaantennabook.html
>
> You need to be careful... one day you'll wake up and find you are a ham.
>
> 73
>
> Paul - AE5JU
>
> [Non-text portions of this message have been removed]
>

7693. Re: New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-26 17:39:51 UTC
From: tenorman1952
Topic: 7681 Message: 7693

http://www.universal-radio.com/catalog/books/0016.html

Joe Carr's Loop Antenna Handbook.

73
Paul - AE5JU

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> Good question and I wonder if anyone has seen a book dedicated to loops? Information is spotty at best.
>
> Steve
> N4LQ
> ----- Original Message -----
> From: cannonmandolin
> To: loopantennas@yahoogroups.com
> Sent: Friday, July 23, 2010 7:57 AM
> Subject: [loopantennas] New to SWL, trying to learn
>
>
>
> Greetings all. At the risk of sounding pretty stupid: I've been reading posts and searching around and want to make a loop, but I really don't understand the need for and design of amps/grounds/resistors in the loop, etc........
>
> I have a longwire and while that is basically understandable, I'm lost when it comes to the need for anything else to make a LOOP function.
>
> Now, I'll stand back while you real experts throw pencil stubs and wire trimmings at me. But, if you mix in some basic facts or links where i can get smarter, I'll be most appreciative.
>
> Thanks! keith
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7694. Re: [loopantennas] Re: New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-27 17:41:40 UTC
From: Stephen McAdam
Topic: 7681 Message: 7694

Paul
I looked on Amazon.co.uk

http://www.amazon.co.uk/Joe-Carrs-loop-antenna-handbook/dp/188212328X/ref=sr_1_1?ie=UTF8&s=books&qid=1280252248&sr=1-1

But it is a tad pricey at ?229.90 ! - I hope it's just a typo on their part.

regards
Steve, g4vbd
On Mon, Jul 26, 2010 at 6:39 PM, tenorman1952 <tenorman1952@...>wrote:

>
>
>
>
> http://www.universal-radio.com/catalog/books/0016.html
>
> Joe Carr's Loop Antenna Handbook.
>
> 73
> Paul - AE5JU
>
>
>
> >
>
>
>

[Non-text portions of this message have been removed]

7695. Re: New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-28 15:45:14 UTC
From: cam_ont
Topic: 7681 Message: 7695

Try here its FREE good site with alot of information.
http://www.dxzone.com/

--- In loopantennas@yahoogroups.com, Stephen McAdam <steve.g4vbd@...> wrote:
>
> Paul
> I looked on Amazon.co.uk
>
> http://www.amazon.co.uk/Joe-Carrs-loop-antenna-handbook/dp/188212328X/ref=sr_1_1?ie=UTF8
&s=books&qid=1280252248&sr=1-1
>
> But it is a tad pricey at £229.90 ! - I hope it's just a typo on their part.
>
> regards
> Steve, g4vbd
> On Mon, Jul 26, 2010 at 6:39 PM, tenorman1952 <tenorman1952@...>wrote:
>
> >
> >
> >
> >
> > http://www.universal-radio.com/catalog/books/0016.html
> >
> > Joe Carr's Loop Antenna Handbook.
> >
> > 73
> > Paul - AE5JU
> >
> >
> >
> > >
> >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

7696. Re: New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-28 19:46:11 UTC
From: tenorman1952
Topic: 7681 Message: 7696

> Paul
> I looked on Amazon.co.uk
>
> http://www.amazon.co.uk/Joe-Carrs-loop-antenna-handbook/dp/188212328X/ref=sr_1_1?ie=UTF8&s=books&qid=1280252248&sr=1-1
>
> But it is a tad pricey at £229.90 ! - I hope it's just a typo on their part.
>
> regards
> Steve, g4vbd

Yikes!!! My link showed it at $16.50 at Universal Radio. If you can't order from them, I'd be glad to get it and ship it for you.

73
Paul - AE5JU

7697. Re: New to SWL, trying to learn

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-07-29 11:43:48 UTC
From: cannonmandolin
Topic: 7681 Message: 7697

You guys are just the best. I'm going to need to put the honey-do list on the shelf for a couple of evenings, just to digest the responses here. THANKS!!Keith

7698. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-01 16:48:03 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7698

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Wideband Active Loop Amplifier.pdf
Uploaded by : chris3trask <christrask@...>
Description : New! Improved!

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Wideband%20Active%20Loop%20Amplifier.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7699. Wideband Active Loop Antenna Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-01 16:57:02 UTC
From: Chris Trask
Topic: 7699 Message: 7699

I just uploaded a schematic and parts list for the wideband active loop amplifier that I've been working on. A number of changes were needed, especially at the input end, and this project is nearing completion. There will be a full writeup shortly. I've yet to measure the NF, and I want to machine a metal conduit body to mount it in.

Some of the performance is less than initially desired, but overall this has come out pretty nicely. Input impedance is 2.25 ohms (balanced), OIP2 is +80dBm, and OIP3 is +40dBm, all measured at 10MHz. Voltage gain is +30dBv. Power supply is 12-15V at 125mA.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7700. Dragon curve antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-01 18:02:44 UTC
From: jpopelish
Topic: 7700 Message: 7700

The dragon curve
http://en.wikipedia.org/wiki/Dragon_curve
is not a loop antenna, but this is one of the best antenna groups I know of, so I thought I would ask here.

I was thinking of antenna structures that would not exhibit sharp resonances (unlike tunes loop antennas) but would have an extended low frequency response relative to its physical size (comparable to loop antennas). and the dragon curve came to mind. Way back in my Commodore 64 days, I wrote a program that drew this curve with arcs, instead of straight line segments, so that the curve did not touch itself at the corners. I have often wondered what would be the radiation pattern of such a conductor.

The 4 curve tiling
http://upload.wikimedia.org/wikipedia/commons/0/0d/Dragon_tiling1.svg
seems (to me, intuitively) especially promising as a circular polarized antenna if the sections were fed with 90 degree phase shifted signals.

I found a patent on fractal antennas, but the test data is not very detailed, nor is there much in the way of theoretical insight.
http://www.faqs.org/patents/app/20090207087
http://www.google.com/patents/about?id=jtnJAAAAEBAJ&dq=fractal+antenna+dragon+curve

Has anyone, here, any experience with the radiation pattern and other properties of such fractal antennas?

--
Regards,

John Popelish

7701. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-02 23:31:31 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7701

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Wideband Loop Antenna Amplifier.pdf
Uploaded by : chris3trask <christrask@...>
Description : High Dynamic Range Amplifier for Active Loop Antennas

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Wideband%20Loop%20Antenna%20Amplifier.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7702. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 13:45:59 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7702

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Wideband Loop Antenna Amplifier RevA.pdf
Uploaded by : chris3trask <christrask@...>
Description : High Dynamic Range Amplifier for Active Loop Antennas

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Wideband%20Loop%20Antenna%20Amplifier%20RevA.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7703. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 14:21:42 UTC
From: d29602960
Topic: 7703 Message: 7703

Hi Chris and the group,

I just downloaded your lates files from the "files" section of this group but each time I download and/or open the pdf files I get the following error...

"Error opening pdf file"

All your previous files including those on your web pages download/open without error. I wonder, have you changed the software you use to create pdf files recently?

73,s to all.

Des. (M0AYF)

7704. RE: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 14:25:59 UTC
From: dx11
Topic: 7703 Message: 7704

I had the same problem.

Cor Beijersbergen

I just downloaded your lates files from the "files" section of this group
but each time I download and/or open the pdf files I get the following
error...

"Error opening pdf file"

7705. Re: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 14:31:10 UTC
From: Chris Trask
Topic: 7703 Message: 7705

>
> I just downloaded your lates files from the "files" section of
> this group but each time I download and/or open the pdf files
> I get the following error...
>
> "Error opening pdf file"
>
> All your previous files including those on your web pages
> download/open without error. I wonder, have you changed the
> software you use to create pdf files recently?
>

I compiled that corrected version on my laptop, which has Adobe Acrobat 6.0, and which creates a 5.0 compatible file. My desk computer has 4.0, which creates a 3.0 compatible file that I much prefer. I'll compile it again when I return home.

Chris

7706. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 14:43:57 UTC
From: d29602960
Topic: 7703 Message: 7706

Hi again Chris and the group,

Chris wrote:
My desk computer has 4.0, which creates a 3.0 compatible file that I much prefer. I'll compile it again when I return home.
*****

Many thanks Chris and I look forward to reading the update.

73,s

Des.

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > I just downloaded your lates files from the "files" section of
> > this group but each time I download and/or open the pdf files
> > I get the following error...
> >
> > "Error opening pdf file"
> >
> > All your previous files including those on your web pages
> > download/open without error. I wonder, have you changed the
> > software you use to create pdf files recently?
> >
>
> I compiled that corrected version on my laptop, which has Adobe Acrobat 6.0, and which creates a 5.0 compatible file. My desk computer has 4.0, which creates a 3.0 compatible file that I much prefer. I'll compile it again when I return home.
>
> Chris
>

7707. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 15:59:30 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7707

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Wideband Loop Antenna Amplifier RevA.pdf
Uploaded by : chris3trask <christrask@...>
Description : High Dynamic Range Amplifier for Active Loop Antennas

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Wideband%20Loop%20Antenna%20Amplifier%20RevA.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

chris3trask <christrask@...>

7708. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 16:27:06 UTC
From: greenfruit2002
Topic: 7703 Message: 7708

Hi,

Foxit READER (free) opens the pdf here without any problem.

73,
Kjell PB3SM - SM6CPI

--- In loopantennas@yahoogroups.com, "d29602960" <d29602960@...> wrote:
>
> Hi Chris and the group,
>
> I just downloaded your lates files from the "files" section of this group but each time I download and/or open the pdf files I get the following error...
>
> "Error opening pdf file"
>
> All your previous files including those on your web pages download/open without error. I wonder, have you changed the software you use to create pdf files recently?
>
> 73,s to all.
>
> Des. (M0AYF)
>

7709. Re: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 17:43:30 UTC
From: Chris Trask
Topic: 7703 Message: 7709

>
> Foxit READER (free) opens the pdf here without any problem.
>

I uploaded a new copy about an hour ago that was compiled with Acrobat
4.0, so it shouldn't be a problem now.

Chris

7710. Re: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 18:09:02 UTC
From: brian nsl
Topic: 7703 Message: 7710

Chris,
Thank you for the ' reconfiguration ', opened no trouble this time
both with Foxit and Adobe.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Chris Trask
To: loopantennas@yahoogroups.com
Sent: Tuesday, August 03, 2010 6:43 PM
Subject: Re: [loopantennas] Re: New file uploades to loopantennas.

[Non-text portions of this message have been removed]

7711. Re: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 15:50:37 UTC
From: brian nsl
Topic: 7703 Message: 7711

Des,
Like you I tried to access the article via the files menu,each and every one
came up, ' the requested document is not available ' ' !!!!!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: d29602960
To: loopantennas@yahoogroups.com
Sent: Tuesday, August 03, 2010 3:43 PM
Subject: [loopantennas] Re: New file uploades to loopantennas.

[Non-text portions of this message have been removed]

7712. Re: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 18:18:39 UTC
From: Chris Trask
Topic: 7703 Message: 7712

```
>
> Thank you for the ' reconfiguration ', opened no trouble this time
> both with Foxit and Adobe.
>

Good. Wish I could solve every problem that easily. :{)

Chris
```

7713. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-03 21:17:49 UTC
From: Paul
Topic: 7703 Message: 7713

--- In loopantennas@yahoogroups.com, "greenfruit2002" <strom.lime@...> wrote:
>
> Hi,
>
> Foxit READER (free) opens the pdf here without any problem.
>
> 73,
> Kjell PB3SM - SM6CPI
>

A few caveats on Foxit:
http://download.cnet.com/Foxit-Reader/3000-10743_4-10313206.html

7714. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-04 08:27:25 UTC
From: d29602960
Topic: 7703 Message: 7714

Hi again Chris, Brian, Paul and greenfruit2002,

Thanks for the re-compiling the "Wideband Loop Antenna Amplifier RevA" doc. It now opens up with no problems.

BTW I use Sumatra pdf reader here, its less "bloated" than Acrobat and no "search bars" or spyware etc. Been using it for about 18 months, no problems except for opening pdf's compiled using the latest Adobe products.

73,s

Des (M0AYF)

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Thank you for the ' reconfiguration ', opened no trouble this time
> > both with Foxit and Adobe.
> >
>
> Good. Wish I could solve every problem that easily. :{)
>
> Chris
>

7715. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-04 09:47:04 UTC
From: d29602960
Topic: 7703 Message: 7715

Hi again Chris,

I just read the write-up on the broad band loop amplifier, its very detailed and very clear. it looks as though a good deal of work was involved. I would like to ask a couple of questions relating to the design if I may?

The input inductor (L2), would an T37-61 core be a suitable substitute for L2 with 4 turns bi-filer?

Neglecting C1/L1 in the revised design for the moment, how much difference in performance results from the use of L2 in the newer design as compared to the trasformer input (similar to T3 and T6) of the earlier design?

And finally, just out of curiosity how long does it take to prepare a write-up such as this?

73,

Des (M0AYF)

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Foxit READER (free) opens the pdf here without any problem.
> >
>
> I uploaded a new copy about an hour ago that was compiled with Acrobat
> 4.0, so it shouldn't be a problem now.
>
> Chris
>

7716. Re: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-04 13:24:59 UTC
From: Chris Trask
Topic: 7703 Message: 7716

>
> The input inductor (L2), would an T37-61 core be a suitable
> substitute for L2 with 4 turns bi-filer?
>

You can, but the inductance will be much higher due to the higher permeability and size of the core. With larger capacitors for C2 and C3 you can extend the frequency range down to 250kHz, at which time the coupling of T3 dictates the roll-off.

>
> Neglecting C1/L1 in the revised design for the moment, how much
> difference in performance results from the use of L2 in the newer
> design as compared to the trasformer input (similar to T3 and T6)
> of the earlier design?
>

Quite a bit, actually. In the original design the input transformer became configured like the present T3. The input impedance was far too high to be suitable for use with a loop, so I conceded to using the coupling capacitors, which was simpler and less expensive that using a 1:1:1:1 transformer.

I should mention that L1 can be very easily realized by twisting the wires from the SO-239 connectors to the board for 2-3 turns and then slipping a small toroid or two over that. Really cheap, but provides the same function.

>
> And finally, just out of curiosity how long does it take to prepare
> a write-up such as this?
>

All together, about a full day. As I go from one write-up to another I borrow portions of previous ones, such as the early section on loop antenna impedance and the following portion on passive augmentation. Some things need to be repeated so that each write-up stands by itself.

Chris

Regards,
Chris

7717. Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-05 01:21:47 UTC
From: cannonmandolin
Topic: 7717 Message: 7717

I can get a used variable condenser from an old radio, but it is one of the small ones with leaves of polyethylene between the metal plates. Can this be used in making a tuned loop? most specs call for an "air capacitor", but in salvage terms, at least in my life and work, they are quite rare.

I can see now that actually listening to the radio and keeping a log is just a small part of the whole picture, and perhaps a larger part is planning for, talking about, reading up and then actually building an antenna. heh heh heh So, it's about like fly fishing in that the fly tying, reel lube, rod building, wader fixing, etc far outweighs the time we are allowed to spend on the stream.

keith

7718. Re: [loopantennas] Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-05 05:09:37 UTC
From: kevin asato
Topic: 7717 Message: 7718

Short answer is YES.
The amount and type of insulation will really come into play when you are using the variable capacitor in a transmitter tank or antenna impedance match circuit. The insulation (air gap or poly) will set the amount of voltage that can be handled by the capacitor before breakdown/arcing occurs.
73,kevinkc6pob

--- On Wed, 8/4/10, cannonmandolin <cannonmandolin@...> wrote:

From: cannonmandolin <cannonmandolin@...>
Subject: [loopantennas] Salvaged Variable Condenser?
To: loopantennas@yahoogroups.com
Date: Wednesday, August 4, 2010, 6:21 PM

I can get a used variable condenser from an old radio, but it is one of the small ones with leaves of polyethylene between the metal plates. Can this be used in making a tuned loop? most specs call for an "air capacitor", but in salvage terms, at least in my life and work, they are quite rare.

I can see now that actually listening to the radio and keeping a log is just a small part of the whole picture, and perhaps a larger part is planning for, talking about, reading up and then actually building an antenna. heh heh heh So, it's about like fly fishing in that the fly tying, reel lube, rod building, wader fixing, etc far outweighs the time we are allowed to spend on the stream.

keith

[Non-text portions of this message have been removed]

7719. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-05 08:56:29 UTC
From: d29602960
Topic: 7703 Message: 7719

Hi again Chris,

Thanks for the swift reply to my questions relating to L2. Everything is understood now.

I had not fully understood the significance of L2 and its role in the filtering of I/P signals but after reading your reply and re-reading your write-up its much clearer now.

Regards,

Des (M0AYF)

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > The input inductor (L2), would an T37-61 core be a suitable
> > substitute for L2 with 4 turns bi-filer?
> >
>
> You can, but the inductance will be much higher due to the higher permeability and size of the core. With larger capacitors for C2 and C3 you can extend the frequency range down to 250kHz, at which time the coupling of T3 dictates the roll-off.
>
> >
> > Neglecting C1/L1 in the revised design for the moment, how much
> > difference in performance results from the use of L2 in the newer
> > design as compared to the trasformer input (similar to T3 and T6)
> > of the earlier design?
> >
>
> Quite a bit, actually. In the original design the input transformer became configured like the present T3. The input impedance was far too high to be suitable for use with a loop, so I conceded to using the coupling capacitors, which was simpler and less expensive that using a 1:1:1:1 transformer.
>
> I should mention that L1 can be very easily realized by twisting the wires from the SO-239 connectors to the board for 2-3 turns and then slipping a small toroid or two over that. Really cheap, but provides the same function.
>
> >
> > And finally, just out of curiosity how long does it take to prepare
> > a write-up such as this?
> >
>
> All together, about a full day. As I go from one write-up to another I borrow portions of previous ones, such as the early section on loop antenna impedance and the following portion on passive augmentation. Some things need to be repeated so that each write-up

stands by itself.
>
> Chris
>
>
> Regards,
> Chris
>

7720. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-05 08:56:13 UTC
From: d29602960
Topic: 7703 Message: 7720

Hi again Chris,

Thanks for the swift reply to my questions relating to L2. Everything is understood now.

I had not fully understood the significance of L2 and its role in the filtering of I/P signals but after reading your reply and re-reading your write-up its much clearer now.

Regards,

Des (M0AYF)

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > The input inductor (L2), would an T37-61 core be a suitable
> > substitute for L2 with 4 turns bi-filer?
> >
>
> You can, but the inductance will be much higher due to the higher permeability and size of the core. With larger capacitors for C2 and C3 you can extend the frequency range down to 250kHz, at which time the coupling of T3 dictates the roll-off.
>
> >
> > Neglecting C1/L1 in the revised design for the moment, how much
> > difference in performance results from the use of L2 in the newer
> > design as compared to the trasformer input (similar to T3 and T6)
> > of the earlier design?
> >
>
> Quite a bit, actually. In the original design the input transformer became configured like the present T3. The input impedance was far too high to be suitable for use with a loop, so I conceded to using the coupling capacitors, which was simpler and less expensive that using a 1:1:1:1 transformer.
>
> I should mention that L1 can be very easily realized by twisting the wires from the SO-239 connectors to the board for 2-3 turns and then slipping a small toroid or two over that. Really cheap, but provides the same function.
>
> >
> > And finally, just out of curiosity how long does it take to prepare
> > a write-up such as this?
> >
>
> All together, about a full day. As I go from one write-up to another I borrow portions of previous ones, such as the early section on loop antenna impedance and the following portion on passive augmentation. Some things need to be repeated so that each write-up

stands by itself.
>
> Chris
>
>
> Regards,
> Chris
>

7721. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-05 10:45:14 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7721

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /MagneticLoopFoil.zip
Uploaded by : bitterlemon40 <bitterlemon40@...>
Description : Just for fun - Another magnetic loop calculator

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/MagneticLoopFoil.zip

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

bitterlemon40 <bitterlemon40@...>

7722. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-05 18:36:34 UTC
From: Dave
Topic: 7717 Message: 7722

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:
>
> I can get a used variable condenser from an old radio, but it is one of the small ones with leaves of polyethylene between the metal plates. Can this be used in making a tuned loop? most specs call for an "air capacitor", but in salvage terms, at least in my life and work, they are quite rare.

Don't forget that you're not limited to commercially produced capacitors. It's perfectly possible to build your own variable capacitor. All a capacitor is is two conductors separated by an insulator. So, you can dream up a lot of different configurations of conductors and insulators that will produce a capacitor. Then, all you have to do is vary the position of some of the elements to produce a variable capacitor.

For examples, do a search on "trombone capacitor", "book capacitor", and "rotary capacitor".

If you have any mechanical skills, there are even plans out on the web for building your own variable capacitors:

http://www.eham.net/articles/5217?
http://brneurosci.org/capacitor.html

> I can see now that actually listening to the radio and keeping a log is just a small part of the whole picture, and perhaps a larger part is planning for, talking about, reading up and then actually building an antenna. heh heh heh So, it's about like fly fishing in that the fly tying, reel lube, rod building, wader fixing, etc far outweighs the time we are allowed to spend on the stream.

The antenna tends to be the most important part of any receiver, since that is where the signal is the weakest, and the point where a degradation of the signal to noise ratio can occur the easiest. And, once the signal to noise ratio has been degraded, then it's generally impossible to improve it.

> keith

Dave

7723. MagneticLoopFoil

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-06 05:25:29 UTC
From: Bill McGraw
Topic: 7723 Message: 7723

I couldn't open that file.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

7724. Re: [loopantennas] MagneticLoopFoil

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-06 06:10:30 UTC
From: brian nsl
Topic: 7723 Message: 7724

Bill,
Same situation here !!!!
Since it is not in the files archive either I assumed it was a ' doubtful ' one hi!
72, Brian, GONSL-QRP
----- Original Message -----
From: Bill McGraw
To: loopantennas@yahoogroups.com
Sent: Friday, August 06, 2010 6:25 AM
Subject: [loopantennas] MagneticLoopFoil

I couldn't open that file.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

7725. RE: [loopantennas] MagneticLoopFoil

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-06 06:36:55 UTC
From: dx11
Topic: 7723 Message: 7725

It worked for me. I have unzipped the downloaded file. It contains versions for Windows, Linux and Mac of a loop calculator. The windows version worked without problems. There are no explanations or instructions, but because you have to give in perimeter and width by moving slide bars it seems to be a calculator for a single turn loop made from foil.
Perhaps the Group memebr who uploaded this can give some background info?

Cor Beijersbergen

-----Oorspronkelijk bericht-----
Van: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
Namens Bill McGraw
Verzonden: vrijdag 6 augustus 2010 7:25
Aan: loopantennas@yahoogroups.com
Onderwerp: [loopantennas] MagneticLoopFoil

I couldn't open that file.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7726. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-06 12:44:11 UTC
From: cannonmandolin
Topic: 7717 Message: 7726

I like that "build your own" idea......and, yes I have the skill and a couple shops full of tools and "stuff". Just not lots of radio "stuff". However, in my work as a professional violinmaker things do tend to accumulate on shelves and corners. And, lets face it, some "stuff" is just too good to throw away.

I have not read up on the trombone capacitor yet, but will do so.

Speaking of loops, i seem to remember an old radio in my childhood with an oblong loop pasted into the back panel of the cabinet, of course it was an old-fashion radio even then and i suppose it went out to the curb at some point. dang.

I bought a Kaito loop with the extendable spar in the middle. It took me a couple evenings to figure out how to get the best out of it, and may not be there yet, but it is working. I'm puzzled that it works about the same whether the little box is ON or OFF, only the tuning wheel does not function in the OFF position. No noticeable difference in whether it is switched to SW or MW. I've been hanging it in the window, right along with the aluminum mini blinds, so that may be messing with it. I'm waiting for the weekend and temps under 100 degrees and i'll take it out on the patio and hang it in a tree. Keeping a can of adult beverage nearby might help reception.

Thanks for all your help guys. I'll keep asking questions till i am half as smart as you all. That'll take about ten years.

keith

7727. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-06 16:17:24 UTC
From: tenorman1952
Topic: 7717 Message: 7727

For the time involved, even if you have the materials, for the price you can buy one, making one is not reasonable.

http://www.midnightscience.com/catalog5.html#part2 $11 USD

http://www.stormwise.com/page3.htm (this page has 1, 2, and 3 section caps) $18 USD for single section.

http://www.mtmscientific.com/capacitor.html $17.50 USD

73
Paul - AE5JU

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:
>
> I like that "build your own" idea......and, yes I have the skill and a couple shops full of tools and "stuff". Just not lots of radio "stuff". However, in my work as a professional violinmaker things do tend to accumulate on shelves and corners. And, lets face it, some "stuff" is just too good to throw away.
>
> I have not read up on the trombone capacitor yet, but will do so.
>
> Speaking of loops, i seem to remember an old radio in my childhood with an oblong loop pasted into the back panel of the cabinet, of course it was an old-fashion radio even then and i suppose it went out to the curb at some point. dang.
>
> I bought a Kaito loop with the extendable spar in the middle. It took me a couple evenings to figure out how to get the best out of it, and may not be there yet, but it is working. I'm puzzled that it works about the same whether the little box is ON or OFF, only the tuning wheel does not function in the OFF position. No noticeable difference in whether it is switched to SW or MW. I've been hanging it in the window, right along with the aluminum mini blinds, so that may be messing with it. I'm waiting for the weekend and temps under 100 degrees and i'll take it out on the patio and hang it in a tree. Keeping a can of adult beverage nearby might help reception.
>
> Thanks for all your help guys. I'll keep asking questions till i am half as smart as you all. That'll take about ten years.
>
> keith
>

7728. Re: [loopantennas] Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-07 21:01:36 UTC
From: Keith Davis
Topic: 7717 Message: 7728

Wow......I guess I am not understanding the power involved in an antenna if it will actually ARC THROUGH the poly separators.

I read someplace that hanging a wire in your back yard and wiring it to ground via a salvaged LED will actually light the diode. I have not tried this but plan to soon.

keith

7729. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-07 22:15:46 UTC
From: cannonmandolin
Topic: 7717 Message: 7729

OK, one of you all just made me smarter. Transmit antennas can develop voltage and arc, not USUALLY receiving antennas. Whew....

In about six decades i've managed to learn a lot of stuff.....just not stuff about radios. I've been too busy making a living I guess.
As usual, you guys are bailing me out. THANKS.

If it cools down much under 95 this evening I'm going to take my new Kaito out on the patio and hang it as high as I can and see what's available to listen to. Hopefully the 'skeeters are not too hungry tonight.

keith

7730. Re: [loopantennas] Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 00:10:41 UTC
From: Dick Bingham
Topic: 7717 Message: 7730

I have heard of people _CHARGING_ car batteries using a long-wire antenna, a spark-plug, an ignition-coil and connecting the battery to ground. Have not investigated this but it sounds reasonable... Check it out on GOOGLE...

73 - Dick/w7wkr CN98pi

On Sat, Aug 7, 2010 at 2:01 PM, Keith Davis <cannonmandolin@...>wrote:

>
>
> Wow......I guess I am not understanding the power involved in an antenna if
> it will actually ARC THROUGH the poly separators.
>
> I read someplace that hanging a wire in your back yard and wiring it to
> ground via a salvaged LED will actually light the diode. I have not tried
> this but plan to soon.
>
> keith
>
>
>

--
Dick Bingham - W7WKR CN98pi
Stehekin, WA
Located in "The Alps of America"

[Non-text portions of this message have been removed]

7731. Re: [loopantennas] Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 02:26:31 UTC
From: John Kolb
Topic: 7717 Message: 7731

While in the Navy, we could light small florescent tubes from our
receiving antennas, but that was with
two 500 watt transmitters continuously keyed, and spacing less than
the length of the ship. I wouldn't
expect to light an LED from a receive antenna unless you are within a
few blocks of a broadcast transmitter.

Likewise, for receive use, a variable cap with poly separators should fine.

John

At 02:01 PM 8/7/2010, you wrote:
>Wow......I guess I am not understanding the power involved in an
>antenna if it will actually ARC THROUGH the poly separators.
>
>I read someplace that hanging a wire in your back yard and wiring it
>to ground via a salvaged LED will actually light the diode. I have
>not tried this but plan to soon.
>
>keith

7732. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 12:22:45 UTC
From: cannonmandolin
Topic: 7717 Message: 7732

I'm sold on Loops now I guess. I got outside last evening and humg my new Kaito on a bamboo stick about 20 feet long and let the lead trail down to me on the patio. I was hearing stations I've never heard before, and the tuning wheel, though pretty sensitive, was doing wonders.

Now I'll have to dig in and figure out where to get some copper and build my own, permanent OUTSIDE loop.

keith

7733. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 09:23:04 UTC
From: legonedijk
Topic: 7717 Message: 7733

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:
>
> I can get a used variable condenser from an old radio, but it is one of the small ones with leaves of polyethylene between the metal plates. Can this be used in making a tuned loop? most specs call for an "air capacitor", but in salvage terms, at least in my life and work, they are quite rare.
>
> I can see now that actually listening to the radio and keeping a log is just a small part of the whole picture, and perhaps a larger part is planning for, talking about, reading up and then actually building an antenna. heh heh heh So, it's about like fly fishing in that the fly tying, reel lube, rod building, wader fixing, etc far outweighs the time we are allowed to spend on the stream.
>
> keith
>
Keith,
Making a varible condensor is great fun in my opinion.
Ofcourse you can buy the nessesary components.
Starting build your own most simplified receiver
is fun and still students do that....
http://www.youtube.com/watch?v=AWL7hLEVSHQ

Google for "selfmade variable condensor" and "crystal radio".

Have fun !!!

Regards:
jan

7734. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 14:55:00 UTC
From: alienrelics
Topic: 7717 Message: 7734

Well, that's gotten twisted in the telling and retelling.

Power harvesting has been a hot item lately, but not to charge car batteries. EDN, Design News, or EE Times had an article lately on using static electricity or random RF fields to charge very, very low power capacitor storage devices for use in extremely low duty cycle, extremely low power devices. We're talking microwatts/microjoules.

There is actually a spark gap oscillator involved in one design. A really, really tiny spark gap.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Dick Bingham <dick.bingham@...> wrote:
>
> I have heard of people _CHARGING_ car batteries using a long-wire antenna, a
> spark-plug, an ignition-coil and connecting the battery to ground. Have not
> investigated this but it sounds reasonable... Check it out on GOOGLE...
>
> 73 - Dick/w7wkr CN98pi
>
>
>
> On Sat, Aug 7, 2010 at 2:01 PM, Keith Davis <cannonmandolin@...>wrote:
>
> >
> >
> > Wow......I guess I am not understanding the power involved in an antenna if
> > it will actually ARC THROUGH the poly separators.
> >
> > I read someplace that hanging a wire in your back yard and wiring it to
> > ground via a salvaged LED will actually light the diode. I have not tried
> > this but plan to soon.
> >
> > keith
> >
> >
> >
>
>
>
> --
> Dick Bingham - W7WKR CN98pi
> Stehekin, WA
> Located in "The Alps of America"
>
>

> [Non-text portions of this message have been removed]
>

7735. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 15:14:25 UTC
From: alienrelics
Topic: 7717 Message: 7735

--- In loopantennas@yahoogroups.com, "legonedijk" <legonedijk@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@> wrote:
> >
> > I can get a used variable condenser from an old radio, but it is one of the small ones with leaves of polyethylene between the metal plates. Can this be used in making a tuned loop? most specs call for an "air capacitor", but in salvage terms, at least in my life and work, they are quite rare.
> >
> > I can see now that actually listening to the radio and keeping a log is just a small part of the whole picture, and perhaps a larger part is planning for, talking about, reading up and then actually building an antenna. heh heh heh So, it's about like fly fishing in that the fly tying, reel lube, rod building, wader fixing, etc far outweighs the time we are allowed to spend on the stream.
> >
> > keith
> >
> Keith,
> Making a varible condensor is great fun in my opinion.
> Ofcourse you can buy the nessesary components.
> Starting build your own most simplified receiver
> is fun and still students do that....
> http://www.youtube.com/watch?v=AWL7hLEVSHQ
>
> Google for "selfmade variable condensor" and "crystal radio".
>

Wow, there are a lot of bad videos about making crystal radios on YouTube!

Steve Greenfield AE7HD

7736. Re: [loopantennas] Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 17:10:33 UTC
From: Andy
Topic: 7717 Message: 7736

> Wow.....I guess I am not understanding the power involved in an antenna if it will actually ARC THROUGH the poly separators.

Transmitting loop antennas, especially small ones, can have VERY high voltages and circulating currents even at moderate power levels.

That's why some people who make small transmitting loops go out of their way to use thick pipe, vacuum capacitors, or devices that have no sliding contacts, such as butterfly capacitors where there are no moving parts (i.e., bearings) in the current path.

Receiving circuits? No such problem.

7737. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 18:47:41 UTC
From: pappy_hiram
Topic: 7717 Message: 7737

"cannonmandolin" wrote:
>
> OK, one of you all just made me smarter. Transmit antennas can develop voltage and arc, not USUALLY receiving antennas. Whew....

Unless it gets struck by lightning, then it won't just be the capacitor arcing..... :)

Pappy Hiram

7738. Re: Salvaged Variable Condenser?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 22:28:24 UTC
From: tenorman1952
Topic: 7717 Message: 7738

Nobody, but nobody makes crystal radios like Dave Schmarder makes crystal radios!!!

http://makearadio.com/crystal/index.php

and Dave's Loops:

http://makearadio.com/loops/index.php

You can't help but be impressed!

73
Paul - AE5JU

--- In loopantennas@yahoogroups.com, "alienrelics" <alienrelics@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "legonedijk" <legonedijk@> wrote:
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@> wrote:
> > >
> > > I can get a used variable condenser from an old radio, but it is one of the small ones with leaves of polyethylene between the metal plates. Can this be used in making a tuned loop? most specs call for an "air capacitor", but in salvage terms, at least in my life and work, they are quite rare.
> > >
> > > I can see now that actually listening to the radio and keeping a log is just a small part of the whole picture, and perhaps a larger part is planning for, talking about, reading up and then actually building an antenna. heh heh heh So, it's about like fly fishing in that the fly tying, reel lube, rod building, wader fixing, etc far outweighs the time we are allowed to spend on the stream.
> > >
> > > keith
> > >
> > Keith,
> > Making a varible condensor is great fun in my opinion.
> > Ofcourse you can buy the nessesary components.
> > Starting build your own most simplified receiver
> > is fun and still students do that....
> > http://www.youtube.com/watch?v=AWL7hLEVSHQ
> >
> > Google for "selfmade variable condensor" and "crystal radio".
> >
>

> Wow, there are a lot of bad videos about making crystal radios on YouTube!
>
> Steve Greenfield AE7HD
>

7739. Xtal Radio

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-08 22:30:52 UTC
From: Bill McGraw
Topic: 7739 Message: 7739

Wow, there are a lot of bad videos about making crystal radios on YouTube!

Steve Greenfield AE7HD

I've seen those but all of mine from 50 years ago were crude, no board mountings, first one had no tuner and received all 3 local stations and local hams so loud they would wake me in the mornings with the military headset under my bed. The later ones had a tapped coil and/or V-cap but not mountings, just wired together loosely. I even used a rusty nail and a corroded bronze penny as a detector, worked but poorly. I tried the last one on an 8" diameter (25 turn for 50') loop, worked but was weak. Somehow, I picked up a weak FM station, didn't know that could be done. My ground was a foot long bronze welding rod in the ground and I know better.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

7740. One bit at a time...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 12:20:51 UTC
From: cannonmandolin
Topic: 7740 Message: 7740

Let me see if i understand this: I have been looking hard at the loops Dave Schmarder makes and the circuit drawings. So, there is a multi-turn coil (loop) that gets tuned, and a secondary loop just built NEARBY that is somehow influenced by the first one?

I've got to find some wire. I went into a Radio Shack last week and they seem to be out of the wire biz. In fact, they seem to be more of a toy store. Not many real parts or pieces left. Back in 1983 I trained as a RS Company Store manager, went through the whole program and was a week away from taking a store when the job i really wanted in civil engineering came up. So, my wife and I packed up and moved to Wisconsin, leaving the RS store behind. At that time we had about a million discreet parts in the store and probably 30 or so kinds and sizes of wire. Thing of the past, i guess.

Can I use piano wire for loops? I have lots of that in the shop, just no copper. Piano wire comes in many gauges and a pound roll may have a half a mile of wire on it. Otherwise, it'll be "shop online" or find a motor I can canibalize. Over the past couple of years i have gutted a microwave and a big automatic shredder and some lights and have a little pile of parts, so i may have the right capacitor and perhaps I can cough up a variable without having to destroy something else. But, if I gut an old radio for parts it will be one less thing on the shelf in the storage room that my wife will have to tsk-tsk over when she walks by.

keith

7741. Re: [loopantennas] One bit at a time...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 12:45:51 UTC
From: John Popelish
Topic: 7740 Message: 7741

cannonmandolin wrote:
(snip)
> Can I use piano wire for loops? I have lots of that in
> the shop, just no copper. Piano wire comes in many
> gauges and a pound roll may have a half a mile of wire on
> it. Otherwise, it'll be "shop online" or find a motor I
> can canibalize. Over the past couple of years i have
> gutted a microwave and a big automatic shredder and some
> lights and have a little pile of parts, so i may have the
> right capacitor and perhaps I can cough up a variable
> without having to destroy something else. But, if I gut
> an old radio for parts it will be one less thing on the
> shelf in the storage room that my wife will have to
> tsk-tsk over when she walks by.

Piano wire has a lot more electrical resistance than copper,
and is not insulated and does not solder easily. That is
three strikes against it.

One of the best salvage sources of insulated copper wire for
loops is old color televisions and monitors. Most have a
large degaussing coil wrapped around the picture tube that
contains a significant amount of enameled copper wire.

If you can't lay your hands on some of those, and live in
the U.S., I can send you over a pound of 22AWG enameled wire
for about $10, shipped ($4 per pound plus my shipping cost).
It is from a big batch that spilled, so it is not on a
spool, but is just a loose but neat coil that may have a
slight tangle or two in it, but is pretty usable. I am
trying to find uses for it, rather than just recycle it.

--
Regards,

John Popelish

7742. Re: [loopantennas] One bit at a time...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 14:43:54 UTC
From: Andy
Topic: 7740 Message: 7742

Yes, many loop antennas use a coupled pick-up loop.

Radio Shack is indeed a phone and toy store these days, but you still can buy parts and wire there. Many fewer small parts, but they are there, usually in the pull-out shelves now. Wire, while not the cheapest, should be stocked too, in small spools on the walls. Insulated or enameled. You just need to find it.

Go to their website to find what you want, then walk in and look for/ask for those items. P/N 278-1345 is three small spools of enameled magnet wire, good enough for a small project or two.

Another source for lots of copper wire, are old fan motors, or any other motors. I've read you can also get free leftover wire from shops that rebuild electrical motors.

Andy

7743. I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 15:31:26 UTC
From: CE3FZL
Topic: 7743 Message: 7743

Hello friends,

Need information, diagram and details of DELTA LOOP for Transmition in 40 meter band Ham Radio.

Beste regards,

Hector
Ce3FZL

[Non-text portions of this message have been removed]

7744. RE: [loopantennas] I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 16:02:59 UTC
From: dx11
Topic: 7743 Message: 7744

Hello Hector,

Is this a statement, a question, a request or an order?
Most members of this Group are more polite to each other...

>>>Hello friends,

Need information, diagram and details of DELTA LOOP for Transmition in
40 meter band Ham Radio.

Beste regards,

Hector
Ce3FZL<<<

7745. I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 16:20:20 UTC
From: CE3FZL
Topic: 7743 Message: 7745

Ohhhh sorry my English is very poor

Very is a question

Sorry friends

Hector
Ce3FZL

--- El lun, 8/9/10, dx11 <dx11@...> escribió:

De: dx11 <dx11@...>
Asunto: RE: [loopantennas] I need Information
A: loopantennas@yahoogroups.com
Fecha: lunes, 9 de agosto de 2010, 01:02 pm

Hello Hector,

Is this a statement, a question, a request or an order?
Most members of this Group are more polite to each other...

>>>Hello friends,

Need information, diagram and details of DELTA LOOP for Transmition in
40 meter band Ham Radio.

Beste regards,

Hector
Ce3FZL<<<

[Non-text portions of this message have been removed]

7746. Re: One bit at a time...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 17:36:11 UTC
From: jpopelish
Topic: 7740 Message: 7746

--- In loopantennas@yahoogroups.com, John Popelish <jpopelish@...> wrote:
(snip)
> If you can't lay your hands on some of those, and live in
> the U.S., I can send you over a pound of 22AWG enameled wire
> for about $10, shipped ($4 per pound plus my shipping cost).
> It is from a big batch that spilled, so it is not on a
> spool, but is just a loose but neat coil that may have a
> slight tangle or two in it, but is pretty usable. I am
> trying to find uses for it, rather than just recycle it.

Sorry for the AWG typo. That is 20 AWG, heavy build, class H motor rated wire.
--
Regards,

John Popelish

7747. Re: One bit at a time...

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 18:47:36 UTC
From: tenorman1952
Topic: 7740 Message: 7747

Enameled wire, aka "magnet wire" can be bought from

www.kenselectroncics.com

73
Paul - AE5JU

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:
>
> Let me see if i understand this: I have been looking hard at the loops Dave Schmarder makes and the circuit drawings. So, there is a multi-turn coil (loop) that gets tuned, and a secondary loop just built NEARBY that is somehow influenced by the first one?
>
> I've got to find some wire. I went into a Radio Shack last week and they seem to be out of the wire biz. In fact, they seem to be more of a toy store. Not many real parts or pieces left. Back in 1983 I trained as a RS Company Store manager, went through the whole program and was a week away from taking a store when the job i really wanted in civil engineering came up. So, my wife and I packed up and moved to Wisconsin, leaving the RS store behind. At that time we had about a million discreet parts in the store and probably 30 or so kinds and sizes of wire. Thing of the past, i guess.
>
> Can I use piano wire for loops? I have lots of that in the shop, just no copper. Piano wire comes in many gauges and a pound roll may have a half a mile of wire on it. Otherwise, it'll be "shop online" or find a motor I can canibalize. Over the past couple of years i have gutted a microwave and a big automatic shredder and some lights and have a little pile of parts, so i may have the right capacitor and perhaps I can cough up a variable without having to destroy something else. But, if I gut an old radio for parts it will be one less thing on the shelf in the storage room that my wife will have to tsk-tsk over when she walks by.
>
> keith
>

7748. Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 19:00:23 UTC
From: pappy_hiram
Topic: 7743 Message: 7748

Hector,
I tried a google search of "40 meter delta loop" and got many hits. Here is one that looks easy to do and has a lot of info on the site:

http://w5sdc.net/delta_loop_for_hf.htm

There seems to be many variations on this antenna, I would look at as many different ones as you can find, and then pick one to try.

Best regards,

Pappy Hiram

--- In loopantennas@yahoogroups.com, CE3FZL <ce3fzl@...> wrote:
>
>
> Hello friends,
>
> Need information, diagram and details of DELTA LOOP for Transmition in
> 40 meter band Ham Radio.
>
> Beste regards,
>
>
> Hector
> Ce3FZL
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7749. RE: [loopantennas] I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 19:08:01 UTC
From: dx11
Topic: 7743 Message: 7749

Hello Hector,

I apologize for my too quick and somewhat rude response to your initial mail. I see now you are from Chile and English is not your first language.

I can not help you directly, but I know on the internet a lot of information on 40 loops is available. Just google "deltaloop 40 meters" and you will find a wealth of documents. I give you a few here:

http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/40%20Meter%20Delta%20Loop%20Array.htm

http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/40%20Meter%20Delta%20Loop%20Array.htm

http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=23165

http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=13281

Maybe others in this Group will have more direct help to your question.

Regards,

Cor Beijersbergen

7750. First, assume the best

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-09 21:21:34 UTC
From: alienrelics
Topic: 7750 Message: 7750

English is not a first language for many people on this list. If someone seems rude to you, I suggest reading again and considering the possibility that the poster speaks English as a second language.

I know people who, despite English being their native language, still are misunderstood due to typos or poor word choices. I'm told that we Americans may be seen as rather abrupt and rude. So even if someone isn't from a "foreign" country (to someone in Brazil, -you- are in a foreign country), give them the benefit of the doubt.

So first, assume the best or at least don't assume the worst. If someone is truly being rude, it will become obvious in a few messages.

Steve Greenfield AE7HD
your friendly neighborhood moderator

7751. Re: First, assume the best

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 00:37:01 UTC
From: neilkj6fba
Topic: 7750 Message: 7751

Well said, Mr. Moderator - good advice for all

Neil Bell
KJ6FBA

--- In loopantennas@yahoogroups.com, "alienrelics" <alienrelics@...> wrote:
>
> English is not a first language for many people on this list. If someone seems rude to you, I suggest reading again and considering the possibility that the poster speaks English as a second language.
>
> I know people who, despite English being their native language, still are misunderstood due to typos or poor word choices. I'm told that we Americans may be seen as rather abrupt and rude. So even if someone isn't from a "foreign" country (to someone in Brazil, -you- are in a foreign country), give them the benefit of the doubt.
>
> So first, assume the best or at least don't assume the worst. If someone is truly being rude, it will become obvious in a few messages.
>
> Steve Greenfield AE7HD
> your friendly neighborhood moderator
>

7752. Wire for Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 02:15:50 UTC
From: Bill McGraw
Topic: 7752 Message: 7752

Keith asked, "Can I use piano wire for loops?"

I would use copper wire and got most of mine from a dead TV tube, lots of it, enameled, found some telephone cable with a dozen or more insulated wire in there and had to splice some together, all free for the asking. I made my small AM tuning loop with it, my tapped Xtal radio coil and others are for my office wall and ceiling single-turn loops for short wave listening.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

7753. Re: [loopantennas] First, assume the best

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 05:51:50 UTC
From: David LeBlanc
Topic: 7750 Message: 7753

dude, it wasn't my post to which you are referring. I was NICE!

Pappy Hiram

"Never Underestimate the Power of Coffee!" http://www.toomuchcaffeine.org/ Got Art? http://www.davesullivan.net/ Check out my blog at: http://stonesrants.blogspot.com/

--- On Mon, 8/9/10, alienrelics <alienrelics@...> wrote:

From: alienrelics <alienrelics@yahoo.com>
Subject: [loopantennas] First, assume the best
To: loopantennas@yahoogroups.com
Date: Monday, August 9, 2010, 2:21 PM

English is not a first language for many people on this list. If someone seems rude to you, I suggest reading again and considering the possibility that the poster speaks English as a second language.

I know people who, despite English being their native language, still are misunderstood due to typos or poor word choices. I'm told that we Americans may be seen as rather abrupt and rude. So even if someone isn't from a "foreign" country (to someone in Brazil, -you- are in a foreign country), give them the benefit of the doubt.

So first, assume the best or at least don't assume the worst. If someone is truly being rude, it will become obvious in a few messages.

Steve Greenfield AE7HD

your friendly neighborhood moderator

[Non-text portions of this message have been removed]

7755. Re: [loopantennas] First, assume the best

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 08:28:20 UTC
From: Richard
Topic: 7750 Message: 7755

On Mon, 09 Aug 2010 21:21:34 -0000
"alienrelics" <alienrelics@...> wrote:

> English is not a first language for many people on this list. If someone
> seems rude to you, I suggest reading again and considering the possibility
> that the poster speaks English as a second language.
>
> I know people who, despite English being their native language, still are
> misunderstood due to typos or poor word choices. I'm told that we Americans
> may be seen as rather abrupt and rude. So even if someone isn't from a
> "foreign" country (to someone in Brazil, -you- are in a foreign country),
> give them the benefit of the doubt.
>
> So first, assume the best or at least don't assume the worst. If someone is
> truly being rude, it will become obvious in a few messages.
>
> Steve Greenfield AE7HD
> your friendly neighborhood moderator
>

Hear hear,
It was obvious by the grammar that Hector was not using his native language.
I wouldn't expect the flames from a "American" as the English language spoken and written is not unlike English originating in the UK. Moreover now, it is laced with Spanish
Yes I am aware that the language spoken in Brazil is Portuguese, but that often sounds and looks very similar to Spanish.
The flames appeared to come from this side of the pond from a person using a Dutch ISP. So there is a chance that the person who sent the flame was not reading his native language, and in his over exuberance for perfection has misguidedly assumed that all should reach the same degree of perfection.

There is one country in mainland Europe where level of exactitude and precision are considered to be the normality, however as one of our greatest scientists once said, in theory there is no difference between theory and practice, in practice there is.

In a few days I will unsubscribe from the list, it served its purpose when joining, when I required assistance on building Mag loops from coaxial hardline, but the need to stay on the list has passed.
Thanks for the previous help.
--
Best wishes

Richard Bown G8JVM

##
Registered Linux User 36561
OS: Mandriva 2010.1 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
GHz
##

7756. Re: First, assume the best

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 12:44:18 UTC
From: alienrelics
Topic: 7750 Message: 7756

Let's not beat a dead horse. This was sent out as a reminder to everyone, triggered by recent events but certainly not meant to pick anyone in particular out. The poster who triggered this message had already apologized for his error, no need to track anyone down.

I'm glad we helped, Richard. You are welcome to hang around, you may later find you have more questions or you may even find that you can help others with what you've learned.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Richard <richard.bown@...> wrote:
>
> On Mon, 09 Aug 2010 21:21:34 -0000
> "alienrelics" <alienrelics@...> wrote:
>
> > English is not a first language for many people on this list. If someone
> > seems rude to you, I suggest reading again and considering the possibility
> > that the poster speaks English as a second language.
> >
> > I know people who, despite English being their native language, still are
> > misunderstood due to typos or poor word choices. I'm told that we Americans
> > may be seen as rather abrupt and rude. So even if someone isn't from a
> > "foreign" country (to someone in Brazil, -you- are in a foreign country),
> > give them the benefit of the doubt.
> >
> > So first, assume the best or at least don't assume the worst. If someone is
> > truly being rude, it will become obvious in a few messages.
> >
> > Steve Greenfield AE7HD
> > your friendly neighborhood moderator
> >
>
>
>
> Hear hear,
> It was obvious by the grammar that Hector was not using his native language.
> I wouldn't expect the flames from a "American" as the English language spoken
> and written is not unlike English originating in the UK. Moreover now, it is
> laced with Spanish
> Yes I am aware that the language spoken in Brazil is Portuguese, but that often
> sounds and looks very similar to Spanish.
> The flames appeared to come from this side of the pond from a person using a
> Dutch ISP. So there is a chance that the person who sent the flame was not
> reading his native language, and in his over exuberance for perfection has
> misguidedly assumed that all should reach the same degree of perfection.
>
> There is one country in mainland Europe where level of exactitude and precision

> are considered to be the normality, however as one of our greatest scientists
> once said, in theory there is no difference between theory and practice, in
> practice there is.
>
> In a few days I will unsubscribe from the list, it served its purpose when
> joining, when I required assistance on building Mag loops from coaxial
> hardline, but the need to stay on the list has passed.
> Thanks for the previous help.
> --
> Best wishes
>
> Richard Bown G8JVM
>
> ##
> Registered Linux User 36561
> OS: Mandriva 2010.1 Powerpack on an AMD Dual Athlon 64 +4400: 8 GB RAM DDR2
> Ham Call: G8JVM , QRA IO82SP, Interests Microwave 1.3 GHz,2.3 GHz & 5.7GHz & 10
> GHz
> ##
>

7757. Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 02:55:22 UTC
From: Eamon Egan
Topic: 7743 Message: 7757

Hello Hector,

try Googling "40m delta loop".

Here is one page I found that looks good:
http://www.mccormick.uk.com/40%20meter%20loop/index.html

After reading this (and other pages), if you have some specific questions, or things you do not understand, I am sure people in this group can help you.

73
Eamon
VE2EGN / AB1NK

7758. Re: [loopantennas] First, assume the best

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 00:36:46 UTC
From: Julius Fazekas
Topic: 7750 Message: 7758

Amen to that!

Julius Fazekas

N2WN

Tennessee Contest Group

http://www.k4ro.net/tcg/index.html

http://groups.google.com/group/tcg1?hl=en

Tennessee QSO Party

http://www.tnqp.org/

Elecraft K2 #4455

Elecraft K3/100 #366

Elecraft K3/100 #1875

--- On Mon, 8/9/10, alienrelics <alienrelics@...> wrote:

From: alienrelics <alienrelics@...>
Subject: [loopantennas] First, assume the best
To: loopantennas@yahoogroups.com
Date: Monday, August 9, 2010, 5:21 PM

English is not a first language for many people on this list. If someone seems rude to you, I suggest reading again and considering the possibility that the poster speaks English as a second language.

I know people who, despite English being their native language, still are misunderstood due to typos or poor word choices. I'm told that we Americans may be seen as rather abrupt and rude. So even if someone isn't from a "foreign" country (to someone in Brazil, -you- are in a foreign country), give them the benefit of the doubt.

So first, assume the best or at least don't assume the worst. If someone is truly being rude, it will become obvious in a few messages.

Steve Greenfield AE7HD

your friendly neighborhood moderator

[Non-text portions of this message have been removed]

7759. Re: [loopantennas] Mobile , Animal , Flower & Love Wallpaper 11:22:46 AM8/10/2010

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 13:34:18 UTC
From: Chris Trask
Topic: 7759 Message: 7759

>
> 11:22:46 AM
>
> Mobile , Animal , Flower & Love Wallpaper
>
>
> Landscape Mobile FlowersCats2
> Mobile 20 Wallpaper Flowers1cats1
> best Mobile Wallpaper Flower Wallpapers 3Frog_Wallpapers
> Mobile Wallpaper 2010 HQ Beautiful Flowers Beautiful Animals Wallpap
> Best Mobile Wallpaper-1 Black2Cartoon Cats Pictures
> Cute Mobile Wallpaper1 Black Wallpaper-14Animal
> Best Mobile Wallpaper 2 Black Wallpapers - Part 1Graphic Wallpaper1
> Love WallpaperLovely Wallpaper 2Wallpaper Love & kiss
> Lovely WallpaperLovely Wallpaper-3 Best Pic of Love Story
> Best Love Story 2 Love Wallpaper exotic birds
> Best Mobile Wallpaper 3 Wallpaper Black Packe
>
>
>
> Hot Links
> Best Desktop Wallpaper Pack 1Best Mobile Ringtone Pack 2Mobile Wallpaper
> Best Desktop Wallpaper Pack 2Best Mobile Ringtone Pack 1Animal Wallpaper
> Love WallpaperBest Magazine-Free DownloadFlower Wallpaper
> Model WallpaperFamous Artists & Singers picHot Wallpaper
> Best Cars 2011Best 2010 video ClipsHot Artists Pic
>

Great. Yet another Spamnation intrusion.

Chris

7760. Re: [loopantennas] Wire for Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 15:11:44 UTC
From: Myamiphil
Topic: 7752 Message: 7760

Funny you should mention TV tubes. I just gleaned a bunch of copper from a CRT yolk. ONly problem it was glued every so often making it a pain to take apart.

But I got LOTS of wire out of it.

Best Regards

Phil
Lat: 40.8367633
Long: -74.1768412

From: Bill McGraw <mcgr3799@...>
To: loopantennas@yahoogroups.com
Sent: Mon, August 9, 2010 10:15:50 PM
Subject: [loopantennas] Wire for Loops

Keith asked, "Can I use piano wire for loops?"

I would use copper wire and got most of mine from a dead TV tube, lots of it, enameled, found some telephone cable with a dozen or more insulated wire in there and had to splice some together, all free for the asking. I made my small AM tuning loop with it, my tapped Xtal radio coil and others are for my office wall and ceiling single-turn loops for short wave listening.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

7761. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 16:26:00 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7761

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Underestimated Magnetic Loop HF Antenna.rtf
Uploaded by : alienrelics <alienrelics@...>
Description : An Overview of the Underestimated Magnetic Loop HF Antenna

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Underestimated%20Magnetic%20Loop%20HF%20A
ntenna.rtf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

alienrelics <alienrelics@...>

7762. Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 18:04:26 UTC
From: Monica Ann P
Topic: 7762 Message: 7762

Hi all. I have been following here for the last few weeks and I was wondering if I can get some feedback and hints on how I can better my antenna situation.

I recently got the ham bug again and I am trying to get my station on the air. I have an FT-950 which I love. I thought how can put up an antenna in my restricted space (I live on the fifth floor, facing east in Manhattan). My building is a large steel framed building with brick curtain walls. I don't have access to a balcony. I came across loop antennas and I thought to give it a shot.

My blog, http://kv2o.blogspot.com/, has a picture of my current setup. It is a rectangle, approximately 44" wide by 50" high consisting of 6 turns of #16 wire fed into a SGC-230 antenna tuner. The SGC-230 matches it well from 160m through 10m.

I haven't tried to make many QSOs yet, but I do get fairly good coverage and can hear DX and stateside stations, especially on 20m. W1AW is loud on 160m and 80m.

I was wondering if anyone has any tips or suggestions on what to improve.

It is possible for me to hand a wire down as a sort of vertical on the outside wall of the building, run a sort of dipole across all my windows (my apartment is 25' wide by 30' deep) and let the end droop and there is also a close by tree that I am thinking of throwing a thin wire across.

I don't think anything mounted in the apartment itself will radiate, since it is a big brick apartment house and 20 storeys high. I am on the fifth floor.

Any help or suggestions would be greatly appreciated.

Monica
KV2O

7763. Re: Mobile , Animal , Flower & Love Wallpaper 11:22:46 AM8/10/2010

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 19:24:02 UTC
From: alienrelics
Topic: 7759 Message: 7763

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > 11:22:46 AM
> >
> > Mobile , Animal , Flower & Love Wallpaper
... snip loads of carp....
> > Best Cars 2011Best 2010 video ClipsHot Artists Pic
> >
>
> Great. Yet another Spamnation intrusion.
>
> Chris

Already taken care of.

I may have been a bit quick on the trigger... a search reveals that capntripps2000 has posted legitimately many times in the past. Normally I'd put someone on moderation until they fix the problem. I regret clicking the "ban" button so quickly, especially considering the history of the list that this one replaced and its moderator.

I've emailed Andrew about it and let him know that once he assures me the problem is fixed, he's welcome back.

Steve Greenfield

7764. Re: [loopantennas] Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 20:11:32 UTC
From: Myamiphil
Topic: 7762 Message: 7764

I was going to suggest putting it on the glass. I've seen this before... Would it help to make it on a tripod mount in one room where you can turn it to optimize your direction?

The geeky part could be to add a microcontroller (arduino?) to motor control it from another room (shack)
Best Regards

Phil
Lat: 40.8367633
Long: -74.1768412

_____
From: Monica Ann P <darkeraven@...>
To: loopantennas@yahoogroups.com
Sent: Tue, August 10, 2010 2:04:26 PM
Subject: [loopantennas] Loop Antenna in my Manhattan Condo

Hi all. I have been following here for the last few weeks and I was wondering if I can get some feedback and hints on how I can better my antenna situation.

I recently got the ham bug again and I am trying to get my station on the air. I have an FT-950 which I love. I thought how can put up an antenna in my restricted space (I live on the fifth floor, facing east in Manhattan). My building is a large steel framed building with brick curtain walls. I don't have access to a balcony. I came across loop antennas and I thought to give it a shot.

My blog, http://kv2o.blogspot.com/, has a picture of my current setup. It is a rectangle, approximately 44" wide by 50" high consisting of 6 turns of #16 wire fed into a SGC-230 antenna tuner. The SGC-230 matches it well from 160m through 10m.

I haven't tried to make many QSOs yet, but I do get fairly good coverage and can hear DX and stateside stations, especially on 20m. W1AW is loud on 160m and 80m.

I was wondering if anyone has any tips or suggestions on what to improve.

It is possible for me to hand a wire down as a sort of vertical on the outside wall of the building, run a sort of dipole across all my windows (my apartment is 25' wide by 30' deep) and let the end droop and there is also a close by tree that I am thinking of throwing a thin wire across.

I don't think anything mounted in the apartment itself will radiate, since it is a big brick apartment house and 20 storeys high. I am on the fifth floor.

Any help or suggestions would be greatly appreciated.

Monica
KV2O

[Non-text portions of this message have been removed]

7765. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 20:17:14 UTC
From: Monica Ann P
Topic: 7762 Message: 7765

Phil

Thanks so much for your suggestion.

I actually have a Tripod type of thing (actually its an octagon about 4ft across the points) that I have built for this very purpose. I have to add some supports this weekend and then I can mount he SGC-230 on it and rotate the direction of the loop as well as the location of the feedpoint (lower horizontal or vertical).

And I did think, if it works well, to include some rotator setup. For now though I will just turn it by hand until it is established that the refinement would be worthwhile.

--- In loopantennas@yahoogroups.com, Myamiphil <myamiphil@...> wrote:
>
> I was going to suggest putting it on the glass. I've seen this before... Would
> it help to make it on a tripod mount in one room where you can turn it to
> optimize your direction?
>
>
> The geeky part could be to add a microcontroller (arduino?) to motor control it
> from another room (shack)
> Best Regards
>
> Phil
> Lat: 40.8367633
> Long: -74.1768412
>
>
>
>
>
> _____
> From: Monica Ann P <darkeraven@...>
> To: loopantennas@yahoogroups.com
> Sent: Tue, August 10, 2010 2:04:26 PM
> Subject: [loopantennas] Loop Antenna in my Manhattan Condo
>
>
> Hi all. I have been following here for the last few weeks and I was wondering
> if I can get some feedback and hints on how I can better my antenna situation.
>
> I recently got the ham bug again and I am trying to get my station on the air.
> I have an FT-950 which I love. I thought how can put up an antenna in my
> restricted space (I live on the fifth floor, facing east in Manhattan). My
> building is a large steel framed building with brick curtain walls. I don't
> have access to a balcony. I came across loop antennas and I thought to give it

> a shot.
>
> My blog, http://kv2o.blogspot.com/, has a picture of my current setup. It is a
> rectangle, approximately 44" wide by 50" high consisting of 6 turns of #16 wire
> fed into a SGC-230 antenna tuner. The SGC-230 matches it well from 160m through
> 10m.
>
> I haven't tried to make many QSOs yet, but I do get fairly good coverage and can
> hear DX and stateside stations, especially on 20m. W1AW is loud on 160m and
> 80m.
>
> I was wondering if anyone has any tips or suggestions on what to improve.
>
> It is possible for me to hand a wire down as a sort of vertical on the outside
> wall of the building, run a sort of dipole across all my windows (my apartment
> is 25' wide by 30' deep) and let the end droop and there is also a close by tree
> that I am thinking of throwing a thin wire across.
>
> I don't think anything mounted in the apartment itself will radiate, since it is
> a big brick apartment house and 20 storeys high. I am on the fifth floor.
>
> Any help or suggestions would be greatly appreciated.
>
> Monica
> KV2O
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7766. Re: [loopantennas] First, assume the best

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-10 21:00:10 UTC
From: Bob Guerrette
Topic: 7750 Message: 7766

Steve, you're right. Most of us (yes even those of us born here) aren't always clear in our posts. So we need to cut posters some slack. Sadly it is like this all over the web Someone goes to the trouble of trying to be helpful, and there is ALWAYS an idiot who berates them for their efforts.. No Good Deed Goes Un-Punished. we need to collectively remember your gentle reminder. 73, Bob K1QGF

--- On Mon, 8/9/10, alienrelics <alienrelics@...> wrote:

From: alienrelics <alienrelics@...>
Subject: [loopantennas] First, assume the best
To: loopantennas@yahoogroups.com
Date: Monday, August 9, 2010, 5:21 PM

English is not a first language for many people on this list. If someone seems rude to you, I suggest reading again and considering the possibility that the poster speaks English as a second language.

I know people who, despite English being their native language, still are misunderstood due to typos or poor word choices. I'm told that we Americans may be seen as rather abrupt and rude. So even if someone isn't from a "foreign" country (to someone in Brazil, -you- are in a foreign country), give them the benefit of the doubt.

So first, assume the best or at least don't assume the worst. If someone is truly being rude, it will become obvious in a few messages.

Steve Greenfield AE7HD
your friendly neighborhood moderator

[Non-text portions of this message have been removed]

7767. RE: [loopantennas] Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 08:40:56 UTC
From: Chris Harris
Topic: 7743 Message: 7767

It's worth looking at the first part of the last paragraph of that page:

"Bearing in mind that most of the RF will be going skywards"

I've never understood why some people make horizontal full wave loops.
A horizontal full wave loop will beam half of the energy straight down
for a lot to be absorbed by ground resistance and the other half
straight up.
The MUF (http://www.spacew.com/www/realtime.php) has been increasing
lately, so I guess it's useful for local communication.
73, Chris zl3cjh

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of Eamon Egan
Sent: Tuesday, 10 August 2010 2:55 p.m.
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: I need Information

Hello Hector,

try Googling "40m delta loop".

Here is one page I found that looks good:
http://www.mccormick.uk.com/40%20meter%20loop/index.html

After reading this (and other pages), if you have some specific
questions, or things you do not understand, I am sure people in this
group can help you.

73
Eamon
VE2EGN / AB1NK

[Non-text portions of this message have been removed]

7768. RE: [loopantennas] Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 09:29:17 UTC
From: M HOLDEN
Topic: 7743 Message: 7768

The ground will absorb some, but it will also reflect a great deal, particularly if the loop is at a suitable height, and the ground is of good conductivity.
The fact often missed with large horizontal loops is that they radiate vertically on their fundamental frequency, but as you change bands to use them on their harmonics, that angle of radiation changes to progressively lower angles, ultimately producing horizon kissing signals in the higher HF bands. Mike Holden G4HOL

--- On Wed, 11/8/10, Chris Harris <chris.harris@...> wrote:

It's worth looking at the first part of the last paragraph of that page:

"Bearing in mind that most of the RF will be going skywards"

I've never understood why some people make horizontal full wave loops.

A horizontal full wave loop will beam half of the energy straight down

for a lot to be absorbed by ground resistance and the other half

straight up.

The MUF (http://www.spacew.com/www/realtime.php) has been increasing

lately, so I guess it's useful for local communication.

73, Chris zl3cjh

-----Original Message-----

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]

On Behalf Of Eamon Egan

Sent: Tuesday, 10 August 2010 2:55 p.m.

To: loopantennas@yahoogroups.com

Subject: [loopantennas] Re: I need Information

Hello Hector,

try Googling "40m delta loop".

Here is one page I found that looks good:

http://www.mccormick.uk.com/40%20meter%20loop/index.html

After reading this (and other pages), if you have some specific

questions, or things you do not understand, I am sure people in this

group can help you.

73

Eamon

VE2EGN / AB1NK

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7769. Re: [loopantennas] Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 07:10:16 UTC
From: John Barnett
Topic: 7762 Message: 7769

Hi Monica,

The kink you provided for your blog does not seem to work! Could you check it please and re-post.

John.

On Tue, 10 Aug 2010 19:04:26 +0100, Monica Ann P <darkeraven@...> wrote:

> Hi all. I have been following here for the last few weeks and I was
> wondering if I can get some feedback and hints on how I can better my
> antenna situation.
>
> I recently got the ham bug again and I am trying to get my station on
> the air. I have an FT-950 which I love. I thought how can put up an
> antenna in my restricted space (I live on the fifth floor, facing east
> in Manhattan). My building is a large steel framed building with brick
> curtain walls. I don't have access to a balcony. I came across loop
> antennas and I thought to give it a shot.
>
> My blog, http://kv2o.blogspot.com/, has a picture of my current setup.
> It is a rectangle, approximately 44" wide by 50" high consisting of 6
> turns of #16 wire fed into a SGC-230 antenna tuner. The SGC-230 matches
> it well from 160m through 10m.
>
> I haven't tried to make many QSOs yet, but I do get fairly good coverage
> and can hear DX and stateside stations, especially on 20m. W1AW is loud
> on 160m and 80m.
>
> I was wondering if anyone has any tips or suggestions on what to improve.
>
> It is possible for me to hand a wire down as a sort of vertical on the
> outside wall of the building, run a sort of dipole across all my windows
> (my apartment is 25' wide by 30' deep) and let the end droop and there
> is also a close by tree that I am thinking of throwing a thin wire
> across.
>
> I don't think anything mounted in the apartment itself will radiate,
> since it is a big brick apartment house and 20 storeys high. I am on
> the fifth floor.
>
> Any help or suggestions would be greatly appreciated.
>
> Monica
> KV2O

>

--
Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

7770. Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 14:54:26 UTC
From: CE3FZL
Topic: 7743 Message: 7770

FRIENDS OF LOOPANTENNAS YAHOOGROPS,

Thank you for information about diagram for Delta Loop antenna is veri imprtant links

Best Regard

Hector
CE3FZL
XR2A

[Non-text portions of this message have been removed]

7771. Re: [loopantennas] Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 15:31:32 UTC
From: Andy
Topic: 7743 Message: 7771

> A horizontal full wave loop will beam half of the energy straight down
> for a lot to be absorbed by ground resistance and the other half
> straight up.

The same is true of much of the energy from horizontal dipoles too,
just not to quite the same degree.

While some of the energy going down is lost, much of it is reflected
back up. This upward-going energy is what makes NVIS work, and gives
you local/regional coverage.

Some of the early work on NVIS actually used log-periodic antennas
that were aimed straight down, on purpose. Apparently they found they
worked better that way, using earth as a reflector, rather than
pointing up. Pointed either way, the beam interacts with the ground,
and I guess they found it worked better that way. (See the Fielder &
Farmer NVIS book, now out of print, for examples.)

As you go up in frequency, above foF2 (which is the MUF for NVIS), the
radiation from horizontal loops flattens out into more of a disk,
going more outwards than up or down. So the loop can be the best of
both worlds: an excellent NVIS antenna on lower frequencies that
support NVIS, morphing into a DX antenna on higher bands where NVIS
doesn't work.

Andy

7772. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 15:37:54 UTC
From: Monica Ann P
Topic: 7762 Message: 7772

Oops

I think a comma got into the URL

Here it is: http://kv2o.blogspot.com/

--- In loopantennas@yahoogroups.com, "John Barnett" <swlistener09@...> wrote:
>
> Hi Monica,
>
> The kink you provided for your blog does not seem to work! Could you check
> it please and re-post.
>
> John.
>
> On Tue, 10 Aug 2010 19:04:26 +0100, Monica Ann P <darkeraven@...>
> wrote:
>
> > Hi all. I have been following here for the last few weeks and I was
> > wondering if I can get some feedback and hints on how I can better my
> > antenna situation.
> >
> > I recently got the ham bug again and I am trying to get my station on
> > the air. I have an FT-950 which I love. I thought how can put up an
> > antenna in my restricted space (I live on the fifth floor, facing east
> > in Manhattan). My building is a large steel framed building with brick
> > curtain walls. I don't have access to a balcony. I came across loop
> > antennas and I thought to give it a shot.
> >
> > My blog, http://kv2o.blogspot.com/, has a picture of my current setup.
> > It is a rectangle, approximately 44" wide by 50" high consisting of 6
> > turns of #16 wire fed into a SGC-230 antenna tuner. The SGC-230 matches
> > it well from 160m through 10m.
> >
> > I haven't tried to make many QSOs yet, but I do get fairly good coverage
> > and can hear DX and stateside stations, especially on 20m. W1AW is loud
> > on 160m and 80m.
> >
> > I was wondering if anyone has any tips or suggestions on what to improve.
> >
> > It is possible for me to hand a wire down as a sort of vertical on the
> > outside wall of the building, run a sort of dipole across all my windows
> > (my apartment is 25' wide by 30' deep) and let the end droop and there
> > is also a close by tree that I am thinking of throwing a thin wire
> > across.
> >

> > I don't think anything mounted in the apartment itself will radiate,
> > since it is a big brick apartment house and 20 storeys high. I am on
> > the fifth floor.
> >
> > Any help or suggestions would be greatly appreciated.
> >
> > Monica
> > KV2O
> >
>
>
> --
> Using Opera's revolutionary e-mail client: http://www.opera.com/mail/
>

7773. Re: [loopantennas] Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 16:08:44 UTC
From: Myamiphil
Topic: 7762 Message: 7773

Cut and paste the link to your browser then
take out the comma at the end of the link

Best Regards

Phil

From: John Barnett <swlistener09@...>
To: loopantennas@yahoogroups.com
Sent: Wed, August 11, 2010 3:10:16 AM
Subject: Re: [loopantennas] Loop Antenna in my Manhattan Condo

Hi Monica,

The kink you provided for your blog does not seem to work! Could you check
it please and re-post.

John.

On Tue, 10 Aug 2010 19:04:26 +0100, Monica Ann P <darkeraven@...>
wrote:

> Hi all. I have been following here for the last few weeks and I was
> wondering if I can get some feedback and hints on how I can better my
> antenna situation.
>
> I recently got the ham bug again and I am trying to get my station on
> the air. I have an FT-950 which I love. I thought how can put up an
> antenna in my restricted space (I live on the fifth floor, facing east
> in Manhattan). My building is a large steel framed building with brick
> curtain walls. I don't have access to a balcony. I came across loop
> antennas and I thought to give it a shot.
>
> My blog, http://kv2o.blogspot.com/, has a picture of my current setup.
> It is a rectangle, approximately 44" wide by 50" high consisting of 6
> turns of #16 wire fed into a SGC-230 antenna tuner. The SGC-230 matches
> it well from 160m through 10m.
>
> I haven't tried to make many QSOs yet, but I do get fairly good coverage
> and can hear DX and stateside stations, especially on 20m. W1AW is loud
> on 160m and 80m.
>
> I was wondering if anyone has any tips or suggestions on what to improve.
>
> It is possible for me to hand a wire down as a sort of vertical on the
> outside wall of the building, run a sort of dipole across all my windows

> (my apartment is 25' wide by 30' deep) and let the end droop and there
> is also a close by tree that I am thinking of throwing a thin wire
> across.
>
> I don't think anything mounted in the apartment itself will radiate,
> since it is a big brick apartment house and 20 storeys high. I am on
> the fifth floor.
>
> Any help or suggestions would be greatly appreciated.
>
> Monica
> KV2O
>

--
Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links
rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into
Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

[Non-text portions of this message have been removed]

7774. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 20:47:55 UTC
From: Dave
Topic: 7762 Message: 7774

--- In loopantennas@yahoogroups.com, "Monica Ann P" <darkeraven@...> wrote:
>
> Hi all. I have been following here for the last few weeks and I was wondering if I can get some feedback and hints on how I can better my antenna situation.

Oh, we're full of it...I mean feedback and hints of course. :*)

> I recently got the ham bug again and I am trying to get my station on the air.

Excellent. I was first bitten 34+ years ago. Still haven't found the perfect antenna yet, but I'm still trying things. Need to order that spool of 2500 feet of Copperweld for the next antenna (No, I'm am NOT joking!).

> I have an FT-950 which I love.

Still using a Kenwood TS-820 here (complete with vacuum tubes in it, even!).

> I thought how can put up an antenna in my restricted space (I live on the fifth floor, facing east in Manhattan). My building is a large steel framed building with brick curtain walls. I don't have access to a balcony. I came across loop antennas and I thought to give it a shot.

Loops will work for you, but the problem may be that they can be VERY narrow banded. That may not be a problem for a CW signal, which occupies only a few Hz of bandwidth, but it may be a problem for a SSB signal, since the sidebands may fall far enough outside of the resonance frequency to be attenuated.

There have been quite a few designs over the years. Chris Trask, one of the members here, has written an excellent article about his work with loop antennas:

http://www.home.earthlink.net/~christrask/Transmitting%20Loop%20Antenna.pdf

There was quite a bit of interest in the DDRR (Directional Discontinuity Ring Radiator) antenna about 25-30 years ago (Ok, would you believe 40 years ago? Err, how about 50 years ago?), although I haven't heard much about it recently:

http://w9ttw.com/ddrr.htm

In any case, the basic problem is that a very short antenna (whether it's a dipole or a loop) is not going to couple energy to the outside world very well. Thus, you tend to have large voltages and currents flowing. In order to avoid excessive (I**2)*R "heating" losses, you need to hold the resistance down. That usually means heavy conductors, and capacitors which don't suffer resistance in moving joints.

There has also been some interest in using ferrite cored loop antennas, but it's awfully easy to overload the ferrite core and push it into magnetic saturation with very little transmitter power. I think a couple of the guys here may be working on things like that.

> My blog, http://kv2o.blogspot.com/, has a picture of my current setup. It is a rectangle, approximately 44" wide by 50" high consisting of 6 turns of #16 wire fed into a SGC-230 antenna tuner. The SGC-230 matches it well from 160m through 10m.

#16 gauge is probably about the minimum I'd consider for a transmitting loop. Note that some transmitting loop builders go as far as using Copper plumbing pipe for the loop, specifically to hold down the resistance.

> I haven't tried to make many QSOs yet, but I do get fairly good coverage and can hear DX and stateside stations, especially on 20m. W1AW is loud on 160m and 80m.

If it works, well, it works!

Be a little careful about making measurements from W1AW from your location, since they're just a few miles away in Newington, CT (which is east of you, too), and they have some rather fantastic antennas, too.

Can you hear WWV on any bands? That's in Ft. Collins, CO, which would be a bit better test (2.5 MHz, 5 MHz, 10 MHz, 15 MHz, and 20 MHz).

> I was wondering if anyone has any tips or suggestions on what to improve.

Use larger wire? I'd probably go with #12 gauge wire (Yes, I've stripped many hundreds of feet of NM electric wire to get at the individual conductors, although, in reality, this is soft drawn Copper wire, which makes for lousy suspended antennas, since it stretches under tension).

Make sure any capacitors in the loop circuit as able to handle the voltages and currents, and are low loss. Some loop builders use butterfly style capacitors so that there's no current flowing through a slip-connection (e.g., to the rotor plates) to hold down the resistance and losses.

> It is possible for me to hand a wire down as a sort of vertical on the outside wall of the building, run a sort of dipole across all my windows (my apartment is 25' wide by 30' deep) and let the end droop and there is also a close by tree that I am thinking of throwing a thin wire across.

You can droop a wire out the window, but you have to make sure that no one can reach it ("Hey, what's this wire outside my window? OWWWW!"). Trust me, RF burns HURT!

I've even occasionally resorted to using a Helium balloon to float a piece of magnet wire (I prefer #30 gauge.), although that doesn't really help, since you're not on the top floor. Plus, wind does bad things to Helium balloons. And, the Helium diffuses through the balloon walls quite rapidly, even if you use Hi-Float to make the envelope less permeable for the Helium.

The wire to the tree is a decent idea. Note that antennas tend to develop high voltages on the ends when transmitting, so it would probably be a good idea to stop the wire before it reaches the tree (lest it arc over to the tree and/or kill a branch).

You may want to look up the topic of "invisible antennas". A lot can be done with some light gauge magnet wire in conjunction with some monofilament fishing line. Of course, the UV in sunlight deteriorates the Nylon that the fishing line is made for, necessitating the replacement of it periodically.

Over all, though, think safety (both RF and electrical).

> I don't think anything mounted in the apartment itself will radiate, since it is a big brick apartment house and 20 storeys high. I am on the fifth floor.

One option may be to mount a mobile style antenna sticking out of a window. Those are usually pretty weak antennas, but they certainly will beat using a piece of wet spaghetti as an antenna. :*)

> Any help or suggestions would be greatly appreciated.
>
> Monica
> KV2O

Dave
WA4QAL

7775. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 21:56:18 UTC
From: Monica Pedone
Topic: 7762 Message: 7775

Dave

Thanks for all your thoughtful suggestions.

I do intend, in subsequent versions, to upgrade the wire to a heavier gauge.

I also want to try a copper tube version (luckily I can solder copper tubing well). I wonder if my SGC-230 can act as a tuning element for the copper loop?

I do hear some fairly good signals both stateside and DX so I think that at least on 40, I am functioning.

As to bandwidth, I like to operate CW most of all, so a narrow bandwidth antenna is a good match for me.

--
Monica

[Non-text portions of this message have been removed]

7776. Re: [loopantennas] Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 22:44:04 UTC
From: Rick Karlquist
Topic: 7762 Message: 7776

Monica Pedone wrote:
>>
> I also want to try a copper tube version (luckily I can solder copper
> tubing
> well). I wonder if my SGC-230 can act as a tuning element for the copper
> loop?

Using a tuner to tune a loop is very suboptimal. You should make
a ONE turn loop as big as you can (based on window) out of large
diameter copper and tune it with a high voltage capacitor. There
are commerical versions of this and many homebrew articles.
A small loop should be very narrow band, necessitating retuning
the capacitor after QSY. If not, it is indicative that the efficiency
is very low. Instead of actual copper tubing, you can run 3M copper
tape lengthwise along plastic pipe to fake it.

Rick N6RK

7777. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 23:05:21 UTC
From: alienrelics
Topic: 7762 Message: 7777

I worry that the window frame acts as a shorted turn.

I'm not sure where else you can put it, though. It depends heavily on what is in the walls - you might do better hanging it on an inside wall.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Monica Pedone <darkeraven@...> wrote:
>
> Dave
>
> Thanks for all your thoughtful suggestions.
>
> I do intend, in subsequent versions, to upgrade the wire to a heavier gauge.
>
> I also want to try a copper tube version (luckily I can solder copper tubing
> well). I wonder if my SGC-230 can act as a tuning element for the copper
> loop?
>
> I do hear some fairly good signals both stateside and DX so I think that at
> least on 40, I am functioning.
>
> As to bandwidth, I like to operate CW most of all, so a narrow bandwidth
> antenna is a good match for me.
>
> --
> Monica
>
>
> [Non-text portions of this message have been removed]
>

7778. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-11 23:41:58 UTC
From: Monica Ann P
Topic: 7762 Message: 7778

Thanks Steve

I worry about that too. I wish the window frames were wood, but they are not. I also worry cause the outside walls are brick, but it is curtain wall with some type of metal behind. Also some of the interior walls may have wire lathe behind the plaster.

Hmm, Maybe I can feed the aluminum frame as the loop itself!

I have a few option, but I think letting a wire go down vertically, a sort of inverted vertical, would be an option, but it would lie against the brick curtain wall. Same for a dipole I can string across a narrow window ledge.

This weekend I will try the wire thrown across the tree and see if the reception is an improvement. If it is, I may try to transmit at a low power.

I have lots of things to try, as well as a frame I built so I can try the loop inside the apartment a bit. Its basically a big octagon, about 48" across the points and on a mount 5 foot off the floor.

I would try the mult-iturn loop that SGC recommends on that frame and play with that.

I like experimenting and building, so this is fun to me. I am sure I will find something that works.

Monica
KV2O

--- In loopantennas@yahoogroups.com, "alienrelics" <alienrelics@...> wrote:
>
> I worry that the window frame acts as a shorted turn.
>
> I'm not sure where else you can put it, though. It depends heavily on what is in the walls - you might do better hanging it on an inside wall.
>
> Steve Greenfield AE7HD
>
> --- In loopantennas@yahoogroups.com, Monica Pedone <darkeraven@> wrote:
> >
> > Dave
> >
> > Thanks for all your thoughtful suggestions.
> >
> > I do intend, in subsequent versions, to upgrade the wire to a heavier gauge.
> >
> > I also want to try a copper tube version (luckily I can solder copper tubing
> > well). I wonder if my SGC-230 can act as a tuning element for the copper
> > loop?

> >
> > I do hear some fairly good signals both stateside and DX so I think that at
> > least on 40, I am functioning.
> >
> > As to bandwidth, I like to operate CW most of all, so a narrow bandwidth
> > antenna is a good match for me.
> >
> > --
> > Monica
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

7779. Re: [loopantennas] Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-12 05:40:29 UTC
From: Chris Harris
Topic: 7743 Message: 7779

Andy wrote:
>
>
> > A horizontal full wave loop will beam half of the energy straight down
> > for a lot to be absorbed by ground resistance and the other half
> > straight up.
>
> The same is true of much of the energy from horizontal dipoles too,
> just not to quite the same degree.
>
The point is, for the full wave loop, the emission is a double cone,
rather than a donut. with the dipole the action of the attenuated ground
reflection is to turn it into the (roughly) horizontal double cone and
hopefully to stations of interest.
With a horizontal full wave loop, most of the energy not lost the the
ground goes nearly straight up. With the sunspots as they have, the
energy will radiate out into space. If there are some ions up there, it
will come almost straight down again, so useful for local communications
only.

For a full wave loop, it makes much more sense to have it vertical. It
should still have gain over a dipole. Then you can add a director or
reflector or both (turning it into a quad) and pick up some more gain.

> While some of the energy going down is lost, much of it is reflected
> back up. This upward-going energy is what makes NVIS work, and gives
> you local/regional coverage.
>

True

> Some of the early work on NVIS actually used log-periodic antennas
> that were aimed straight down, on purpose. Apparently they found they
> worked better that way, using earth as a reflector, rather than
> pointing up. Pointed either way, the beam interacts with the ground,
> and I guess they found it worked better that way. (See the Fielder &
> Farmer NVIS book, now out of print, for examples.)
>
I wonder why they stopped doing that ;-)
There will always be ground losses, the best you can do is minimise them.
>
>
> As you go up in frequency, above foF2 (which is the MUF for NVIS), the
> radiation from horizontal loops flattens out into more of a disk,
>
at which point it is no longer a full wave loop, but a multi-wave loop

> going more outwards than up or down. So the loop can be the best of
> both worlds: an excellent NVIS antenna on lower frequencies that
> support NVIS, morphing into a DX antenna on higher bands where NVIS
> doesn't work.
>
True, but I would cut it for 80m rather than 40, space permitting.

7780. Re: [loopantennas] Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-12 05:53:31 UTC
From: brian nsl
Topic: 7743 Message: 7780

Hi,
Somewhere there are details of a ' super loop ', in the horizontal plane with three reflector wires laid on the ground below the antenna !!!!
I don't recall the author of the article.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Chris Harris
To: loopantennas@yahoogroups.com
Sent: Thursday, August 12, 2010 6:40 AM
Subject: Re: [loopantennas] Re: I need Information

[Non-text portions of this message have been removed]

7781. Re: [loopantennas] Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-12 01:02:34 UTC
From: Bill Aycock
Topic: 7762 Message: 7781

Monica Ann--
With that tree there (if you can get a wire through the window) toss the weighted end of a wire out there, let some slide down, and load it as an inverted L with inverted feed !
Bill--W4BSG

----- Original Message -----
From: "Monica Ann P" <darkeraven@...>
To: <loopantennas@yahoogroups.com>
Sent: Wednesday, August 11, 2010 6:41 PM
Subject: [loopantennas] Re: Loop Antenna in my Manhattan Condo

>
>
> Thanks Steve
>
> I worry about that too. I wish the window frames were wood, but they are
> not. I also worry cause the outside walls are brick, but it is curtain
> wall with some type of metal behind. Also some of the interior walls may
> have wire lathe behind the plaster.
>
> Hmm, Maybe I can feed the aluminum frame as the loop itself!
>

7782. Re: [loopantennas] Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-13 02:21:51 UTC
From: Andy
Topic: 7743 Message: 7782

> For a full wave loop, it makes much more sense to have it vertical.

If you chase DX, absolutely.

Me, I would use a full wave horizontal loop because I want local NVIS coverage for the people I need to talk to, and an antenna that optimizes DX misses that.

There seem to be lots of other people who like horizontal loops and may not be looking for NVIS. I guess it is either because it turns into a decent DX antenna when it is many wavelengths long, or because they are getting good performance out of it anyway at the lower frequencies that isn't strictly NVIS.

>> Some of the early work on NVIS actually used log-periodic antennas
>> that were aimed straight down, on purpose. ...
>>
> I wonder why they stopped doing that ;-)

Probably because it was a lot of hardware, just to get a very wideband antenna. (These people were researching the theory behind NVIS.) A more practical antenna might be a simple dipole, or something larger to get more gain; but not an upside-down LPDA which is so unwieldy.

Regards,
Andy

7783. Re: [loopantennas] Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-13 02:25:58 UTC
From: Andy
Topic: 7743 Message: 7783

> Somewhere there are details of a ' super loop ', in the horizontal plane with three
> reflector wires laid on the ground below the antenna !!!!
> I don't recall the author of the article.

Hmmm... I've seen a couple of articles about a "super NVIS" antenna
which had a low dipole and three reflector wires laid on the ground.
(The authors were in or near Texas.) I haven't seen a version using a
horizontal loop. If you can find it, I'd love to see it. (I've been
thinking how one might do that.)

Andy

7784. Re: [loopantennas] Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-13 07:36:34 UTC
From: brian nsl
Topic: 7743 Message: 7784

Andy,
You may be more correct than me in that it was a dipole with three reflector wires laid on the ground, old memory drives do strange things hi!
However, back in the late 90's I did add a reflector to my 40m full wave horizontal loop, the antenna was at 35ft in a diamond shape and the + 5% reflector loop at 15 ft, with 5 watts ssb I controlled a big inter G - EI net for hours on end, so it did work.
Strangely (another posting did mention this fact) on the odd occasion I could work nobody on the net, as though the radiated signal just kept on going hi!
732, Brian, G0NSL-QRP.
----- Original Message -----
From: Andy
To: loopantennas@yahoogroups.com
Sent: Friday, August 13, 2010 3:25 AM
Subject: Re: [loopantennas] Re: I need Information

[Non-text portions of this message have been removed]

7785. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-14 00:02:02 UTC
From: Monica Ann P
Topic: 7762 Message: 7785

Thanks Bill

So, I tried today, and heard an SP9 calling. He answered me after the second try and I was 57 on the loop. That was pretty sweet.

So now I know I am definitely able to transmit and I can use this as my baseline and improve from here.

Monica
KV2O

--- In loopantennas@yahoogroups.com, "Bill Aycock" <billaycock@...> wrote:
>
> Monica Ann--
> With that tree there (if you can get a wire through the window) toss the
> weighted end of a wire out there, let some slide down, and load it as an
> inverted L with inverted feed !
> Bill--W4BSG
>
> ----- Original Message -----
> From: "Monica Ann P" <darkeraven@...>
> To: <loopantennas@yahoogroups.com>
> Sent: Wednesday, August 11, 2010 6:41 PM
> Subject: [loopantennas] Re: Loop Antenna in my Manhattan Condo
>
>
> > >
> > >
> > > Thanks Steve
> > >
> > > I worry about that too. I wish the window frames were wood, but they are
> > > not. I also worry cause the outside walls are brick, but it is curtain
> > > wall with some type of metal behind. Also some of the interior walls may
> > > have wire lathe behind the plaster.
> > >
> > > Hmm, Maybe I can feed the aluminum frame as the loop itself!
> > >
>

7786. A silver wire question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-14 01:47:04 UTC
From: cannonmandolin
Topic: 7786 Message: 7786

I realized today that i have a spool of silver-plated copper wire in stock. It is pretty fine, the sort used to wind wire grips on violin bows. We usually use solid silver now, or German Silver, as the plated copper can give the player a green finger . Not good. But, it may be just the thing for an indoor loop.

So, it is solid conductor, not stranded. And it solders real well. If nothing else it would make a PRETTY loop.

Your comments are welcomed and sought. Thanks, keith

7787. Re: A silver wire question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-15 03:00:53 UTC
From: tenorman1952
Topic: 7786 Message: 7787

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:
>
> I realized today that i have a spool of silver-plated copper wire in stock. It is pretty fine, the sort used to wind wire grips on violin bows.

I can see no downside to this. ;-)

BTW, I play and repair woodwinds.

Paul - AE5JU

7788. Re: I need Information

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-15 12:08:30 UTC
From: HooNz
Topic: 7743 Message: 7788

http://picasaweb.google.com/okHooNz/AmateurRadio#
i have been using a dual band version for 3 years now (80/40m via a single coax feed)

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Andy,
> You may be more correct than me in that it was a dipole with three reflector wires
> laid on the ground, old memory drives do strange things hi!
> However, back in the late 90's I did add a reflector to my 40m full wave horizontal loop,
> the antenna was at 35ft in a diamond shape and the + 5% reflector loop at 15 ft,
> with 5 watts ssb I controlled a big inter G - EI net for hours on end, so it did work.
> Strangely (another posting did mention this fact) on the odd occasion I could work
nobody
> on the net, as though the radiated signal just kept on going hi!
> 732, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: Andy
> To: loopantennas@yahoogroups.com
> Sent: Friday, August 13, 2010 3:25 AM
> Subject: Re: [loopantennas] Re: I need Information
>
>
>
>
> [Non-text portions of this message have been removed]
>

7789. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-15 13:54:44 UTC
From: cank13cat
Topic: 7762 Message: 7789

I've used loops mounted near windows with good results but for receive only. About a year or so ago I switched from magnet wire loops to one that uses a couple of turns of coax and it's a bit quieter on receive in my high RFI suburban environment. The shielded loop from coax is based on a design from Joe Carr's Receiving Antenna Handbook, but it's nothing unique - you can find similar designs for shielded loops all over the web.

For transmitting from your location, you might check into the Super Antenna MP-1. I'd been skeptical about loaded verticals but an acquaintance near the East Coast has used an MP-1 successfully to make contacts (voice on SSB running 100 watts or less) and I heard him many times last year from my home in Texas. I don't know how efficient it is, I can only say I heard him clearly several times in the 40m range.

Based on his experience the only drawbacks appear to be: the need for a counterpoise wire; and it's limited to fair weather operation - apparently it's very sensitive to precipitation; it needs to be mounted outside the building, but is small, lightweight and discrete enough that it could be rigged to work from a small temporary platform hung over an open window frame, or from a tripod on a balcony (I think you mentioned you don't have access to a balcony, though).

7790. Re: [loopantennas] Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-15 14:11:40 UTC
From: M HOLDEN
Topic: 7762 Message: 7790

Thinking outside of the box, do you have access to the roof of the block ? It would open up possibilities of conventional wire antennas, with a feeder running down to your floor level. I'm imagining an auto tuner on the roof level and coaxial cable to your shack.
Best wishes, Mike, G4HOL

--- On Sun, 15/8/10, cank13cat <wa_jenkins@...> wrote:

From: cank13cat <wa_jenkins@...>
Subject: [loopantennas] Re: Loop Antenna in my Manhattan Condo
To: loopantennas@yahoogroups.com
Date: Sunday, 15 August, 2010, 14:54

I've used loops mounted near windows with good results but for receive only. About a year or so ago I switched from magnet wire loops to one that uses a couple of turns of coax and it's a bit quieter on receive in my high RFI suburban environment. The shielded loop from coax is based on a design from Joe Carr's Receiving Antenna Handbook, but it's nothing unique - you can find similar designs for shielded loops all over the web.

For transmitting from your location, you might check into the Super Antenna MP-1. I'd been skeptical about loaded verticals but an acquaintance near the East Coast has used an MP-1 successfully to make contacts (voice on SSB running 100 watts or less) and I heard him many times last year from my home in Texas. I don't know how efficient it is, I can only say I heard him clearly several times in the 40m range.

Based on his experience the only drawbacks appear to be: the need for a counterpoise wire; and it's limited to fair weather operation - apparently it's very sensitive to precipitation; it needs to be mounted outside the building, but is small, lightweight and discrete enough that it could be rigged to work from a small temporary platform hung over an open window frame, or from a tripod on a balcony (I think you mentioned you don't have access to a balcony, though).

[Non-text portions of this message have been removed]

7791. Re: [loopantennas] Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-15 18:02:57 UTC
From: W2XJ
Topic: 7762 Message: 7791

Many places in Manhattan will evict for merely being on the roof. That is part of my problem but the other part is metal window frames and bars compromise even a loop.

On 8/15/10 10:11 AM, "M HOLDEN" <mholden909@btinternet.com> wrote:

>
>
>
>
>
> Thinking outside of the box, do you have access to the roof of the block ? It
> would open up possibilities of conventional wire antennas, with a feeder
> running down to your floor level. I'm imagining an auto tuner on the roof
> level and coaxial cable to your shack.
> Best wishes, Mike, G4HOL
>
> --- On Sun, 15/8/10, cank13cat <wa_jenkins@...
> <mailto:wa_jenkins%40sbcglobal.net> > wrote:
>
> From: cank13cat <wa_jenkins@... <mailto:wa_jenkins%40sbcglobal.net>
> >
> Subject: [loopantennas] Re: Loop Antenna in my Manhattan Condo
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Date: Sunday, 15 August, 2010, 14:54
>
>
>
> I've used loops mounted near windows with good results but for receive only.
> About a year or so ago I switched from magnet wire loops to one that uses a
> couple of turns of coax and it's a bit quieter on receive in my high RFI
> suburban environment. The shielded loop from coax is based on a design from
> Joe Carr's Receiving Antenna Handbook, but it's nothing unique - you can find
> similar designs for shielded loops all over the web.
>
> For transmitting from your location, you might check into the Super Antenna
> MP-1. I'd been skeptical about loaded verticals but an acquaintance near the
> East Coast has used an MP-1 successfully to make contacts (voice on SSB
> running 100 watts or less) and I heard him many times last year from my home
> in Texas. I don't know how efficient it is, I can only say I heard him
> clearly several times in the 40m range.
>
> Based on his experience the only drawbacks appear to be: the need for a
> counterpoise wire; and it's limited to fair weather operation - apparently
> it's very sensitive to precipitation; it needs to be mounted outside the

> building, but is small, lightweight and discrete enough that it could be
> rigged to work from a small temporary platform hung over an open window frame,
> or from a tripod on a balcony (I think you mentioned you don't have access to
> a balcony, though).
>
> [Non-text portions of this message have been removed]
>
>
>
>
>

[Non-text portions of this message have been removed]

7792. Re: Loop Antenna in my Manhattan Condo

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-15 23:01:26 UTC
From: Monica Ann P
Topic: 7762 Message: 7792

Thanks everyone for there comments and input.

I got a few things accomplished this weekend. I built some shelves to put my equipment on, set up a 20m vertical hanging frommy window and got my old FT-707 up and running .

The big surprise was the 20m vertical. I cut it to length with two radials, tuned it using the MFJ analyzer and tried it side by side with the multi-turn loop. I tuned it with an old Ten-Tec tuner to an under 1:1.3 SWR.

No comparison. The vertical was loud and clear on signals that the loop didn't even hear. I am pretty happy with this so far.

Next experiment is to try a 40 meter vertical. Maybe next weekend!

Monica
KV2O

--- In loopantennas@yahoogroups.com, W2XJ <w2xj@...> wrote:
>
> Many places in Manhattan will evict for merely being on the roof. That is
> part of my problem but the other part is metal window frames and bars
> compromise even a loop.
>
>
> On 8/15/10 10:11 AM, "M HOLDEN" <mholden909@...> wrote:
>
> > >
> > >
> > >
> > >
> > >
> > > Thinking outside of the box, do you have access to the roof of the block ? It
> > > would open up possibilities of conventional wire antennas, with a feeder
> > > running down to your floor level. I'm imagining an auto tuner on the roof
> > > level and coaxial cable to your shack.
> > > Best wishes, Mike, G4HOL
> > >
> > > --- On Sun, 15/8/10, cank13cat <wa_jenkins@...
> > > <mailto:wa_jenkins%40sbcglobal.net> > wrote:
> > >
> > > From: cank13cat <wa_jenkins@... <mailto:wa_jenkins%40sbcglobal.net>
> > > >
> > > Subject: [loopantennas] Re: Loop Antenna in my Manhattan Condo
> > > To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> > > Date: Sunday, 15 August, 2010, 14:54
> > >

> >
> >
> > I've used loops mounted near windows with good results but for receive only.
> > About a year or so ago I switched from magnet wire loops to one that uses a
> > couple of turns of coax and it's a bit quieter on receive in my high RFI
> > suburban environment. The shielded loop from coax is based on a design from
> > Joe Carr's Receiving Antenna Handbook, but it's nothing unique - you can find
> > similar designs for shielded loops all over the web.
> >
> > For transmitting from your location, you might check into the Super Antenna
> > MP-1. I'd been skeptical about loaded verticals but an acquaintance near the
> > East Coast has used an MP-1 successfully to make contacts (voice on SSB
> > running 100 watts or less) and I heard him many times last year from my home
> > in Texas. I don't know how efficient it is, I can only say I heard him
> > clearly several times in the 40m range.
> >
> > Based on his experience the only drawbacks appear to be: the need for a
> > counterpoise wire; and it's limited to fair weather operation - apparently
> > it's very sensitive to precipitation; it needs to be mounted outside the
> > building, but is small, lightweight and discrete enough that it could be
> > rigged to work from a small temporary platform hung over an open window frame,
> > or from a tripod on a balcony (I think you mentioned you don't have access to
> > a balcony, though).
> >
> > [Non-text portions of this message have been removed]
> >
> >
> >
> >
> >
>
>
>
> [Non-text portions of this message have been removed]
>

7793. Re: A silver wire question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-15 23:07:34 UTC
From: pappy_hiram
Topic: 7786 Message: 7793

That would work on this antenna:

http://www.sm0vpo.com/antennas/frameant.htm

I've not tried it yet myself, but it's a future project in the Queue.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:
>
> I realized today that i have a spool of silver-plated copper wire in stock. It is pretty fine, the sort used to wind wire grips on violin bows. We usually use solid silver now, or German Silver, as the plated copper can give the player a green finger . Not good. But, it may be just the thing for an indoor loop.
>
> So, it is solid conductor, not stranded. And it solders real well. If nothing else it would make a PRETTY loop.
>
> Your comments are welcomed and sought. Thanks, keith
>

7794. Re: [loopantennas] Re: A silver wire question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-16 08:21:16 UTC
From: M HOLDEN
Topic: 7786 Message: 7794

German silver, by the way, is an alloy of of Copper, nickel and zinc and it's conductivity would lag behind straightforward copper. Mike G4HOL

--- On Mon, 16/8/10, pappy_hiram <daveleb55@...> wrote:

From: pappy_hiram <daveleb55@...>
Subject: [loopantennas] Re: A silver wire question
To: loopantennas@yahoogroups.com
Date: Monday, 16 August, 2010, 0:07

That would work on this antenna:

http://www.sm0vpo.com/antennas/frameant.htm

I've not tried it yet myself, but it's a future project in the Queue.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "cannonmandolin" <cannonmandolin@...> wrote:

>

> I realized today that i have a spool of silver-plated copper wire in stock. It is pretty fine, the sort used to wind wire grips on violin bows. We usually use solid silver now, or German Silver, as the plated copper can give the player a green finger . Not good. But, it may be just the thing for an indoor loop.

>

> So, it is solid conductor, not stranded. And it solders real well. If nothing else it would make a PRETTY loop.

>

> Your comments are welcomed and sought. Thanks, keith

>

[Non-text portions of this message have been removed]

7795. RE: [loopantennas] Re: A silver wire question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-16 09:16:36 UTC
From: Kjell W. Strom
Topic: 7786 Message: 7795

>>
German silver, by the way, is an alloy of of Copper, nickel and
zinc and it's conductivity would lag behind straightforward
copper. Mike G4HOL
>>

Yes, indeed. The electrical conductivity is in the same range as
for iron and lead, depending on the alloy composition.

73,
Kjell, PB3SM - SM6CPI

_____

From: loopantennas@yahoogroups.com
[mailto:loopantennas@yahoogroups.com] On Behalf Of M HOLDEN
Sent: 16 August 2010 10:21
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: A silver wire question

German silver, by the way, is an alloy of of Copper, nickel and
zinc and it's conductivity would lag behind straightforward
copper. Mike G4HOL

--- On Mon, 16/8/10, pappy_hiram <daveleb55@...
<mailto:daveleb55%40yahoo.com> > wrote:

From: pappy_hiram <daveleb55@...
<mailto:daveleb55%40yahoo.com> >
Subject: [loopantennas] Re: A silver wire question
To: loopantennas@yahoogroups.com
<mailto:loopantennas%40yahoogroups.com>
Date: Monday, 16 August, 2010, 0:07

That would work on this antenna:

http://www.sm0vpo.com/antennas/frameant.htm

I've not tried it yet myself, but it's a future project in the
Queue.

Pappy Hiram

--- In loopantennas@yahoogroups.com
<mailto:loopantennas%40yahoogroups.com> , "cannonmandolin"
<cannonmandolin@...> wrote:

>

> I realized today that i have a spool of silver-plated copper wire in stock. It is pretty fine, the sort used to wind wire grips on violin bows. We usually use solid silver now, or German Silver, as the plated copper can give the player a green finger . Not good. But, it may be just the thing for an indoor loop.

>

> So, it is solid conductor, not stranded. And it solders real well. If nothing else it would make a PRETTY loop.

>

> Your comments are welcomed and sought. Thanks, keith

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7796. Another loopamp built and working well with a small loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-17 01:33:42 UTC
From: Steve Ratzlaff
Topic: 7796 Message: 7796

I built the latest version of the Trask "A High Dynamic Range Amplifier for Wideband Active Loop Antennas" (8/3/2010 rev.) and initially had trouble with it, mainly with it being very noisy and covering up weak signals from a small loop. I set it aside until another list member who'd also built one told me his was noisy too and he'd traced it to VHF oscillations. It hadn't occurred to me to check for that but sure enough, mine was oscillating too, with a massive +17 dBm output. Primary oscillation was around 250 MHz with several other secondary oscillations (not harmonics), checked with a TEK 495P 1.8 GHz spectrum analyzer. I first tried ferrite beads on each transistor collector, but that didn't help at all. Leaving those in place I then put beads on each transistor base and that did the trick and killed all the oscillations. The amp is now quiet and I can probably remove the beads on the collectors though I haven't tried that yet. I tweaked the bias for about 97 mA at 13.0 volts supply; this seemed the highest I wanted to go since Q3,4 are already running very hot. 0.87 V on each emitter gives about 26 mA for each device; Q1,2 with 0.84 V for about 18 mA each device.
I ran some bench tests first. Using a 73-202 binoc core with 1:1 winding for 50 ohm unbalanced input/balanced output to the preamp loop inputs worked well. Gain at 1 MHz +23.6 dB; at 20 MHz (very broad minimum) +19.7 dB; at 40 MHz +23.5 dB. My primary spectrum analyzer, HP 3585A, stops at 40 MHz and I didn't try to check gain above that. Gain is mostly flat below 1 MHz, being -3 dB down at 47 kHz and -6 dB down at 13 kHz referred to gain at 1 MHz. (I used 1 uF monolithic caps for C2,3.)
For two-tone IMD tests I used my standard setup of 3 and 4 MHz test tones, set for 0 dBm at the output of the preamp to the spectrum analyzer. I used a 3/4 MHz band reject filter with a 20 db pad in front of the filter that effectively removes both fundamentals and allows the SA to operate at full sensitivity at the IMD frequencies without being overloaded by the very strong test tones. I checked IMD at 1, 2, 5, 7 MHz.
IMD results with 13.0 volts supply:
1 MHz +91.5 OIP2
2 MHz +45.2 OIP3
5 MHz +43.3 OIP3
7 MHz +94 OIP2
These indicate pretty decent results which should give good resistance to overload and also indicate that my circuit current is probably close to optimum.

I've been doing various small loop and associated loopamp tests the past several months; I made a 6 foot square PVC frame that I hang loops on for testing, and can check a loopamp as well. I have been interested in testing "crossed-parallel" loops, mentioned in the in the LZ1AQ article on his webpage (and also interested in building and testing his loopamp). I had built four 38 inch diameter single-turn loops of 1/2 inch soft copper tubing and compared them, connected quad cross-parallel (CP) configuration, to a

single-turn loop using 19 foot circumference 1/2 inch soft copper tubing (about 6 feet 4 inches diameter). The combined area of the quad small loops is just a little greater than the larger single loop area, and should give similar signal levels to a loopamp. (Actually, LZ1AQ seems to indicate that the quad CP loops should work better than a single larger area loop.) I have a whole range of weak signals (and some strong signals) on frequencies from 19.8 kHz to 20 MHz that I check each loop and loopamp for signal level, using an AOR AR-7030 receiver which has a very accurate digital bargraph S meter as the measuring instrument. I primarily use the 6 foot loop for preamp checks. So far my best homebrew loopamp has been the M0AYF preamp modified with trifilar output transformer. This has the most gain (+34 dB at 1 MHz) and hears the various weak signals the best, though its IMD results from bench testing are only moderate. I live in a rural area with low AC noise level and no nearby strong stations such as strong AMBC stations, so I can readily do comparisons among loops and loopamps of weak signals over a wide frequency range. I was not expecting a lot for the Trask loopamp with its approximately 10 dB less gain. But it's a quiet amp; and that's why it's fun to build, test and compare things such as loops and loopamps, to see how one compares to another. I was pleasantly surprised--even though the results showed it was 1-2 S units lower output than the M0AYF loopamp, every signal could be heard with about the same S/N ratio, over the whole frequency range from 19.8 kHz to 20 MHz (WWV time signal).

I built my loopamp using 43-303 binoc cores for all 6 main transformers; I left out L1, L2 and associated components on the input and ran the loop directly to C2,3. I matched the Q1,2 and Q3,4 transistor pairs for beta as close as I could with my limited supply of MPS6521s--my emitter voltages turned out to be equal for Q1,2 and Q3,4, so it must have been fairly close matching. As I do with all the loopamps I've been testing, I powered this loopamp separately with a small 12 volt gelcell outside at the loopamp, not powered down the coax cable as would be done for normal remote-loop and loopamp operation. I wound T6 slightly different from the article's Fig. 9 picture (and T3 as well). It does appear that ferrite beads (I used short beads,#43 material) need to be added to each transistor base as close to the transistor as possible, to suppress VHF oscillations. The bias needs to be adjustable; at least on mine--using just the original 68 ohm resistor gave only about 50 mA total initial circuit current for the particular devices I used.
After getting the oscillations tamed, this loopamp compares very favorably with my other best homebrew loopamps (not all of them worked well like this one eventually did). I give it a thumbs up!
73,
Steve

7797. Re: [loopantennas] Another loopamp built and working well with a small loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-17 02:10:40 UTC
From: Chris Trask
Topic: 7796 Message: 7797

>
> I built the latest version of the Trask "A High Dynamic Range Amplifier
for
> Wideband Active Loop Antennas" (8/3/2010 rev.) and initially had trouble
> with it, mainly with it being very noisy and covering up weak signals from
a
> small loop. I set it aside until another list member who'd also built one
> told me his was noisy too and he'd traced it to VHF oscillations. It
hadn't
> occurred to me to check for that but sure enough, mine was oscillating
too,
> with a massive +17 dBm output. Primary oscillation was around 250 MHz with
> several other secondary oscillations (not harmonics), checked with a TEK
> 495P 1.8 GHz spectrum analyzer. I first tried ferrite beads on each
> transistor collector, but that didn't help at all. Leaving those in place
I
> then put beads on each transistor base and that did the trick and killed
all
> the oscillations. The amp is now quiet and I can probably remove the beads
> on the collectors though I haven't tried that yet. I tweaked the bias for
> about 97 mA at 13.0 volts supply; this seemed the highest I wanted to go
> since Q3,4 are already running very hot. 0.87 V on each emitter gives
about
> 26 mA for each device; Q1,2 with 0.84 V for about 18 mA each device.
> I ran some bench tests first. Using a 73-202 binoc core with 1:1 winding
for
> 50 ohm unbalanced input/balanced output to the preamp loop inputs worked
> well. Gain at 1 MHz +23.6 dB; at 20 MHz (very broad minimum) +19.7 dB; at
40
> MHz +23.5 dB. My primary spectrum analyzer, HP 3585A, stops at 40 MHz and
I
> didn't try to check gain above that. Gain is mostly flat below 1 MHz,
> being -3 dB down at 47 kHz and -6 dB down at 13 kHz referred to gain at 1
> MHz. (I used 1 uF monolithic caps for C2,3.)
> For two-tone IMD tests I used my standard setup of 3 and 4 MHz test tones,
> set for 0 dBm at the output of the preamp to the spectrum analyzer. I used
a
> 3/4 MHz band reject filter with a 20 db pad in front of the filter that
> effectively removes both fundamentals and allows the SA to operate at full
> sensitivity at the IMD frequencies without being overloaded by the very
> strong test tones. I checked IMD at 1, 2, 5, 7 MHz.
> IMD results with 13.0 volts supply:
> 1 MHz +91.5 OIP2
> 2 MHz +45.2 OIP3

> 5 MHz +43.3 OIP3
> 7 MHz +94 OIP2
> These indicate pretty decent results which should give good resistance to
> overload and also indicate that my circuit current is probably close to
> optimum.
>

Steve,
Nice work. I'm surprised at the oscillation problem as I did not have any trouble in that regard. I'm going to be building another version that should have better than +50dBm OIP3 and I'll see if I can force it and the original one to oscillate. Very often a small resistor in series with the collector lead can kill the VHF problem, but I'll try ferrite beads on the base leads first.

I'm using a 16:1 UnBal between the 50-ohm generator(s) and the amplifier input, wound just like T4 on a 43 core instead of 61. That low source impedance may be why I didn't experience any oscillations.

Chris

7798. Re: [loopantennas] Another loopamp built and working well with a small loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-17 02:45:27 UTC
From: Paul V Birke PEng
Topic: 7796 Message: 7798

Dear Steve

great stuff, very detailed work you have on Chris's design

I wish I knew 10% of what you guys know and can do
amazing work all around

I take it little ferrite beads on all the base lead are more or less mandatory

best wishes
Paul VE3PVB

From: Steve Ratzlaff <steveratz@...>
To: loopantennas@yahoogroups.com
Sent: Mon, August 16, 2010 9:33:42 PM
Subject: [loopantennas] Another loopamp built and working well with a small loop

I built the latest version of the Trask "A High Dynamic Range Amplifier for
Wideband Active Loop Antennas" (8/3/2010 rev.) and initially had trouble
with it, mainly with it being very noisy and covering up weak signals from a
small loop. I set it aside until another list member who'd also built one
told me his was noisy too and he'd traced it to VHF oscillations. It hadn't
occurred to me to check for that but sure enough, mine was oscillating too,
with a massive +17 dBm output. Primary oscillation was around 250 MHz with
several other secondary oscillations (not harmonics), checked with a TEK
495P 1.8 GHz spectrum analyzer. I first tried ferrite beads on each
transistor collector, but that didn't help at all. Leaving those in place I
then put beads on each transistor base and that did the trick and killed all
the oscillations. The amp is now quiet and I can probably remove the beads
on the collectors though I haven't tried that yet. I tweaked the bias for
about 97 mA at 13.0 volts supply; this seemed the highest I wanted to go
since Q3,4 are already running very hot. 0.87 V on each emitter gives about
26 mA for each device; Q1,2 with 0.84 V for about 18 mA each device.
I ran some bench tests first. Using a 73-202 binoc core with 1:1 winding for
50 ohm unbalanced input/balanced output to the preamp loop inputs worked
well. Gain at 1 MHz +23.6 dB; at 20 MHz (very broad minimum) +19.7 dB; at 40
MHz +23.5 dB. My primary spectrum analyzer, HP 3585A, stops at 40 MHz and I
didn't try to check gain above that. Gain is mostly flat below 1 MHz,
being -3 dB down at 47 kHz and -6 dB down at 13 kHz referred to gain at 1
MHz. (I used 1 uF monolithic caps for C2,3.)
For two-tone IMD tests I used my standard setup of 3 and 4 MHz test tones,
set for 0 dBm at the output of the preamp to the spectrum analyzer. I used a
3/4 MHz band reject filter with a 20 db pad in front of the filter that
effectively removes both fundamentals and allows the SA to operate at full

sensitivity at the IMD frequencies without being overloaded by the very strong test tones. I checked IMD at 1, 2, 5, 7 MHz.
IMD results with 13.0 volts supply:
1 MHz +91.5 OIP2
2 MHz +45.2 OIP3
5 MHz +43.3 OIP3
7 MHz +94 OIP2
These indicate pretty decent results which should give good resistance to overload and also indicate that my circuit current is probably close to optimum.

I've been doing various small loop and associated loopamp tests the past several months; I made a 6 foot square PVC frame that I hang loops on for testing, and can check a loopamp as well. I have been interested in testing "crossed-parallel" loops, mentioned in the in the LZ1AQ article on his webpage (and also interested in building and testing his loopamp). I had built four 38 inch diameter single-turn loops of 1/2 inch soft copper tubing and compared them, connected quad cross-parallel (CP) configuration, to a single-turn loop using 19 foot circumference 1/2 inch soft copper tubing (about 6 feet 4 inches diameter). The combined area of the quad small loops is just a little greater than the larger single loop area, and should give similar signal levels to a loopamp. (Actually, LZ1AQ seems to indicate that the quad CP loops should work better than a single larger area loop.) I have a whole range of weak signals (and some strong signals) on frequencies from 19.8 kHz to 20 MHz that I check each loop and loopamp for signal level, using an AOR AR-7030 receiver which has a very accurate digital bargraph S meter as the measuring instrument. I primarily use the 6 foot loop for preamp checks. So far my best homebrew loopamp has been the M0AYF preamp modified with trifilar output transformer. This has the most gain (+34 dB at 1 MHz) and hears the various weak signals the best, though its IMD results from bench testing are only moderate. I live in a rural area with low AC noise level and no nearby strong stations such as strong AMBC stations, so I can readily do comparisons among loops and loopamps of weak signals over a wide frequency range. I was not expecting a lot for the Trask loopamp with its approximately 10 dB less gain. But it's a quiet amp; and that's why it's fun to build, test and compare things such as loops and loopamps, to see how one compares to another. I was pleasantly surprised--even though the results showed it was 1-2 S units lower output than the M0AYF loopamp, every signal could be heard with about the same S/N ratio, over the whole frequency range from 19.8 kHz to 20 MHz (WWV time signal).

I built my loopamp using 43-303 binoc cores for all 6 main transformers; I left out L1, L2 and associated components on the input and ran the loop directly to C2,3. I matched the Q1,2 and Q3,4 transistor pairs for beta as close as I could with my limited supply of MPS6521s--my emitter voltages turned out to be equal for Q1,2 and Q3,4, so it must have been fairly close matching. As I do with all the loopamps I've been testing, I powered this loopamp separately with a small 12 volt gelcell outside at the loopamp, not powered down the coax cable as would be done for normal remote-loop and loopamp operation. I wound T6 slightly different from the article's Fig. 9 picture (and T3 as well). It does appear that ferrite beads (I used short

beads,#43 material) need to be added to each transistor base as close to the transistor as possible, to suppress VHF oscillations. The bias needs to be adjustable; at least on mine--using just the original 68 ohm resistor gave only about 50 mA total initial circuit current for the particular devices I used.
After getting the oscillations tamed, this loopamp compares very favorably with my other best homebrew loopamps (not all of them worked well like this one eventually did). I give it a thumbs up!
73,
Steve

[Non-text portions of this message have been removed]

7799. sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-19 15:33:07 UTC
From: kg6wla
Topic: 7799 Message: 7799

Hi everyone,
I am planning on building my first small transmitting loop and I am having trouble locating suppliers for variable capacitors. I recall that ocean state electronics had some in the past, but it seems they are out of business now.
I found a couple other companies with a quick google search... Who do you like to deal with?

From the specs Im looking at, I need to find a cap able to handle about 5kv RMS, with a range between 14-pF - 65pF. My goal is to work the 20-10 meter bands.

I used the loop calculator on this site:
http://www.66pacific.com/calculators/small_tx_loop_calc.aspx

RESULTS:
Antenna efficiency: 59% (-2.3 dB below 100%)
Antenna bandwidth: 13.2 kHz
Tuning Capacitance: 65pF

Capacitor voltage: 4,290 volts RMS
Resonant circulating current: 24.7 A
Radiation resistance: 0.048 ohms
Loss Resistance: 0.034 ohms
Inductance: 1.98 microhenrys
Inductive Reactance: 174 ohms
Quality Factor (Q): 1,059
Distributed capacity: 7 pF

Antenna "circumference": 9 feet
Loop dimensions Side length: 1.13 feet
Antenna diameter: 2.7 feet

Comments:
The specified conductor length of 9 feet is OK.

Conductor length should be between 8.52 and 17.0 feet at the specified frequency of 14 MHz.

For highest efficiency, the conductor length for a small transmitting loop antenna should be greater than 1/8 wavelength (greater than about 8.52 feet at the specified frequency of 14 MHz).

To avoid self-resonance, the conductor length for a small transmitting loop antenna should be less than 1/4 wavelength (less than about 17.0 feet at the specified frequency of 14 MHz).

Input Values:
Length of conductor: 9 feet
Diameter of conductor: 1 inches

Frequency: 14 MHz
Transmitter power: 100 watts

THANKS,
Ryan

7800. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-19 22:52:55 UTC
From: bm40g
Topic: 7799 Message: 7800

Hi Ryan,

The length of the element needs to be less than 1/2, not 1/4 to avoid self resonance. My transmitting loop is 4 foot 6 inches in diameter, which is 14.1 foot (4.3 meters) in circumference. 1/2 wavelength would be just above ten meters, 1/4 wavelength 17 meters, and the antenna is working just fine on 18 MHz.

So, do not be afraid to make the loop longer, it wont be a magnetic loop above 1/4 wavelength, but, it will work just fine. And the longer length will reduced the capacitor requirements.

My first capacitor was a butterfly cap in my junk-box. But the second was a hamfest find earlier this year. I have just recently installed it. Its a split stator cap - 1 1/2 foot long, and 6" by 6" when at min capacitance.

Take a look at this link: http://www.aa3mw.com/antenna_parts/ . I was about to contact him before finding the cap I did.

7801. Re: [loopantennas] sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-20 08:20:23 UTC
From: Christopher E. Brown
Topic: 7799 Message: 7801

Thick wall plumbing copper in 3/4 size is .9 inches OD, available in 10ft sticks with 45 elbows at amy home store.

Try increasing to 16ft, 2 ft per side with the octagional design the calculator uses.

This drops voltage and current to 3.3Kv at 9.5 amps or less and increases to 85% efficiency and 45khz B/W.

Loop is still only 4.8 feet across and you have more room for the cap assembly.

If using fixed freq google for "trombone capaciter" Easily made from copper tube and coax, or 2 sizes of tube and some sched 40 PVC.

For tunable, MFJ and a few others sell the same caps they use in AMPS and tuners as parts. A butterfly type rated at 5KV and covering 25 - 150 pf would be perfect for covering 40, 30, 20 meters, and could easily be remote tuned with a gear reduction motor.

Also, vacume variable types are avail, check Max Gain Systems as a start.

For remoting though, you would need a gear reduction motor with _stops_.

On Thu, 19 Aug 2010, kg6wla wrote:

> Hi everyone,
> I am planning on building my first small transmitting loop and I am having trouble locating suppliers for variable capacitors. I recall that ocean state electronics had some in the past, but it seems they are out of business now.
> I found a couple other companies with a quick google search... Who do you like to deal with?
>
>> From the specs Im looking at, I need to find a cap able to handle about 5kv RMS, with a range between 14-pF - 65pF. My goal is to work the 20-10 meter bands.
>
>
> I used the loop calculator on this site:
> http://www.66pacific.com/calculators/small_tx_loop_calc.aspx
>
> RESULTS:
> Antenna efficiency: 59% (-2.3 dB below 100%)
> Antenna bandwidth: 13.2 kHz
> Tuning Capacitance: 65pF
>
> Capacitor voltage: 4,290 volts RMS
> Resonant circulating current: 24.7 A

> Radiation resistance: 0.048 ohms
> Loss Resistance: 0.034 ohms
> Inductance: 1.98 microhenrys
> Inductive Reactance: 174 ohms
> Quality Factor (Q): 1,059
> Distributed capacity: 7 pF
>
> Antenna "circumference": 9 feet
> Loop dimensions Side length: 1.13 feet
> Antenna diameter: 2.7 feet
>
> Comments:
> The specified conductor length of 9 feet is OK.
>
> Conductor length should be between 8.52 and 17.0 feet at the specified frequency of 14 MHz.
>
> For highest efficiency, the conductor length for a small transmitting loop antenna should be greater than 1/8 wavelength (greater than about 8.52 feet at the specified frequency of 14 MHz).
>
> To avoid self-resonance, the conductor length for a small transmitting loop antenna should be less than 1/4 wavelength (less than about 17.0 feet at the specified frequency of 14 MHz).
>
> Input Values:
> Length of conductor: 9 feet
> Diameter of conductor: 1 inches
> Frequency: 14 MHz
> Transmitter power: 100 watts
>
> THANKS,
> Ryan
>
>
>
> ---
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links

>
>
>

7802. Re: [loopantennas] sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-20 11:13:58 UTC
From: toddroberts2001@aol.com
Topic: 7799 Message: 7802

In a message dated 8/20/2010 4:21:35 A.M. Eastern Daylight Time,
cbrown@... writes:

If using fixed freq google for "trombone capaciter" Easily made from
copper tube and coax, or 2 sizes of tube and some sched 40 PVC.

- Sched 40 PVC would be a terrible choice for a high-voltage capacitor dielectric used in a transmitting loop variable capacitor. A trombone-type fixed or variable capacitor can be an excellent choice for a transmitting loop but only
if the correct dielectric is used. Using coax itself is also a very lossy choice
for a capacitor.

I would recommend using only Teflon sheet or as a second choice
polyethylene sheet for an insulator of a trombone-style capacitor.
The plastic sheeting is wrapped tightly around the
inner pipe of the trombone capacitor and secured in place with Teflon-type tape.
Also the builder needs to
understand the thickness of the insulating plastic needed to survive the high-voltage developed in a transmitting loop and the builder needs to understand the capacitance related to the spacing between the pipes and the length of the pipes.

An excellent article on building a home made trombone capacitor for a transmitting loop is the article by Bill Jones KD7S in the November, 1994 issue of QST magazine titled " A Homebrew Loop Tuning Capacitor".

Building your own loop tuning capacitor can save a lot of money compared to buying a vacuum variable but it requires knowledge of using the best materials available. Using a lossy capacitor is probably the most common mistake most loop builders make. Making a good transmitting loop requires the builder know how to make and use a good quality capacitor, plus use
only the best connections between the capacitor and the loop. A trombone capacitor can be soldered directly to the loop.

73 - Todd WD4NGG

7803. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-20 15:11:50 UTC
From: kg6wla
Topic: 7799 Message: 7803

Thanks for the information everyone. I am really excited to get started with the project. My last antenna project was a 2m square loop for weak signal work, so when I found out about the potential of a small multiband antenna for HF I was very pleased.
I guess I will be going with with a circumference greater than 9 feet as some have recommended. My plans are to use a vacuum capacitor (if found at a low cost) but more likely, a standard variable capacitor with a motor/gear drive.

Thanks for giving me some places to look for variable capacitors! :)

-Ryan

--- In loopantennas@yahoogroups.com, "kg6wla" <kg6wla@...> wrote:
>
> Hi everyone,
> I am planning on building my first small transmitting loop and I am having trouble locating suppliers for variable capacitors. I recall that ocean state electronics had some in the past, but it seems they are out of business now.
> I found a couple other companies with a quick google search... Who do you like to deal with?
>
> From the specs Im looking at, I need to find a cap able to handle about 5kv RMS, with a range between 14-pF - 65pF. My goal is to work the 20-10 meter bands.
>
>
> I used the loop calculator on this site:
> http://www.66pacific.com/calculators/small_tx_loop_calc.aspx
>
> RESULTS:
> Antenna efficiency: 59% (-2.3 dB below 100%)
> Antenna bandwidth: 13.2 kHz
> Tuning Capacitance: 65pF
>
> Capacitor voltage: 4,290 volts RMS
> Resonant circulating current: 24.7 A
> Radiation resistance: 0.048 ohms
> Loss Resistance: 0.034 ohms
> Inductance: 1.98 microhenrys
> Inductive Reactance: 174 ohms
> Quality Factor (Q): 1,059
> Distributed capacity: 7 pF
>
> Antenna "circumference": 9 feet
> Loop dimensions Side length: 1.13 feet
> Antenna diameter: 2.7 feet
>
> Comments:

> The specified conductor length of 9 feet is OK.
>
> Conductor length should be between 8.52 and 17.0 feet at the specified frequency of 14 MHz.
>
> For highest efficiency, the conductor length for a small transmitting loop antenna should be greater than 1/8 wavelength (greater than about 8.52 feet at the specified frequency of 14 MHz).
>
> To avoid self-resonance, the conductor length for a small transmitting loop antenna should be less than 1/4 wavelength (less than about 17.0 feet at the specified frequency of 14 MHz).
>
> Input Values:
> Length of conductor: 9 feet
> Diameter of conductor: 1 inches
> Frequency: 14 MHz
> Transmitter power: 100 watts
>
> THANKS,
> Ryan
>

7804. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-20 16:32:54 UTC
From: Dave
Topic: 7799 Message: 7804

--- In loopantennas@yahoogroups.com, "kg6wla" <kg6wla@...> wrote:
>
> Hi everyone,
> I am planning on building my first small transmitting loop and I am having trouble locating suppliers for variable capacitors. I recall that ocean state electronics had some in the past, but it seems they are out of business now.
> I found a couple other companies with a quick google search... Who do you like to deal with?

Have you considered building your own?

http://www.eham.net/articles/5217?

> From the specs Im looking at, I need to find a cap able to handle about 5kv RMS, with a range between 14-pF - 65pF. My goal is to work the 20-10 meter bands.
>
>
> I used the loop calculator on this site:
> http://www.66pacific.com/calculators/small_tx_loop_calc.aspx
>
> RESULTS:
> Antenna efficiency: 59% (-2.3 dB below 100%)
> Antenna bandwidth: 13.2 kHz
> Tuning Capacitance: 65pF
>
> Capacitor voltage: 4,290 volts RMS
> Resonant circulating current: 24.7 A
> Radiation resistance: 0.048 ohms
> Loss Resistance: 0.034 ohms
> Inductance: 1.98 microhenrys
> Inductive Reactance: 174 ohms
> Quality Factor (Q): 1,059
> Distributed capacity: 7 pF
>
> Antenna "circumference": 9 feet
> Loop dimensions Side length: 1.13 feet
> Antenna diameter: 2.7 feet
>
> Comments:
> The specified conductor length of 9 feet is OK.
>
> Conductor length should be between 8.52 and 17.0 feet at the specified frequency of 14 MHz.
>
> For highest efficiency, the conductor length for a small transmitting loop antenna should be greater than 1/8 wavelength (greater than about 8.52 feet at the specified frequency of

14 MHz).
>
> To avoid self-resonance, the conductor length for a small transmitting loop antenna should be less than 1/4 wavelength (less than about 17.0 feet at the specified frequency of 14 MHz).
>
> Input Values:
> Length of conductor: 9 feet
> Diameter of conductor: 1 inches
> Frequency: 14 MHz
> Transmitter power: 100 watts
>
> THANKS,
> Ryan

Dave

7805. My Loop antenna antenna, and Big Cap pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-21 12:03:51 UTC
From: bm40g
Topic: 7805 Message: 7805

Hi All,

I have added some pictures of my loop antenna (version 2 - its already rebuilt into version 3 now with the big cap, but no pictures of that yet) and the big split stator capacitor I have replaced the butterfly cap with.

7806. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-21 16:01:43 UTC
From: kg6wla
Topic: 7799 Message: 7806

Building my own is something I am considering, and I could use the experience! I just don't know about that eham article mentioned earlier, I guess I could substitute the roof flashing with something more substantial.
Thank

Ryan :)

--- In loopantennas@yahoogroups.com, "Dave" <wa4qal@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "kg6wla" <kg6wla@> wrote:
> >
> > Hi everyone,
> > I am planning on building my first small transmitting loop and I am having trouble locating suppliers for variable capacitors. I recall that ocean state electronics had some in the past, but it seems they are out of business now.
> > I found a couple other companies with a quick google search... Who do you like to deal with?
>
> Have you considered building your own?
>
> http://www.eham.net/articles/5217?
>
> > From the specs Im looking at, I need to find a cap able to handle about 5kv RMS, with a range between 14-pF - 65pF. My goal is to work the 20-10 meter bands.
> >
> >
> > I used the loop calculator on this site:
> > http://www.66pacific.com/calculators/small_tx_loop_calc.aspx
> >
> > RESULTS:
> > Antenna efficiency: 59% (-2.3 dB below 100%)
> > Antenna bandwidth: 13.2 kHz
> > Tuning Capacitance: 65pF
> >
> > Capacitor voltage: 4,290 volts RMS
> > Resonant circulating current: 24.7 A
> > Radiation resistance: 0.048 ohms
> > Loss Resistance: 0.034 ohms
> > Inductance: 1.98 microhenrys
> > Inductive Reactance: 174 ohms
> > Quality Factor (Q): 1,059
> > Distributed capacity: 7 pF
> >
> > Antenna "circumference": 9 feet
> > Loop dimensions Side length: 1.13 feet

> > Antenna diameter: 2.7 feet
> >
> > Comments:
> > The specified conductor length of 9 feet is OK.
> >
> > Conductor length should be between 8.52 and 17.0 feet at the specified frequency of 14 MHz.
> >
> > For highest efficiency, the conductor length for a small transmitting loop antenna should be greater than 1/8 wavelength (greater than about 8.52 feet at the specified frequency of 14 MHz).
> >
> > To avoid self-resonance, the conductor length for a small transmitting loop antenna should be less than 1/4 wavelength (less than about 17.0 feet at the specified frequency of 14 MHz).
> >
> > Input Values:
> > Length of conductor: 9 feet
> > Diameter of conductor: 1 inches
> > Frequency: 14 MHz
> > Transmitter power: 100 watts
> >
> > THANKS,
> > Ryan
>
> Dave
>

7807. Re: My Loop antenna antenna, and Big Cap pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-22 16:57:32 UTC
From: dannibou
Topic: 7805 Message: 7807

--- In loopantennas@yahoogroups.com, "bm40g" <donver@...> wrote:
>
>
> Hi All,
>
> I have added some pictures of my loop antenna (version 2 - its already rebuilt into version 3 now with the big cap, but no pictures of that yet) and the big split stator capacitor I have replaced the butterfly cap with.

Congralutions. It look like pro stuff. You're a pretty good handyman. Good luck with your project and keep us informed.
Danny

7808. Re: My Loop antenna antenna, and Big Cap pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-23 00:35:06 UTC
From: bm40g
Topic: 7805 Message: 7808

--- In loopantennas@yahoogroups.com, "dannibou" <dannibou@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "bm40g" <donver@> wrote:
> >
> >
> > Hi All,
> >
> > I have added some pictures of my loop antenna (version 2 - its already rebuilt into version 3 now with the big cap, but no pictures of that yet) and the big split stator capacitor I have replaced the butterfly cap with.
>
> Congralutions. It look like pro stuff. You're a pretty good handyman. Good luck with your project and keep us informed.
> Danny
>

Thanks Danny,

You have not seen Version 3 yet! It looks much less rube-goldberg than version 2, and if I bump into it in the living room, it does not detune, like version 2.

Worked a station today in Rusia in at the NE tip of China with it. Also, France and Uruquay on the 17 meter band.

73, Don...

7809. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-22 18:51:12 UTC
From: Eamon Egan
Topic: 7799 Message: 7809

I have never built variable capacitors but I have looked into it.

As I think you're saying, in reference to construction articles, flashing is flimsy, and may be hard to keep flat.

If you don't know where to get metal sheet locally, one online supplier for small quantities of metal sheet, which I have looked at (though I haven't used them yet) is http://www.onlinemetals.com/ .

If anyone is serious about building these things, maybe we could enhance existing published designs by making up some gcode for CNC to cut out the plates and maybe the plexiglass supports.

- Eamon Egan
VE2EGN

--- In loopantennas@yahoogroups.com, "kg6wla" <kg6wla@...> wrote:
>
>
> Building my own is something I am considering, and I could use the experience! I just don't know about that eham article mentioned earlier, I guess I could substitute the roof flashing with something more substantial.
> Thank
>
> Ryan :)
>
>

7810. Re: [loopantennas] Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-23 01:55:38 UTC
From: toddroberts2001@aol.com
Topic: 7799 Message: 7810

In a message dated 8/22/2010 9:16:41 P.M. Eastern Daylight Time,
eamon.egan@... writes:

I have never built variable capacitors but I have looked into it.

As I think you're saying, in reference to construction articles, flashing
is flimsy, and may be hard to keep flat.

If you don't know where to get metal sheet locally, one online supplier
for small quantities of metal sheet, which I have looked at (though I haven't
used them yet) is http://www.onlinemetals.com/ .

If anyone is serious about building these things, maybe we could enhance
existing published designs by making up some gcode for CNC to cut out the
plates and maybe the plexiglass supports.

- Eamon Egan
VE2EGN

For anyone interested in building their own high-voltage, low-loss variable
capacitor
for a transmitting loop I highly recommend the article by Bill Jones, KD7S
titled
"A Homebrew Loop Tuning Capacitor". His article appeared in the Nov, 1994
issue
of QST magazine and it is still the best article I have ever seen published
on the subject.

Bill gives step by step directions with detailed drawings on how to build a
trombone-style
variable tuning capacitor with remote motor drive for a transmitting loop.
There are many
advantages to building a trombone-style tuning capacitor:

Uses common copper pipe for the elements, no flimsy copper sheets or
flashing.
No need for tedious cutting of many sheets of copper for capacitor plates
or critical spacing
The copper pipe is very rigid = Frequency-stable for precision tuning.
Uses common 12VDC gear motor or can use a stepper motor for tuning
Simple to build motor drive uses a threaded rod and brass knurled nut.
Uses Teflon sheet for insulation. Lowest loss, Easy to use, capacitor stays
aligned
The copper pipe capacitor can be incorporated directly into the
transmitting loop for lowest loss

If a few folks are interested in the article and are not members of the ARRL write to me
and I will send you a pdf copy of the article.

73 Todd WD4NGG

7811. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-23 02:22:10 UTC
From: alienrelics
Topic: 7799 Message: 7811

Re: CNC code
Yes! I agree. You may find somewhere that can CNC or laser cut for you for a reasonable charge. There is a place in Seattle, WA where you can go in and work on projects, I think they have a CNC they rent time on.

I have a small kit CNC machine I'm still working on, slowly. Have the driver board nearly completed, and just picked up a suitable power supply at a hamfest.

It should be suitable for cutting copper, which is really the only choice if you are shooting for a low loss butterfly capacitor.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:
>
> In a message dated 8/22/2010 9:16:41 P.M. Eastern Daylight Time,
> eamon.egan@... writes:
>
> I have never built variable capacitors but I have looked into it.
>
> As I think you're saying, in reference to construction articles, flashing
> is flimsy, and may be hard to keep flat.
>
> If you don't know where to get metal sheet locally, one online supplier
> for small quantities of metal sheet, which I have looked at (though I haven't
> used them yet) is http://www.onlinemetals.com/ .
>
> If anyone is serious about building these things, maybe we could enhance
> existing published designs by making up some gcode for CNC to cut out the
> plates and maybe the plexiglass supports.
>
> - Eamon Egan
> VE2EGN
>

7812. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-23 03:57:47 UTC
From: kg6wla
Topic: 7799 Message: 7812

Actually, my brother was a CNC button jockey at a local machine shop. I will see if he can talk to his former boss about either using the equipment or the costs of such a job. In this area machine work has been a little light, so the equipment may be available for a small project like this.

Ryan

--- In loopantennas@yahoogroups.com, "alienrelics" <alienrelics@...> wrote:
>
> Re: CNC code
> Yes! I agree. You may find somewhere that can CNC or laser cut for you for a reasonable charge. There is a place in Seattle, WA where you can go in and work on projects, I think they have a CNC they rent time on.
>
> I have a small kit CNC machine I'm still working on, slowly. Have the driver board nearly completed, and just picked up a suitable power supply at a hamfest.
>
> It should be suitable for cutting copper, which is really the only choice if you are shooting for a low loss butterfly capacitor.
>
> Steve Greenfield AE7HD
>
> --- In loopantennas@yahoogroups.com, toddroberts2001@ wrote:
> >
> > In a message dated 8/22/2010 9:16:41 P.M. Eastern Daylight Time,
> > eamon.egan@ writes:
> >
> > I have never built variable capacitors but I have looked into it.
> >
> > As I think you're saying, in reference to construction articles, flashing
> > is flimsy, and may be hard to keep flat.
> >
> > If you don't know where to get metal sheet locally, one online supplier
> > for small quantities of metal sheet, which I have looked at (though I haven't
> > used them yet) is http://www.onlinemetals.com/ .
> >
> > If anyone is serious about building these things, maybe we could enhance
> > existing published designs by making up some gcode for CNC to cut out the
> > plates and maybe the plexiglass supports.
> >
> > - Eamon Egan
> > VE2EGN
> >
>

7813. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-25 02:52:47 UTC
From: Eamon Egan
Topic: 7799 Message: 7813

Here are a couple of pages with drawings for butterfly capacitor rotors, stators and end plates.

http://fucimin.altervista.org/en/loop.html

http://www.qsl.net/m/mnqrp//Loop/Mag_Loops.htm

Trombone looks interesting, but maybe not as compact as a rotary butterfly capacitor. The qsl.net page has a drawing of a "piston" capacitor. Is that the same as "trombone"?

The two butterfly designs look pretty much identical. You will get 5 ☐ 56pF with 5 rotors and 6 stators. It scales up from there with more elements. Is this a good size to make?

I am pretty sure a lot of people use aluminum for these designs. I think, particularly for rotors since they don't have to connect to anything but only capacitively couple, aluminum would be OK. Maybe copper would be better for the stators, if it will end up making a better connection with the rods.

- Eamon
VE2EGN

--- In loopantennas@...m, "kg6wla" <kg6wla@...> wrote:
>
>
> Actually, my brother was a CNC button jockey at a local machine shop. I will see if he can talk to his former boss about either using the equipment or the costs of such a job. In this area machine work has been a little light, so the equipment may be available for a small project like this.
>
> Ryan
>
> --- In loopantennas@yahoogroups.com, "alienrelics" <alienrelics@> wrote:
> >
> > Re: CNC code
> > Yes! I agree. You may find somewhere that can CNC or laser cut for you for a reasonable charge. There is a place in Seattle, WA where you can go in and work on projects, I think they have a CNC they rent time on.
> >
> > I have a small kit CNC machine I'm still working on, slowly. Have the driver board nearly completed, and just picked up a suitable power supply at a hamfest.

7814. Re: [loopantennas] Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-25 04:25:09 UTC
From: toddroberts2001@aol.com
Topic: 7799 Message: 7814

In a message dated 8/24/2010 10:52:53 P.M. Eastern Daylight Time,
eamon.egan@... writes:
Here are a couple of pages with drawings for butterfly capacitor rotors,
stators and end plates.

http://fucimin.altervista.org/en/loop.html

http://www.qsl.net/m/mnqrp//Loop/Mag_Loops.htm

Trombone looks interesting, but maybe not as compact as a rotary butterfly
capacitor. The qsl.net page has a drawing of a "piston" capacitor. Is that
the same as "trombone"?

I looked at the first link and I can see many problems with the butterfly
capacitor
as shown. First problem I see is you should never mix aluminum with brass
hardware. The dissimilar metals will quickly develop galvanic corrosion and
develop
poor contact at the joints.

For a transmitting loop the plates of a capacitor should be soldered or
brazed to the
rotor or stator. A capacitor using plates that are only pressed together or
held together with threaded
hardware is too lossy for transmitting loop use. Plus aluminum plates
cannot be easily soldered to brass which is another reason not to use
dissimilar metals.

The butterfly capacitors in the second link look like they show the same
problems
mixing aluminum plates with brass hardware.

None of these problems occur with a soldered copper-pipe trombone-style
capacitor. The terms
Trombone Capacitor and Piston Capacitor mean the same thing in the
different
articles I have read.

73 - Todd WD4NGG

7815. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-25 14:04:47 UTC
From: shibukiau
Topic: 7799 Message: 7815

Have a look at this web site Ryan --- www.MonarchCapacitors.com.It is a new site being setup to distribute TX Loop Cap kits now sold over Ebay. The current site has a calculator to assist you in determining the number of plates you will require to achieve the desired capacitance.

There is also a new Yahoo Group site focused on Transmitting loops for Hams, look in the Yahoo Group directory for "MagLoops". You should be able to get more info there as well.

Hope this helps!

Lloyd
VE3ERQ/VK4ERQ

--- In loopantennas@yahoogroups.com, "kg6wla" <kg6wla@...> wrote:
>
> Hi everyone,
> I am planning on building my first small transmitting loop and I am having trouble locating suppliers for variable capacitors. I recall that ocean state electronics had some in the past, but it seems they are out of business now.
> I found a couple other companies with a quick google search... Who do you like to deal with?
>
> From the specs Im looking at, I need to find a cap able to handle about 5kv RMS, with a range between 14-pF - 65pF. My goal is to work the 20-10 meter bands.
>
>
> I used the loop calculator on this site:
> http://www.66pacific.com/calculators/small_tx_loop_calc.aspx
>
> RESULTS:
> Antenna efficiency: 59% (-2.3 dB below 100%)
> Antenna bandwidth: 13.2 kHz
> Tuning Capacitance: 65pF
>
> Capacitor voltage: 4,290 volts RMS
> Resonant circulating current: 24.7 A
> Radiation resistance: 0.048 ohms
> Loss Resistance: 0.034 ohms
> Inductance: 1.98 microhenrys
> Inductive Reactance: 174 ohms
> Quality Factor (Q): 1,059
> Distributed capacity: 7 pF
>
> Antenna "circumference": 9 feet
> Loop dimensions Side length: 1.13 feet
> Antenna diameter: 2.7 feet

>
> Comments:
> The specified conductor length of 9 feet is OK.
>
> Conductor length should be between 8.52 and 17.0 feet at the specified frequency of 14 MHz.
>
> For highest efficiency, the conductor length for a small transmitting loop antenna should be greater than 1/8 wavelength (greater than about 8.52 feet at the specified frequency of 14 MHz).
>
> To avoid self-resonance, the conductor length for a small transmitting loop antenna should be less than 1/4 wavelength (less than about 17.0 feet at the specified frequency of 14 MHz).
>
> Input Values:
> Length of conductor: 9 feet
> Diameter of conductor: 1 inches
> Frequency: 14 MHz
> Transmitter power: 100 watts
>
> THANKS,
> Ryan
>

7816. Re: [loopantennas] Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-25 16:04:25 UTC
From: Vaclav
Topic: 7799 Message: 7816

I fully appreciate ones desire to "roll " your own. No questions about that.
However, it seems counmterproductive to build relatively inexpensive tx
loop from cooper tubing and than compromise the design by building variable
capacitor of dubious quality - dissimilar metals, press fit

construction, flimsy aluminum plates.
My chiose is real vacuum variable capacitor.
So, back to the original post
- source is well known web market place.
73 Vaclav AA7EJ

[Non-text portions of this message have been removed]

7817. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-25 19:32:40 UTC
From: legonedijk
Topic: 7799 Message: 7817

Old news ?

http://pa9ok.nl/pages/magnetic-loop.php

7818. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-26 15:47:55 UTC
From: kg6wla
Topic: 7799 Message: 7818

Vaclav,
My intention was not to build my own this early into my loop experiments... It is one of those things I would like to try. As for caps, I really do like the advantages of the vac. caps. Its just the cost... some of them are quite expensive. I have been looking on the max-gain systems webpage. They seem to have quite the selection.
-Ryan

--- In loopantennas@yahoogroups.com, Vaclav <vaclav_sal@...> wrote:
>
>
> I fully appreciate ones desire to "roll " your own. No questions about that.
> However, it seems counmterproductive to build relatively inexpensive tx
> loop from cooper tubing and than compromise the design by building variable
> capacitor of dubious quality - dissimilar metals, press fit
>
> construction, flimsy aluminum plates.
> My chiose is real vacuum variable capacitor.
> So, back to the original post
> - source is well known web market place.
> 73 Vaclav AA7EJ
>
>
>
>
> [Non-text portions of this message have been removed]
>

7819. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-26 15:49:59 UTC
From: kg6wla
Topic: 7799 Message: 7819

Thanks for the info Lloyd, I am going to add that site to by bookmarks and can't wait for the new content.
-Ryan

--- In loopantennas@...m, "shibukiau" <kubisl@...> wrote:
>
> Have a look at this web site Ryan --- www.MonarchCapacitors.com.It is a new site being setup to distribute TX Loop Cap kits now sold over Ebay. The current site has a calculator to assist you in determining the number of plates you will require to achieve the desired capacitance.
>
> There is also a new Yahoo Group site focused on Transmitting loops for Hams, look in the Yahoo Group directory for "MagLoops". You should be able to get more info there as well.
>
> Hope this helps!
>
> Lloyd
> VE3ERQ/VK4ERQ
>
> --- In loopantennas@yahoogroups.com, "kg6wla" <kg6wla@> wrote:
> >
> > Hi everyone,
> > I am planning on building my first small transmitting loop and I am having trouble locating suppliers for variable capacitors. I recall that ocean state electronics had some in the past, but it seems they are out of business now.
> > I found a couple other companies with a quick google search... Who do you like to deal with?
> >
> > From the specs Im looking at, I need to find a cap able to handle about 5kv RMS, with a range between 14-pF - 65pF. My goal is to work the 20-10 meter bands.
> >
> >
> > I used the loop calculator on this site:
> > http://www.66pacific.com/calculators/small_tx_loop_calc.aspx
> >
> > RESULTS:
> > Antenna efficiency: 59% (-2.3 dB below 100%)
> > Antenna bandwidth: 13.2 kHz
> > Tuning Capacitance: 65pF
> >
> > Capacitor voltage: 4,290 volts RMS
> > Resonant circulating current: 24.7 A
> > Radiation resistance: 0.048 ohms
> > Loss Resistance: 0.034 ohms
> > Inductance: 1.98 microhenrys

> > Inductive Reactance: 174 ohms
> > Quality Factor (Q): 1,059
> > Distributed capacity: 7 pF
> >
> > Antenna "circumference": 9 feet
> > Loop dimensions Side length: 1.13 feet
> > Antenna diameter: 2.7 feet
> >
> > Comments:
> > The specified conductor length of 9 feet is OK.
> >
> > Conductor length should be between 8.52 and 17.0 feet at the specified frequency of 14 MHz.
> >
> > For highest efficiency, the conductor length for a small transmitting loop antenna should be greater than 1/8 wavelength (greater than about 8.52 feet at the specified frequency of 14 MHz).
> >
> > To avoid self-resonance, the conductor length for a small transmitting loop antenna should be less than 1/4 wavelength (less than about 17.0 feet at the specified frequency of 14 MHz).
> >
> > Input Values:
> > Length of conductor: 9 feet
> > Diameter of conductor: 1 inches
> > Frequency: 14 MHz
> > Transmitter power: 100 watts
> >
> > THANKS,
> > Ryan
> >
>

7820. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-26 15:55:52 UTC
From: kg6wla
Topic: 7799 Message: 7820

Thanks for the links Eamon, I had seen the second page already, but the first one is new to me. It seems to have some really nice photos.
-Ryan
--- In loopantennas@yahoogroups.com, "Eamon Egan" <eamon.egan@...> wrote:
>
> Here are a couple of pages with drawings for butterfly capacitor rotors, stators and end plates.
>
> http://fucimin.altervista.org/en/loop.html
>
> http://www.qsl.net/m/mnqrp//Loop/Mag_Loops.htm
>
> Trombone looks interesting, but maybe not as compact as a rotary butterfly capacitor. The qsl.net page has a drawing of a "piston" capacitor. Is that the same as "trombone"?
>
> The two butterfly designs look pretty much identical. You will get 5 ☐ 56pF with 5 rotors and 6 stators. It scales up from there with more elements. Is this a good size to make?
>
> I am pretty sure a lot of people use aluminum for these designs. I think, particularly for rotors since they don't have to connect to anything but only capacitively couple, aluminum would be OK. Maybe copper would be better for the stators, if it will end up making a better connection with the rods.
>
> - Eamon
> VE2EGN
>
> --- In loopantennas@yahoogroups.com, "kg6wla" <kg6wla@> wrote:
> >
> >
> > Actually, my brother was a CNC button jockey at a local machine shop. I will see if he can talk to his former boss about either using the equipment or the costs of such a job. In this area machine work has been a little light, so the equipment may be available for a small project like this.
> >
> > Ryan
> >
> > --- In loopantennas@yahoogroups.com, "alienrelics" <alienrelics@> wrote:
> > >
> > > Re: CNC code
> > > Yes! I agree. You may find somewhere that can CNC or laser cut for you for a reasonable charge. There is a place in Seattle, WA where you can go in and work on projects, I think they have a CNC they rent time on.
> > >
> > > I have a small kit CNC machine I'm still working on, slowly. Have the driver board nearly completed, and just picked up a suitable power supply at a hamfest.
>

7821. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-26 17:23:58 UTC
From: c6alk
Topic: 7799 Message: 7821

Please take a look at the famous auction site. Good used vacuum capacitors appear from time to time in strange categories, and can be quite cheap. The sellers loss is your gain. I have purchased two with capacities of up to 100 pf for 25-30 US bucks. They arrived in fine shape and are in use here.

Brian K7RE

--- In loopantennas@yahoogroups.com, "kg6wla" <kg6wla@...> wrote:
>
> Vaclav,
> My intention was not to build my own this early into my loop experiments... It is one of those things I would like to try. As for caps, I really do like the advantages of the vac. caps. Its just the cost... some of them are quite expensive. I have been looking on the max-gain systems webpage. They seem to have quite the selection.
> -Ryan
>
> --- In loopantennas@yahoogroups.com, Vaclav <vaclav_sal@> wrote:
> >
> >
> > I fully appreciate ones desire to "roll " your own. No questions about that.
> > However, it seems counmterproductive to build relatively inexpensive tx
> > loop from cooper tubing and than compromise the design by building variable
> > capacitor of dubious quality - dissimilar metals, press fit
> >
> > construction, flimsy aluminum plates.
> > My chiose is real vacuum variable capacitor.
> > So, back to the original post
> > - source is well known web market place.
> > 73 Vaclav AA7EJ
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

7822. Re: [loopantennas] sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-27 01:14:14 UTC
From: Jay Heyl
Topic: 7799 Message: 7822

On Thu, Aug 19, 2010 at 08:33, kg6wla <kg6wla@...> wrote:

> Hi everyone,
> I am planning on building my first small transmitting loop and I am having
> trouble locating suppliers for variable capacitors. I recall that ocean
> state electronics had some in the past, but it seems they are out of
> business now.
> I found a couple other companies with a quick google search... Who do you
> like to deal with?

You might try Surplus Sales of
Nebraska<http://www.surplussales.com/index.html>.
I took a quick look and I spotted a couple that might fill the bill. Not
cheap.

-- Jay

[Non-text portions of this message have been removed]

7823. Re: sources for variable capacitors???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-27 16:21:58 UTC
From: roger.mitchell@snet.net
Topic: 7799 Message: 7823

You may want to read their reviews on eham.com before using them. I was considering buying some cable and connectors from them but the reviews are really mixed.

Roger Mitchell
NG1R

--- In loopantennas@yahoogroups.com, Jay Heyl <yahoogroups@...> wrote:
>
> On Thu, Aug 19, 2010 at 08:33, kg6wla <kg6wla@...> wrote:
>
> > Hi everyone,
> > I am planning on building my first small transmitting loop and I am having
> > trouble locating suppliers for variable capacitors. I recall that ocean
> > state electronics had some in the past, but it seems they are out of
> > business now.
> > I found a couple other companies with a quick google search... Who do you
> > like to deal with?
>
>
> You might try Surplus Sales of
> Nebraska<http://www.surplussales.com/index.html>.
> I took a quick look and I spotted a couple that might fill the bill. Not
> cheap.
>
> -- Jay
>
>
> [Non-text portions of this message have been removed]
>

7824. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-28 02:46:22 UTC
From: mark
Topic: 7703 Message: 7824

Hi Chris,

I'm getting ready to put together your Wideband Loop Amp. Before I start winding and soldering, I have a couple of questions:

If I use type 73 material for the transformer cores (my interest is NDB DXing), should I adjust the turns count, or stick with what's specified in your document?

For the case of the Q6 JFET, I have no 2N/PN4416 device on hand, but do have several other types. In selecting an alternative, am I correct in thinking that a low goss (output conductance) spec should correlate to a "flatter" drain current curve beyond the transition region?

Thanks again for taking the time to publish your work -- its greatly appreciated.

Mark

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Foxit READER (free) opens the pdf here without any problem.
> >
>
> I uploaded a new copy about an hour ago that was compiled with Acrobat
> 4.0, so it shouldn't be a problem now.
>
> Chris
>

7825. Re: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-28 14:09:07 UTC
From: Chris Trask
Topic: 7703 Message: 7825

>
>I'm getting ready to put together your Wideband Loop Amp. Before
>I start winding and soldering, I have a couple of questions:
>
>If I use type 73 material for the transformer cores (my interest
>is NDB DXing), should I adjust the turns count, or stick with
>what's specified in your document?
>

Since your interest is in lower frequencies, I'd say yes to increasing the number of turns. You can get as many as six turns of #32 trifilar in the 2402 augmentation transformer cores (T1, T2, T4, and T5). And then go to eight turns on T3 and T6 for good measure.

You may want to add a low ESR 1uF electrolytic in parallel with C2 and C3 to ensure good coupling at the lower frequencies.

>
>For the case of the Q6 JFET, I have no 2N/PN4416 device on hand,
>but do have several other types. In selecting an alternative, am
>I correct in thinking that a low goss (output conductance) spec
>should correlate to a "flatter" drain current curve beyond the
>transition region?
>

Let's see what you have available. A J309 can be used, but you'll need to adjust R6 to get the desired current.

>
>Thanks again for taking the time to publish your work -- its
>greatly appreciated.
>

I have a small change in the works that will improve the gain by 6dB without adding any parts or changing the supply current. That will be included later when I complete the +50dBm OIP3 version.

Like Howard Cossell used to say: "We keep making it better, not more expensive."

Chris

7826. Re: [loopantennas] Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-28 15:33:54 UTC
From: Chris Trask
Topic: 7703 Message: 7826

>
>I'm getting ready to put together your Wideband Loop Amp. Before
>I start winding and soldering, I have a couple of questions:
>
>If I use type 73 material for the transformer cores (my interest
>is NDB DXing), should I adjust the turns count, or stick with
>what's specified in your document?
>
>For the case of the Q6 JFET, I have no 2N/PN4416 device on hand,
>but do have several other types. In selecting an alternative, am
>I correct in thinking that a low goss (output conductance) spec
>should correlate to a "flatter" drain current curve beyond the
>transition region?
>
>Thanks again for taking the time to publish your work -- its
>greatly appreciated.
>

I should have mentioned to add a ferrite bead to the base leads of all four transistors to prevent VHF oscillations.

Chris

7827. Re: My Loop antenna antenna, and Big Cap pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-28 22:50:52 UTC
From: bm40g
Topic: 7805 Message: 7827

--- In loopantennas@yahoogroups.com, "bm40g" <donver@...> wrote:
>
> You have not seen Version 3 yet! It looks much less rube-goldberg than version 2, and if I bump into it in the living room, it does not detune, like version 2.
>
> Worked a station today in Rusia in at the NE tip of China with it. Also, France and Uruquay on the 17 meter band.
>
> 73, Don...
>

Oops, for some reason Yahoo is not taking my pictures this time. So, Version 3 pictures will have to wait....

73, Don...

7828. Re: New file uploades to loopantennas.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-29 01:58:25 UTC
From: mark
Topic: 7703 Message: 7828

Thanks Chris,

The FETs I have on hand for Q6 are the J113, J304, 2N4393, and a bunch of 2N3819s. Also just found an NTE 312, which is supposed to be the NTE replacement part for the PN4416. I'll put socket pins in the board so I can try different ones. I'll definitely have a pot for R6.

Looking forward to seeing your improved version.

Mark

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> >I'm getting ready to put together your Wideband Loop Amp. Before
> >I start winding and soldering, I have a couple of questions:
> >
> >If I use type 73 material for the transformer cores (my interest
> >is NDB DXing), should I adjust the turns count, or stick with
> >what's specified in your document?
> >
>
> Since your interest is in lower frequencies, I'd say yes to increasing the number of turns. You can get as many as six turns of #32 trifilar in the 2402 augmentation transformer cores (T1, T2, T4, and T5). And then go to eight turns on T3 and T6 for good measure.
>
> You may want to add a low ESR 1uF electrolytic in parallel with C2 and C3 to ensure good coupling at the lower frequencies.
>
> >
> >For the case of the Q6 JFET, I have no 2N/PN4416 device on hand,
> >but do have several other types. In selecting an alternative, am
> >I correct in thinking that a low goss (output conductance) spec
> >should correlate to a "flatter" drain current curve beyond the
> >transition region?
> >
>
> Let's see what you have available. A J309 can be used, but you'll need to adjust R6 to get the desired current.
>
> >
> >Thanks again for taking the time to publish your work -- its
> >greatly appreciated.
> >
>

> I have a small change in the works that will improve the gain by 6dB without adding any parts or changing the supply current. That will be included later when I complete the +50dBm OIP3 version.
>
> Like Howard Cossell used to say: "We keep making it better, not more expensive."
>
> Chris
>

7829. Antenna request to Chris Trask

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-29 20:13:49 UTC
From: dannibou
Topic: 7703 Message: 7829

Hi Chris
I wrote to you via the link at the right of the message but haven't get any reply from you. I suppose your connection is blocked? Anyway, I just would like to know if an adjustable telescopic antenna like those that are used on car (electric) could be used with an preamp for 100kHz up to about 1.8 mHz, my main band interest. Here, we have only one local AM broadcast station located at about 15 miles away with a power of 50kW. Of course, night reception bring a lot of powerful station from the US. Why use an electric telescoping antenna? To adjust the gain, I used to use AM car radio and found that the more I extend the antenna, the more I get gain. Any suggestion for me? Thanks
Danny

7830. Re: Antenna request to Chris Trask

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-29 22:07:49 UTC
From: vbifyz
Topic: 7703 Message: 7830

Hi Danny,

Interestingly, an old car radio is the best receiver to use with a short whip. Its input is already designed for such kind of antenna, and you can get it for close to free. And it works great if you are far from electrical noise.
However, if you want to reduce noise or to null out one station to listen to another on the same frequency, you need a loop.
My opinion is that tuned loop is better for DX listening on MW band. As a bonus, you can reduce the gain by detuning.
A broadband loop or a whip is a must for SDR which looks at a big chunk of spectrum.

73, Mike

--- In loopantennas@yahoogroups.com, "dannibou" <dannibou@...> wrote:

>

7831. Re: My Loop antenna antenna, and Big Cap pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-30 00:36:48 UTC
From: bm40g
Topic: 7805 Message: 7831

Version 3 Pictures Uploaded....

7832. Re: Antenna request to Chris Trask

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-30 01:18:48 UTC
From: dannibou
Topic: 7703 Message: 7832

--- In loopantennas@yahoogroups.com, "vbifyz" <3ym3ym@...> wrote:
>
> Hi Danny,
>
> Interestingly, an old car radio is the best receiver to use with a short whip. Its input is already designed for such kind of antenna, and you can get it for close to free. And it works great if you are far from electrical noise.

Hi Mike. I agree with you but I've noticed that recent digital car radio has excellent sensitivity and selectivity. The latest I've tried are original car radio from an corolla 1997 and an echo 2005. Both have surprised me in both sensitivity and selectivity but they suffered from adjacent channel rejection. I tried a 102 inch CB antenna on the 1997 model and the results were amazing. I also tried to put a 230 mH coil in between the antenna and it's base. Even if I was in a no noise location, the noise increased, especially on the higher part of the AM band.

> However, if you want to reduce noise or to null out one station to listen to another on the same frequency, you need a loop.
> My opinion is that tuned loop is better for DX listening on MW band. As a bonus, you can reduce the gain by detuning.

I used to use loop antenna in my house with great results. I also tried ferrite antenna with pre-amp and results were very good.

> A broadband loop or a whip is a must for SDR which looks at a big chunk of spectrum.
>
> 73, Mike

Sorry for my ignorance, but what mean SDR? Thanks
Danny

7833. Re: Antenna request to Chris Trask

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-08-30 03:27:11 UTC
From: vbifyz
Topic: 7703 Message: 7833

Software Defined Radio.
Some SDR receivers can record the whole MW band at once for later analysis.

--- In loopantennas@yahoogroups.com, "dannibou" <dannibou@...> wrote:
>
>
>

>
> Sorry for my ignorance, but what mean SDR? Thanks
> Danny
>

7834. Indoor ceiling loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-01 16:53:36 UTC
From: mojavedxer
Topic: 7834 Message: 7834

I am planning to redo my current makeshift indoor antenna to something more permanent.

1. If I run a wire around the perimeter of the radio room in a loop configuration. Will multiple turns help lower the resonance of the antenna or is it a waste of time, I am planning to use a 1" space between the turns.

2. What would be the best way to connect a coax feed line in a loop configuration. 9/1 un/un or 4/1 balun.

3. Would a antenna tuner be beneficial in this case. This antenna would be used for reception only,

4. since grounding is not available. Would creating two 20' radials running against the baseboards of the radio room help lower the noise level.

7835. Re: [loopantennas] Indoor ceiling loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-01 18:21:24 UTC
From: John Popelish
Topic: 7834 Message: 7835

mojavedxer wrote:
> I am planning to redo my current makeshift indoor antenna
> to something more permanent.
>
> 1. If I run a wire around the perimeter of the radio room
> in a loop configuration. Will multiple turns help lower
> the resonance of the antenna or is it a waste of time, I
> am planning to use a 1" space between the turns.

More turns increases the total inductance and electrical length of the loop. Both effect5s lower the self resonant frequency. Increased space between the turns lowers the the turn-to-turn capacitance and also lowers the loop inductance. Both effects raise the self resonant frequency of the loop.

> 2. What would be the best way to connect a coax feed line
> in a loop configuration. 9/1 un/un or 4/1 balun.

You might consider a transformer coupling made with a ferrite bead. This works best if the loop tuning is on the loop side of the transformer.

> 3. Would a antenna tuner be beneficial in this case. This
> antenna would be used for reception only,

Resonating the antenna at the received frequency will not only increase the signal strength at that frequency, it will lower the signal strength of frequencies on each side of that frequency, decreasing interference.

> 4. since grounding is not available. Would creating two
> 20' radials running against the baseboards of the radio
> room help lower the noise level.

A loop antenna much shorter than a half wavelength does not generally benefit much from ground planes or ground connections. There need be only a ground connection at the receiver to carry away static charge.

Keep in mind that a horizontal loop has maximum sensitivity for propagation that has a vertical magnetic component (that passes parallel to the axis of the loop). But this is not a common or efficient mode for most radio wave broadcasts, because that puts the E field component parallel to the ground, where is is most absorbed by the soil. I think you would be better served by circling a wall with the loop,

though you may need to make two loops, one on each wall meeting at a corner, and switch between them, depending on the direction to the transmitter. There is no loop configuration that has the omni directional pattern of a vertical whip, E-field antenna. this is both a benefit (to null a strong interfering signal) and a detriment (can't use a single, fixed loop to receive from any direction).

--
Regards,

John Popelish

7836. PVC Loop Suggestions and Advise for the Tecsun PL-390

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-04 09:14:27 UTC
From: ed_plopenio
Topic: 7836 Message: 7836

Hi everybody. This is my first post after a few months of reading and learning for the group

I would like to build a recieve only MW loop from magnetic wire and a recieve only coax cable SW shielded loop antenna using the same PVC frame. What would be the width and height of the collapsible/portable PVC frame? How many turns of magnetic wire and the spacing between turns for the MW loop? I am assuming that the SW coax would have only 1 turn. I imagine also that both loops can have a common connection to the ground terminal of the 3.5 mm socket with the MW connected to the socket's middle terminal and the SW connectcted to the tip's terminal. I plan to use thses antennas on a Tecsun PL-390 which is on order. Is it possible that both the MW and SW antennas to have an inductance between 10 and 20 uH using a 1:5 turn ratio following the Si4734 DSP chip specs so that both antennas can be tuned directly with the modified PL-390 describe here

(http://f1.grp.yahoofs.com/v1/ELmATP_lM160pzEINc06OhFQCLxtBEPdEKGPXU1pJo8oqgEIcSd2ZN6fdSGe42olHclNp8H-x8u_jPYJGioj-s3FK8IJ823EPgI/6%20Alignment%20%26%20Modification/PL-390%20External%20LW%20MW%20Antenna%20Mod.pdf)

What is a 1:5 turn ratio inductor and how do I make one?

Also, would it be possible to improve the PL-390's ferrite loopstick sensitivity by either replacing it with one of better quality and/or by rewinding the litz wire. I have read about a 3-coil design by Hugo described at the Herculodge website

(http://herculodge.typepad.com/herculodge/2010/03/is-it-true-the-saying-that-the-bigger-the-ferrite-the-better-am-sensitivity-.html)

or his more recent post

(http://herculodge.typepad.com/herculodge/2010/09/hugo-shows-the-best-way-to-maximize-performance-on-your-ferrite-antenna.html)?

I believe the Tecsun PL-390 can turn out to be a "Super DX" portable radio with Mr. Mann's modification, a collapsible/portable common framed MW & SW PVC Loop antenna and a modified ferrite loopstick,

Many thanks for any and all comments, suggestions and advise.

Ed Plopenio
Naga City, Philippines
ed_plopenio@...

7837. Re: PVC Loop Suggestions and Advise for the Tecsun PL-390

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-04 22:04:02 UTC
From: airchecklover
Topic: 7836 Message: 7837

Hi Ed;

Welcome to the world of radio. I will address a portion of your post ... the internal ferrite of the PL-390 and external loop - and also caution you to ask many many questions before you think you fully understand, because there is much to learn and many opinions on what and will not work. And please be aware you are asking "experimenter questions" ... questions which maybe only you can answer after you have tried :)

That said, I wonder in what order you want to make these modifications and antennas? You have outlined an ambitious amount of work!

Whether mounting a MW multi-turn open loop alongside a coax single turn loop is a good or bad idea - I don't know. My gut instinct says you may have interference problems between the two antennas windings ... capacitive and possibly inductive too. Good question and hoping someone else has tried it and can comment. However, I know that making both an external multi-turn open MW loop AND modifying the internal ferrite with Litz wire seems counter-productive. If you are going to make a pickup loop mounted to your multi-turn and direct-connect that to the PL-390, what is the purpose of the Litz re-wire of the ferrite? If you are going to inductively couple the multi-turn loop to the PL-390, the internal ferrite will work great just as it is. I doubt you would see much performance gain by re-winding the ferrite for this application. If you are itching to wind Litz wire on a ferrite, I would suggest investing in a long ferrite rod and winding an external tunable "super-ferrite". You can always cascade the super-ferrite and the multi-turn loop together with inductive coupling and you will achieve extra signal gain plus the ability to play one antennas' nulls against the other for some amazing daytime DX. A tried and proven way to achieve MW & SW on one frame is to use tap points on a open multi-turn winding, making the open winding anything from one to several turns, depending on your tap point. Whether the shielded coax will give you better noise reduction over an open single turn magnet wire has been debated. It's output will probably be lower.

Please report back if you try some of these ideas. Let us know how things worked or didn't work.

Mark

=++++++++++++++++++++++++++++++

--- In loopantennas@yahoogroups.com, "ed_plopenio" <ed_plopenio@...> wrote:
>
> Hi everybody. This is my first post after a few months of reading and learning for the group
>
> I would like to build a recieve only MW loop from magnetic wire and a recieve only coax cable SW shielded loop antenna using the same PVC frame. What would be the width and height of the collapsible/portable PVC frame? How many turns of magnetic wire and the spacing between turns for the MW loop? I am assuming that the SW coax would have only 1 turn. I imagine also that both loops can have a common connection to the ground terminal of the 3.5

mm socket with the MW connected to the socket's middle terminal and the SW connectcted to the tip's terminal. I plan to use thses antennas on a Tecsun PL-390 which is on
> order. Is it possible that both the MW and SW antennas to have an inductance between 10 and 20 uH using a 1:5 turn ratio following the Si4734 DSP chip specs so that both antennas can be tuned directly with the modified PL-390 describe here
>
> (http://f1.grp.yahoofs.com/v1/ELmATP_lM160pzEINc06OhFQCLxtBEPdEKGPXU1pJo8oqgEIcSd2ZN6fdSGe42olHclNp8H-x8u_jPYJGioj-s3FK8IJ823EPgI/6%20Alignment%20%26%20Modification/PL-390%20External%20LW%20MW%20Antenna%20Mod.pdf)
>
> What is a 1:5 turn ratio inductor and how do I make one?
>
> Also, would it be possible to improve the PL-390's ferrite loopstick sensitivity by either replacing it with one of better quality and/or by rewinding the litz wire. I have read about a 3-coil design by Hugo described at the Herculodge website
>
> (http://herculodge.typepad.com/herculodge/2010/03/is-it-true-the-saying-that-the-bigger-the-ferrite-the-better-am-sensitivity-.html)
>
> or his more recent post
>
> (http://herculodge.typepad.com/herculodge/2010/09/hugo-shows-the-best-way-to-maximize-performance-on-your-ferrite-antenna.html)?
>
> I believe the Tecsun PL-390 can turn out to be a "Super DX" portable radio with Mr. Mann's modification, a collapsible/portable common framed MW & SW PVC Loop antenna and a modified ferrite loopstick,
>
> Many thanks for any and all comments, suggestions and advise.
>
>
> Ed Plopenio
> Naga City, Philippines
> ed_plopenio@...
>

7838. Re: PVC Loop Suggestions and Advise for the Tecsun PL-390

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-05 22:01:59 UTC
From: Tony King
Topic: 7836 Message: 7838

I would recommend anyone looking at hot rodding the PL310 PL380 PL390 join the ultralightdx group. It is loaded with files and photos of all the mods and loops that have elevated these models to become great DX sets.

Tony King

New Zealand

[Non-text portions of this message have been removed]

7839. Re: PVC Loop Suggestions and Advise for the Tecsun PL-390

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-06 02:39:14 UTC
From: ed_plopenio
Topic: 7836 Message: 7839

Thanks Tony. I have joined them too. Regards.

--- In loopantennas@yahoogroups.com, "Tony King" <tonyzl@...> wrote:
>
> I would recommend anyone looking at hot rodding the PL310 PL380 PL390 join
> the ultralightdx group. It is loaded with files and photos of all the mods
> and loops that have elevated these models to become great DX sets.
>
> Tony King
>
> New Zealand
>
>
>
> [Non-text portions of this message have been removed]
>

7840. Heat or no heat ? that is the question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-10 10:30:08 UTC
From: jasonwell9657
Topic: 7840 Message: 7840

Hi
I have a number of external active loop antennas. The instructions that
came with a couple of the antennas say thatpower to the antenna should
be maintained 24/7 apparently to maintain slight heat within thepre amp
at all times. The others make no mention of this.
So with winter approaching should I keep the power on all the time ?
will this shorten the antenna life ?
Regards to all
Jason

[Non-text portions of this message have been removed]

7841. Re: [loopantennas] Heat or no heat ? that is the question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-10 16:27:52 UTC
From: ve7sl@shaw.ca
Topic: 7840 Message: 7841

Hi Jason - I'm not sure why they would specify that power be maintained unless the slight heating inside the case is enough to deter any condensation from building up. Running the preamp 24/7 will not harm anything whatsoever. When operated within their ratings, transistors and most solid state components should have an operating life in the 'hundreds' of years!

Steve

> Hi
> I have a number of external active loop antennas. The instructions that
> came with a couple of the antennas say thatpower to the antenna should
> be maintained 24/7 apparently to maintain slight heat within thepre amp
> at all times. The others make no mention of this.
> So with winter approaching should I keep the power on all the time ?
> will this shorten the antenna life ?
> Regards to all
> Jason
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

7842. Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-13 01:56:37 UTC
From: w9ran
Topic: 7842 Message: 7842

My Wellbrook shielded loop bit the dust last year, and I'd like to put it back in service. Primary interest is in LW and BC band DX-ing. I've been looking thru the archives as well as other sources, but would appreciate any suggestions. This is an untuned loop, a broadband preamp would be fine if it's reasonably immune to cross modulation, otherwise a cutoff at 2-3 mhz would be OK. Simple is better than complex.

Thanks and 73,
Bob W9RAN

7843. RE: [loopantennas] Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-13 06:38:32 UTC
From: dx11
Topic: 7842 Message: 7843

Hello Bob,
Maybe the best thing to do is to approach Andy Ikin of Wellbrook First. He may be helpful in repair or replacement.

If you want to build something yourself, take a look at these.

http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm

http://groups.yahoo.com/group/loopantennas/files/Wideband%20Loop%20Antenna%20Amplifier.pdf

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

There has been a recent discussion on them, you can find that in the message archive.

I believe all three designers of these active broadband loops are members of this Group.

regards,

Cor Beijersbergen

>>This is an untuned loop, a broadband preamp would be fine if it's reasonably immune to cross modulation, otherwise a cutoff at 2-3 mhz would be OK. Simple is better than complex.

Thanks and 73,
Bob W9RAN<<

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7844. Re: [loopantennas] Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-13 08:34:02 UTC
From: Andy Ikin
Topic: 7842 Message: 7844

Bob W9RAN wrote on the Sept.

My Wellbrook shielded loop bit the dust last year, and I'd like to put it back in service. Primary interest is in LW and BC band DX-ing. I've been looking thru the archives as well as other sources, but would appreciate any suggestions. This is an untuned loop, a broadband preamp would be fine if it's reasonably immune to cross modulation, otherwise a cutoff at 2-3 mhz would be OK. Simple is better than complex.

Thanks and 73,
Bob W9RAN

Bob, I can provide a replacement Head amplifier for your loop.

73

Andrew

Andrew Ikin e-mail: sales@...
andy@...
URL: http://www.wellbrook.uk.com

Wellbrook Communications
The Farthings
Beulah
Llanwrtyd Wells
Powys
Wales LD5 4YD UK
Tel. 01591 620316 Int.+44 1591 620316

Manufacturers of Broadband Loop Antennas

----- Original Message -----
From: w9ran
To: loopantennas@yahoogroups.com
Sent: Monday, September 13, 2010 2:56 AM
Subject: [loopantennas] Shielded Loop preamp suggestions?

My Wellbrook shielded loop bit the dust last year, and I'd like to put it back in service. Primary interest is in LW and BC band DX-ing. I've been looking thru the archives as well as other sources, but would appreciate any suggestions. This is an untuned loop, a broadband preamp would be fine if it's reasonably immune to cross modulation, otherwise a cutoff at 2-3 mhz would be OK. Simple is better than complex.

Thanks and 73,
Bob W9RAN

[Non-text portions of this message have been removed]

7845. Re: Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-14 13:50:52 UTC
From: shibukiau
Topic: 7842 Message: 7845

Bob, have a look at the new Pixel Loop ---

http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html

It is available in the States since it is made here.

I have one and it's very well made. No parts are potted therefore it is repairable.

Cheers!
Lloyd

--- In loopantennas@yahoogroups.com, "w9ran" <w9ran@...> wrote:
>
> My Wellbrook shielded loop bit the dust last year, and I'd like to put it back in service. Primary interest is in LW and BC band DX-ing. I've been looking thru the archives as well as other sources, but would appreciate any suggestions. This is an untuned loop, a broadband preamp would be fine if it's reasonably immune to cross modulation, otherwise a cutoff at 2-3 mhz would be OK. Simple is better than complex.
>
> Thanks and 73,
> Bob W9RAN
>

7846. Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-14 18:37:31 UTC
From: brian nsl
Topic: 7846 Message: 7846

Hi,
Looks and reads very impressive, could this be the only antenna we will need in future hi!

http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html

72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

7847. Re: Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-14 19:43:57 UTC
From: pappy_hiram
Topic: 7842 Message: 7847

Hokey Smokes, Bullwinkle, the thing costs $400!!

--- In loopantennas@yahoogroups.com, "shibukiau" <kubisl@...> wrote:
>
> Bob, have a look at the new Pixel Loop ---
>
> http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html
>
> It is available in the States since it is made here.
>
> I have one and it's very well made. No parts are potted therefore it is repairable.
>
> Cheers!
> Lloyd
>
> --- In loopantennas@yahoogroups.com, "w9ran" <w9ran@> wrote:
> >
> > My Wellbrook shielded loop bit the dust last year, and I'd like to put it back in service. Primary interest is in LW and BC band DX-ing. I've been looking thru the archives as well as other sources, but would appreciate any suggestions. This is an untuned loop, a broadband preamp would be fine if it's reasonably immune to cross modulation, otherwise a cutoff at 2-3 mhz would be OK. Simple is better than complex.
> >
> > Thanks and 73,
> > Bob W9RAN
> >
>

7848. Re: [loopantennas] Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-14 21:06:37 UTC
From: Richard (Rick) Karlquist
Topic: 7846 Message: 7848

A couple of general comments on preamps.
The amount of preamp gain you need is to
be about 6 dB more than the sum of
the receiver noise figure and the feedline
loss. You don't want more gain than necessary
because it just reduces the dynamic range.
30 dB of gain is way too way IMHO, unless your
receiver is dead or you have a mile of feedline.
The OIP3 of +46 dBm sounds impressive until
you realize that this is only +16 dBm at
the input, after accounting for the 30 dB of
gain. No matter how much gain the preamp has,
the sensitivity will be limited by the room
temperature thermal noise of the 50 ohm swamping
resistor. It is trivial to get a 1 dB NF,
which will be within 1 dB of the best you will
do with an untuned 38 inch loop. It is completely
unjustified IMHO to charge four Benjamins for a
preamp that could be equaled by a <$4 IC. See
Mini-Circuits for examples.

Rick N6RK

On 9/14/2010 11:37 AM, brian nsl wrote:
>
>
> Hi,
> Looks and reads very impressive, could this be the only antenna we will
> need in future hi!
>
> http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html
>
> 72, Brian, G0NSL-QRP.
>
> [Non-text portions of this message have been removed]
>
>

7849. Re: Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-14 21:23:06 UTC
From: james
Topic: 7846 Message: 7849

72 feet of #12 stranded copper wire at a hardware store is a lot cheaper and makes a great receiving loop (18 feet square) that will work great from 500 Khz to 30 MHZ without a preamp and will fit in most back yards , (about 20 bucks or a little less)

i would kick myself in the pants for spending 400 bucks on that

DISCLAIMER: i am not trying to sound mean, just being practical.

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Hi,
> Looks and reads very impressive, could this be the only antenna we will need in future hi!
>
> http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html
>
> 72, Brian, G0NSL-QRP.
>
> [Non-text portions of this message have been removed]
>

7850. Re: [loopantennas] Re: Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-14 21:33:51 UTC
From: Rick Karlquist
Topic: 7846 Message: 7850

james wrote:
> 72 feet of #12 stranded copper wire at a hardware store is a lot cheaper
> and makes a great receiving loop (18 feet square) that will work great
> from 500 Khz to 30 MHZ without a preamp and will fit in most back yards ,
> (about 20 bucks or a little less)

At that size, it isn't really going to work like the classic loop
above 5 or 10 MHz. It will have a funky pattern above 14 MHz where
it is a full wavelength. But you will probably not need a preamp
in most cases.

Rick N6RK

7851. Re: Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 00:02:43 UTC
From: james
Topic: 7846 Message: 7851

since it is for receive only you wont have to worry about a pattern, thats for TX, not RX, i have one right now in a horizontal loop and dont have a problem with it (works great on all bands)

the only time a pattern comes in to play for receive is with highly directional antennas like a log periodic or yagi

--- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
> At that size, it isn't really going to work like the classic loop
> above 5 or 10 MHz. It will have a funky pattern above 14 MHz where
> it is a full wavelength. But you will probably not need a preamp
> in most cases.
>
> Rick N6RK
>

7852. Re: [loopantennas] Re: Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 00:12:31 UTC
From: Chris Trask
Topic: 7842 Message: 7852

```
>
> > Bob, have a look at the new Pixel Loop ---
> >
> >
http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.h
tml
> >
> > It is available in the States since it is made here.
> >
> > I have one and it's very well made. No parts are potted therefore it is
repairable.
>
>
> Hokey Smokes, Bullwinkle, the thing costs $400!!
>

You can make the same loop for less than $100 using my amplifier and the
guidelines in the paper "Mastering the Art of the Shielded Loop Antenna",
both of which are in the list files section.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/
```

7853. Re: [loopantennas] Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 03:27:27 UTC
From: crabtreejr@aol.com
Topic: 7846 Message: 7853

Hello Rick

The reason for the significant gain is there is an enormous mismatch
between the antenna and the amplifier.

The radiation resistance of a small single turn loop (from Jasik, Antenna
Enginneering Handbook,1st ed) is:
19,000 (D / lambda) ^4
So at 1 MHz, a 1 meter diameter loop will have a radiation resistance of
2.3 micro-ohms. The resistance of the loop will be much larger than this, and
the amplifier input impedance will be a small number of ohms.

The Pixel Technologies spec sheet does not give the antenna factor or the
frequency response for their loop, but 30 dB is "about right" for an antenna
factor of ca. 0.5 to 1.0.

73 John KC0G

n a message dated 9/14/2010 4:04:16 PM Central Daylight Time,
richard@... writes:
> A couple of general comments on preamps.
> The amount of preamp gain you need is to
> be about 6 dB more than the sum of
> the receiver noise figure and the feedline
> loss. You don't want more gain than necessary
> because it just reduces the dynamic range.
> 30 dB of gain is way too way IMHO, unless your
> receiver is dead or you have a mile of feedline.
> The OIP3 of +46 dBm sounds impressive until
> you realize that this is only +16 dBm at
> the input, after accounting for the 30 dB of
> gain. No matter how much gain the preamp has,
> the sensitivity will be limited by the room
> temperature thermal noise of the 50 ohm swamping
> resistor. It is trivial to get a 1 dB NF,
> which will be within 1 dB of the best you will
> do with an untuned 38 inch loop. It is completely
> unjustified IMHO to charge four Benjamins for a
> preamp that could be equaled by a <$4 IC. See
> Mini-Circuits for examples.
>
> Rick N6RK
>
> On 9/14/2010 11:37 AM, brian nsl wrote:
> >
> >

> > Hi,
> > Looks and reads very impressive, could this be the only antenna we will
> > need in future hi!
> >
> >
> http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html
> >
> > 72, Brian, G0NSL-QRP.
>

[Non-text portions of this message have been removed]

7854. Re: [loopantennas] Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 06:28:13 UTC
From: Richard (Rick) Karlquist
Topic: 7846 Message: 7854

The radiation resistance is irrelevant because, as you say,
it is dominated by the ohmic resistance of the loop. In an
UNTUNED broadband loop, the ohmic resistance is also irrelevant,
because it is dominated by the inductance of the loop, which
is not tuned out.

You seem to be saying that if the antenna has a gain of -30
dBi, the preamp should have a gain of +30 dBi, as if there
were a rule that the signal strength at the receiver must
be the same as an isotropic antenna. There is no such
rule.

The only requirement is for the noise of the preamp to dominate
the receiver noise. For example, my FT-1000 has a noise figure
of 12 dB. If I put an 18 dB preamp in front of it, the NF
of the system will be about 1 dB worse than the NF of the preamp
alone. IE, if the preamp has 2 dB NF, the resulting system will
have a 3 dB NF. It is irrelevant whether the antenna gain is
-10 dBi, -30 dBi, or -50 dBi, etc.

All of this can be avoided by using a remote varactor tuned loop.
The output signal is so much higher that you don't need a preamp.

Rick N6RK

On 9/14/2010 8:27 PM, crabtreejr@... wrote:
>
>
> Hello Rick
>
> The reason for the significant gain is there is an enormous mismatch
> between the antenna and the amplifier.
>
> The radiation resistance of a small single turn loop (from Jasik, Antenna
> Enginneering Handbook,1st ed) is:
> 19,000 (D / lambda) ^4
> So at 1 MHz, a 1 meter diameter loop will have a radiation resistance of
> 2.3 micro-ohms. The resistance of the loop will be much larger than
> this, and
> the amplifier input impedance will be a small number of ohms.
>
> The Pixel Technologies spec sheet does not give the antenna factor or the
> frequency response for their loop, but 30 dB is "about right" for an
> antenna
> factor of ca. 0.5 to 1.0.
>

> 73 John KC0G
>
>
> n a message dated 9/14/2010 4:04:16 PM Central Daylight Time,
> richard@... <mailto:richard%40karlquist.com> writes:
> > A couple of general comments on preamps.
> > The amount of preamp gain you need is to
> > be about 6 dB more than the sum of
> > the receiver noise figure and the feedline
> > loss. You don't want more gain than necessary
> > because it just reduces the dynamic range.
> > 30 dB of gain is way too way IMHO, unless your
> > receiver is dead or you have a mile of feedline.
> > The OIP3 of +46 dBm sounds impressive until
> > you realize that this is only +16 dBm at
> > the input, after accounting for the 30 dB of
> > gain. No matter how much gain the preamp has,
> > the sensitivity will be limited by the room
> > temperature thermal noise of the 50 ohm swamping
> > resistor. It is trivial to get a 1 dB NF,
> > which will be within 1 dB of the best you will
> > do with an untuned 38 inch loop. It is completely
> > unjustified IMHO to charge four Benjamins for a
> > preamp that could be equaled by a <$4 IC. See
> > Mini-Circuits for examples.
> >
> > Rick N6RK
> >
> > On 9/14/2010 11:37 AM, brian nsl wrote:
> > >
> > >
> > > Hi,
> > > Looks and reads very impressive, could this be the only antenna we will
> > > need in future hi!
> > >
> > >
> >
> http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html
> > >
> > > 72, Brian, G0NSL-QRP.
> >
>
> [Non-text portions of this message have been removed]
>
>

7855. Re: [loopantennas] Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 07:20:52 UTC
From: brian nsl
Topic: 7846 Message: 7855

Hi All,
Thanks for posting the various informed comments on the loop,
seems like the jury is still out hi!
72, Brian.

----- Original Message -----
From: "Richard (Rick) Karlquist" <richard@...>
To: <loopantennas@yahoogroups.com>
Cc: <crabtreejr@...>

7856. RE: [loopantennas] Re: Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 11:33:40 UTC
From: Collins, Graham
Topic: 7842 Message: 7856

Chris, thanks for posting the reference; that and your paper on your amplifier are just what I was looking for.

In fact, I have been slowing reading my through the various papers you have put on your website. Their level of technical detail I find challenging and informative, what better way to improve my level of understanding of the various subject matter.

Cheers, Graham ve3gtc / ve3ghm (mostly QRP CW and digital modes and a constant tinkerer)

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of Chris Trask
Sent: September 14, 2010 20:13
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Shielded Loop preamp suggestions?

>
> > Bob, have a look at the new Pixel Loop ---
> >
> >
http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro
-1.h
tml
> >
> > It is available in the States since it is made here.
> >
> > I have one and it's very well made. No parts are potted therefore it
is
repairable.
>
>
> Hokey Smokes, Bullwinkle, the thing costs $400!!
>

You can make the same loop for less than $100 using my amplifier and
the
guidelines in the paper "Mastering the Art of the Shielded Loop
Antenna",
both of which are in the list files section.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7857. RE: [loopantennas] Re: Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 13:08:57 UTC
From: Chris Trask
Topic: 7842 Message: 7857

>
>
>Chris, thanks for posting the reference; that and your paper on your
>amplifier are just what I was looking for.
>
>In fact, I have been slowing reading my through the various papers you
>have put on your website. Their level of technical detail I find
>challenging and informative, what better way to improve my level of
>understanding of the various subject matter.
>

I thought the shielded loop and loop amplifier papers might be useful to you. With those, you can make your own antenna that will have performace on a par with that of the Welbrook and Pixel products but costing far less.

I have the parts for making an even better amplifier, but I'm tied up with the design of a low IMD mixer at the moment.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7858. Re: Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 16:12:06 UTC
From: Bruce Carter
Topic: 7842 Message: 7858

Two EL2125C's in a fully differential configuration. I've used a gain of up to 46 dB. They are the absolute lowest noise op amp available anywhere and have plenty of bandwidth when operated from +/-5V.

--- In loopantennas@yahoogroups.com, "w9ran" <w9ran@...> wrote:
>
> My Wellbrook shielded loop bit the dust last year, and I'd like to put it back in service. Primary interest is in LW and BC band DX-ing. I've been looking thru the archives as well as other sources, but would appreciate any suggestions. This is an untuned loop, a broadband preamp would be fine if it's reasonably immune to cross modulation, otherwise a cutoff at 2-3 mhz would be OK. Simple is better than complex.
>
> Thanks and 73,
> Bob W9RAN
>

7859. Re: [loopantennas] Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 16:22:36 UTC
From: crabtreejr@aol.com
Topic: 7846 Message: 7859

I am not saying that if the antenna has a gain of -30dB, then the amplifier should have a gain of +30dB.

One reference which I find very useful is:
B.M. Sosin, H.F. Active Antenna performance requirements and realization, Communications and Broadcasting, Summer 1976, pp 29-34.

Sosin's approach is to consider the atmospheric noise level and receiver noise factor, and use these to detemine the required active antenna gain for a 3dB increase in receiver noise. He defines the active antenna gain as the output of the active antenna divided by that of a matched short vertical antenna.

Sosin calculates a required active antenna gain at 10MHz of -20dB, with a comment that it might be desirable to increase this by 3 to 8 dB if it were desired to avoid the noise deterioration.

It is then relatively straightforward to calculate a required antenna factor for this gain. The required gain of the antenna amplifier then depends upon the loop area, and the amplifier input impedance.

I posted some loop antenna calculations to this group back in May 2007.
See:
http://groups.yahoo.com/group/loopantennas/message/3411

HTH and 73

John KC0G

In a message dated 9/15/2010 1:25:53 AM Central Daylight Time,
richard@... writes:
> The radiation resistance is irrelevant because, as you say,
> it is dominated by the ohmic resistance of the loop. In an
> UNTUNED broadband loop, the ohmic resistance is also irrelevant,
> because it is dominated by the inductance of the loop, which
> is not tuned out.
>
> You seem to be saying that if the antenna has a gain of -30
> dBi, the preamp should have a gain of +30 dBi, as if there
> were a rule that the signal strength at the receiver must
> be the same as an isotropic antenna. There is no such
> rule.
>
> The only requirement is for the noise of the preamp to dominate
> the receiver noise. For example, my FT-1000 has a noise figure
> of 12 dB. If I put an 18 dB preamp in front of it, the NF
> of the system will be about 1 dB worse than the NF of the preamp

> alone. IE, if the preamp has 2 dB NF, the resulting system will
> have a 3 dB NF. It is irrelevant whether the antenna gain is
> -10 dBi, -30 dBi, or -50 dBi, etc.
>
> All of this can be avoided by using a remote varactor tuned loop.
> The output signal is so much higher that you don't need a preamp.
>
> Rick N6RK
>
> On 9/14/2010 8:27 PM, crabtreejr@... wrote:
> >
> >
> > Hello Rick
> >
> > The reason for the significant gain is there is an enormous mismatch
> > between the antenna and the amplifier.
> >
> > The radiation resistance of a small single turn loop (from Jasik,
> Antenna
> > Enginneering Handbook,1st ed) is:
> > 19,000 (D / lambda) ^4
> > So at 1 MHz, a 1 meter diameter loop will have a radiation resistance of
> > 2.3 micro-ohms. The resistance of the loop will be much larger than
> > this, and
> > the amplifier input impedance will be a small number of ohms.
> >
> > The Pixel Technologies spec sheet does not give the antenna factor or
> the
> > frequency response for their loop, but 30 dB is "about right" for an
> > antenna
> > factor of ca. 0.5 to 1.0.
> >
> > 73 John KC0G
> >
> >
> > n a message dated 9/14/2010 4:04:16 PM Central Daylight Time,
> > richard@... <mailto:richard%40karlquist.com> writes:
> > > A couple of general comments on preamps.
> > > The amount of preamp gain you need is to
> > > be about 6 dB more than the sum of
> > > the receiver noise figure and the feedline
> > > loss. You don't want more gain than necessary
> > > because it just reduces the dynamic range.
> > > 30 dB of gain is way too way IMHO, unless your
> > > receiver is dead or you have a mile of feedline.
> > > The OIP3 of +46 dBm sounds impressive until
> > > you realize that this is only +16 dBm at
> > > the input, after accounting for the 30 dB of
> > > gain. No matter how much gain the preamp has,
> > > the sensitivity will be limited by the room

> > > temperature thermal noise of the 50 ohm swamping
> > > resistor. It is trivial to get a 1 dB NF,
> > > which will be within 1 dB of the best you will
> > > do with an untuned 38 inch loop. It is completely
> > > unjustified IMHO to charge four Benjamins for a
> > > preamp that could be equaled by a <$4 IC. See
> > > Mini-Circuits for examples.
> > >
> > > Rick N6RK
> > >
> > > On 9/14/2010 11:37 AM, brian nsl wrote:
> > > >
> > > >
> > > > Hi,
> > > > Looks and reads very impressive, could this be the only antenna we
> will
> > > > need in future hi!
> > > >
> > > >
> > > >
> > >
> http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html
> > > >
> > > > 72, Brian, G0NSL-QRP.
> > > >
> > >
> > > [Non-text portions of this message have been removed]
> > >
> > >
> >

[Non-text portions of this message have been removed]

7860. Re: Shielded Loop preamp suggestions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 20:58:19 UTC
From: vbifyz
Topic: 7842 Message: 7860

Hi Bruce,
Can you please post the diagram of your amplifier?
I've got two EL2125C as free samples from Intersil.
I'm playing with a simple inverting configuration with 1k feedback resistor. My problem is the input part, namely the common-mode suppression transformer. I lack the knowledge necessary to optimize this thing.
The amplifier works just fine without the transformer, but I suspect it just picks up the common mode (it keeps receiving when I disconnect the "cold" side of the loop). With my 1:1 transformer and a 1m dia. loop the sensitivity is pathetic.

As for the differential configuration, wouldn't it increase the noise by 3dB? The gain by itself is not that interesting when loop is the input, you need to measure the total system gain as the ratio of output in uV to input in uV/m.

73,
Mike

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> Two EL2125C's in a fully differential configuration. I've used a gain of up to 46 dB. They are the absolute lowest noise op amp available anywhere and have plenty of bandwidth when operated from +/-5V.
>

7861. Loop Antenna Identification

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-15 22:41:20 UTC
From: Marty
Topic: 7861 Message: 7861

Hello. I bought this little beauty at a garage sale awhile back with the hopes of improving my MW reception. It didn't work. Performance took a dive. This being the case, I need to dispose of the loop appropriately, but I need to know what it is. Please advise. Thanks in advance.

http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02721.jpg

http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02722.jpg

http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02723.jpg

7862. Re: [loopantennas] Loop Antenna Identification

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-16 03:15:44 UTC
From: toddroberts2001@aol.com
Topic: 7861 Message: 7862

In a message dated 9/15/2010 10:56:22 P.M. Eastern Daylight Time,
martinegunn@... writes:

Hello. I bought this little beauty at a garage sale awhile back with the
hopes of improving my MW reception. It didn't work. Performance took a dive.
This being the case, I need to dispose of the loop appropriately, but I
need to know what it is. Please advise. Thanks in advance.

It looks like a small poorly-built transmitting loop for a higher band,
perhaps 2 meters = Junk.
73 - Todd WD4NGG

7863. Re: [loopantennas] Loop Antenna Identification

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-16 04:36:33 UTC
From: Don
Topic: 7861 Message: 7863

IMHO: Looks like ham radio with the gamma match at the bottom and a small coax partially hidden - RG-174? Most of the loop is at ground. Not good for MW. Also
too small for MW - 6in??? 224mHz? 1.2gHz? For MW a small (3ft) metal tube loop would need an amp.

Don
Upland, CA

On 15-Sep-10 15:41, Marty wrote:
> Hello. I bought this little beauty at a garage sale awhile back with the hopes of improving my MW reception. It didn't work. Performance took a dive. This being the case, I need to dispose of the loop appropriately, but I need to know what it is. Please advise. Thanks in advance.
>
>
> http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02721.jpg
>
> http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02722.jpg
>
> http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02723.jpg
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

7864. Re: Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-16 06:27:07 UTC
From: David S
Topic: 7846 Message: 7864

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html
>
> 72, Brian, G0NSL-QRP.

Where is the "Unique Moebius Loop architecture" ?

73,
Dave

7865. Re: [loopantennas] Re: Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-16 07:22:49 UTC
From: brian nsl
Topic: 7846 Message: 7865

David,
See,
mobius winding techniques and methods
21 Oct 2009 ... Mobius winding techniques are a method of winding inductors, loop antennas specifically, to reduce the self capacitance inherent in the ...
www.electronics-tutorials.com > BASICS - Similar

72, Brian, G0NSL-QRP.
----- Original Message -----
From: David S
To: loopantennas@yahoogroups.com
Sent: Thursday, September 16, 2010 7:27 AM
Subject: [loopantennas] Re: Loop antenna !!!!

[Non-text portions of this message have been removed]

7866. Re: [loopantennas] Loop Antenna Identification

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-16 09:16:57 UTC
From: Richard Thompson
Topic: 7861 Message: 7866

From the size of it compared to bench vice it is possibly a homemade DF loop for 27mhz

Dick T (UK)

From: Don <stb55@...>
To: loopantennas@yahoogroups.com
Sent: Thu, 16 September, 2010 5:36:33
Subject: Re: [loopantennas] Loop Antenna Identification

IMHO: Looks like ham radio with the gamma match at the bottom and a small coax partially hidden - RG-174? Most of the loop is at ground. Not good for MW. Also

too small for MW - 6in??? 224mHz? 1.2gHz? For MW a small (3ft) metal tube loop would need an amp.

Don
Upland, CA

On 15-Sep-10 15:41, Marty wrote:
> Hello. I bought this little beauty at a garage sale awhile back with the hopes
>of improving my MW reception. It didn't work. Performance took a dive. This
>being the case, I need to dispose of the loop appropriately, but I need to know
>what it is. Please advise. Thanks in advance.
>
>
>http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02721.jpg
>g
>
>http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02722.jpg
>g
>
>http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02723.jpg
>g
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links
>rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files

>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into
>Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

7867. Re: [loopantennas] Re: Loop antenna !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-17 05:17:54 UTC
From: John Kolb
Topic: 7846 Message: 7867

A mobius strip loop antenna is a loop made with a single turn loop mad of coax,
with the center conductor and shield interconnected so that it acts like
a two turn loop. That's the characteristic referred to in the ad for
the Pixel PRO-1A
antenna. Here's a link to the publication by Dr. Baum explaining the
operation.
http://ece.unm.edu/summa/notes/SSN/note7.pdf

Named after the mobius strip which is a geometric shape
with only one surface.

John

At 12:22 AM 9/16/2010, you wrote:
>David,
> See,
> mobius winding techniques and methods
>21 Oct 2009 ... Mobius winding techniques are a method of winding inductors,
>loop antennas specifically, to reduce the self capacitance inherent in the ...
>www.electronics-tutorials.com > BASICS - Similar
>
> 72, Brian, G0NSL-QRP.

7868. RE: [loopantennas] Loop Antenna Identification

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-17 19:03:43 UTC
From: Dave Benham
Topic: 7861 Message: 7868

As I mentioned in an earlier private email, I have had one of these for years. I don't recall where I picked it up but probably from a swap or garage sale. Somewhere I believe I have paperwork on it.

I just dug it out of the garage and put the antenna analyzer on it. Surprisingly it dipped at 25.88 MHz. This is without any tuning of the cap or any cleaning, etc. So, it's probably for mobile CB direction finding and with a little cleaning and peaking.

73,
Dave K8TRF

_____

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Marty
Sent: Wednesday, September 15, 2010 6:41 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Loop Antenna Identification

Hello. I bought this little beauty at a garage sale awhile back with the hopes of improving my MW reception. It didn't work. Performance took a dive. This being the case, I need to dispose of the loop appropriately, but I need to know what it is. Please advise. Thanks in advance.

http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02721.jpg

http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02722.jpg

http://i760.photobucket.com/albums/xx249/immgunn/single%20tank%20tw/Antenna/dsc02723.jpg

[Non-text portions of this message have been removed]

7869. ALA-1530 preamp

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-23 03:54:41 UTC
From: w9ran
Topic: 7869 Message: 7869

Hi Andy,

I appreciate your response to my query on the Loopantennas group. After the preamp failed I did remove it, and was planning to build a homebrew preamp and re-use the metal loop. But I'd appreciate your suggestion(s) as well.

73, Bob W9RAN

7870. Polyvaricons !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-27 16:12:01 UTC
From: brian nsl
Topic: 7870 Message: 7870

Hi,
Looking at pictures of various commercial MW loop antennas judging by the size
of the built in tuning capacitor I get the impression that they possibly use the
polyvaricon types.
Can anyone comment on this or suitability of these minature capacitors for loop tuning ????
Regards,
72, Brian.

[Non-text portions of this message have been removed]

7871. Amazing !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-27 16:27:00 UTC
From: brian nsl
Topic: 7871 Message: 7871

Hi All,
Always interested in loop antenna construction ideas I was wandering the Internet and came upon this website, truly amazing the company was founded with loops in mind hi! I wish we had a source like this in the UK.

Buy flexible pvc pipe at FlexPVC.com PVC pipe, hose, & pvc ...
Wholesale Discounted Flexible PVC pipe, shipped from 6 warehouses, delivery usually in 2-3 days. Flexable PVC, PVC pipe, PVC hose, spaflex, pvc fittings, ...
www.flexpvc.com/ - Cached - Similar

72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

7872. Re: [loopantennas] Amazing !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-27 22:38:59 UTC
From: Garey Wittich
Topic: 7871 Message: 7872

Ref - PVC Pipe:

The WHITE PVC pipe is used for plumbing and is NOT UV protected = with time it will crack due to the sun's UV rays. The GREY PVC pipe (used for electrical conduit) has UV protection and can thus be exposed to the sun. Printed on it's side it says, "for Indoor and Outdoor use, Sunlight Resistant" I just bought some 3/4" diameter, GREY conduit to make an Alford Loop Antenna (I believe it is also known as Cross Parallel Loops). Plan to use 3/8" "soft" aluminum tubing for the loop and the grey PVC pipe as the support structure. Prefer Copper Tubing, but it is expensive and heavy.

Garey Wittich Santa Monica, CA

From: brian nsl <brian.nsl@...>
To: loopantennas@yahoogroups.com
Sent: Mon, September 27, 2010 9:27:00 AM
Subject: [loopantennas] Amazing !!!!!

Hi All,
Always interested in loop antenna construction ideas I was wandering the Internet
and came upon this website, truly amazing the company was founded with loops in mind hi!
I wish we had a source like this in the UK.

Buy flexible pvc pipe at FlexPVC.com PVC pipe, hose, & pvc ...
Wholesale Discounted Flexible PVC pipe, shipped from 6 warehouses, delivery usually

in 2-3 days. Flexable PVC, PVC pipe, PVC hose, spaflex, pvc fittings, ...
www.flexpvc.com/ - Cached - Similar

72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7873. Re: [loopantennas] Amazing !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-28 15:21:56 UTC
From: Andy
Topic: 7871 Message: 7873

> ... The GREY PVC pipe (used for electrical
> conduit) has UV protection and can thus be exposed to the sun. ...

I'm told that the same characteristic that gives it its UV protection, also adds a small loss factor to the conduit, making it absorb and dissipate some of your RF signal. I think it is supposed to contain carbon.

I want to believe that the effect is (hopefully / usually) marginal and something we don't need to think about.

On the other hand, I have read an account from someone who used PVC to make their antennas, where suddenly the antennas stopped working right. It was eventually traced to a vendor change in the supply of PVC from the hardware store. So it can happen.

The test of putting a piece in a microwave oven to see if it gets warm, is great if you are making 2+ GHz antennas, but I doubt it has much relevance on LF/MF/HF.

Andy

7874. Terminating Resistor Assy - sources / designs ???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-28 13:51:26 UTC
From: Kuby
Topic: 7874 Message: 7874

Looking for "economical" sources/leads to buy non-inductive 2-10W terminating resistors for T2FD/Rhombic type antennas.

Any designs on making a loop "terminating resistor assembly" to accommodate 125W HF input?

7875. Re: [loopantennas] Amazing !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-28 17:07:39 UTC
From: Richard (Rick) Karlquist
Topic: 7871 Message: 7875

I have some white PVC that has been out in the sun for
years and is doing fine. OTOH, I have some gray PVC
that turned brown on the surfaces exposed to the sun
after only 1 year.

The microwave oven test at 2 GHz may seem irrelevant
to low frequencies, however, it turns out that the
loss tangent of all plastics I have ever looked at
is fairly constant with frequency. Basically, only
polyethylene, polystyrene, and teflon have low loss
(at all frequencies). Other plastics are like PVC.
PVC is a lossy dielectric at all frequencies, no
matter who makes it.. I suppose it could get even
lossier if it was loaded up with carbon or lead, etc.

Rick N6RK

On 9/28/2010 8:21 AM, Andy wrote:
>
>
> > ... The GREY PVC pipe (used for electrical
> > conduit) has UV protection and can thus be exposed to the sun. ...
>
> I'm told that the same characteristic that gives it its UV protection,
> also adds a small loss factor to the conduit, making it absorb and
> dissipate some of your RF signal. I think it is supposed to contain
> carbon.
>
> I want to believe that the effect is (hopefully / usually) marginal
> and something we don't need to think about.
>
> On the other hand, I have read an account from someone who used PVC to
> make their antennas, where suddenly the antennas stopped working
> right. It was eventually traced to a vendor change in the supply of
> PVC from the hardware store. So it can happen.
>
> The test of putting a piece in a microwave oven to see if it gets
> warm, is great if you are making 2+ GHz antennas, but I doubt it has
> much relevance on LF/MF/HF.
>
> Andy

7876. Terminating Resistor Assy - sources / designs ???

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-29 06:45:13 UTC
From: Michael Buckley
Topic: 7874 Message: 7876

Hi ALl,

I have a complete RACAL kit which I could be pursuaded to part with

This has terminal resistors that nicely fit onto the stakes that are
used to tie down the two sloping wires (Kevlar)

Need 12m mast as its centre and the handbook says it is best for freq
up to 30 from about 8 MHz

Mike B

m1ccf

On 28/09/2010 14:51, Kuby wrote:
>
> Looking for "economical" sources/leads to buy non-inductive 2-10W
> terminating resistors for T2FD/Rhombic type antennas.
>
> Any designs on making a loop "terminating resistor assembly" to
> accommodate 125W HF input?
>
>

[Non-text portions of this message have been removed]

7877. Re: Amazing !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-29 13:26:39 UTC
From: alienrelics
Topic: 7871 Message: 7877

I recall many years ago in QST someone had the traps on their antenna develop carbon tracks from arcing. He knew something was wrong when the SWR suddenly went up.

I suspect if he'd wound them longer, they might have withstood more power.

However, he didn't report problems before the arcing occurred. And that was with a parallel tuned circuit (ie, high voltages) wound directly on a piece of PVC. For a transmitting loop, the high voltages will be present at the ends of the loop and so the capacitor is the limiting factor.

As to sun protection, there is always paint.

White PVC doesn't show sun damage because it remains white but becomes brittle. Grey PVC seems to show it by shifting color. However, I think the color tends to block UV from penetrating more deeply.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@...> wrote:
>
> I have some white PVC that has been out in the sun for
> years and is doing fine. OTOH, I have some gray PVC
> that turned brown on the surfaces exposed to the sun
> after only 1 year.
>
> The microwave oven test at 2 GHz may seem irrelevant
> to low frequencies, however, it turns out that the
> loss tangent of all plastics I have ever looked at
> is fairly constant with frequency. Basically, only
> polyethylene, polystyrene, and teflon have low loss
> (at all frequencies). Other plastics are like PVC.
> PVC is a lossy dielectric at all frequencies, no
> matter who makes it.. I suppose it could get even
> lossier if it was loaded up with carbon or lead, etc.
>
> Rick N6RK
>
> On 9/28/2010 8:21 AM, Andy wrote:
> >
> >
> > > ... The GREY PVC pipe (used for electrical
> > > conduit) has UV protection and can thus be exposed to the sun. ...
> >
> > I'm told that the same characteristic that gives it its UV protection,
> > also adds a small loss factor to the conduit, making it absorb and
> > dissipate some of your RF signal. I think it is supposed to contain

> > carbon.
> >
> > I want to believe that the effect is (hopefully / usually) marginal
> > and something we don't need to think about.
> >
> > On the other hand, I have read an account from someone who used PVC to
> > make their antennas, where suddenly the antennas stopped working
> > right. It was eventually traced to a vendor change in the supply of
> > PVC from the hardware store. So it can happen.
> >
> > The test of putting a piece in a microwave oven to see if it gets
> > warm, is great if you are making 2+ GHz antennas, but I doubt it has
> > much relevance on LF/MF/HF.
> >
> > Andy
>

7878. Loop history !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-29 16:14:31 UTC
From: brian nsl
Topic: 7878 Message: 7878

Hi,
Found a nice website with lots of information on loop
antennas including their history.

What is loop Antenna - Electronics Schematics Components Symbols
What is loop Antenna - Loop antenna consisting of a conducting coil of any convenient ...
Radio West(1979-1985) 23" ferrite rod assembly using Sanserino ...
www.hobbyprojects.com/.../what_is_loop_antenna.html - Cached - Similar

Worth a look.
72, Brian.

[Non-text portions of this message have been removed]

7879. Re: [loopantennas] Paint for UV Protection

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-29 18:15:48 UTC
From: Garey Wittich
Topic: 7871 Message: 7879

Not ALL paint is equal for UV protection on PVC pipe. I can tell you in the fabric covering of airplane surfaces (ailerons, elevators, etc.) to protect them from the suns UV rays a "special" primer and paint are used to make the fabric last long - not just any paint. Sorry to complicate things, but this might be helpful info. A company that sells paint for this purpose is Poly Fiber in Riverside, CA. There telephone number is - (800) 362-3490 [NO I do not get a commission.]

There might be a wrapping tape that does the same thing.

Garey Wittich Santa Monica, CA

_____
From: alienrelics <alienrelics@...>
To: loopantennas@yahoogroups.com
Sent: Wed, September 29, 2010 6:26:39 AM
Subject: [loopantennas] Re: Amazing !!!!!

I recall many years ago in QST someone had the traps on their antenna develop carbon tracks from arcing. He knew something was wrong when the SWR suddenly went up.

I suspect if he'd wound them longer, they might have withstood more power.

However, he didn't report problems before the arcing occurred. And that was with a parallel tuned circuit (ie, high voltages) wound directly on a piece of PVC. For a transmitting loop, the high voltages will be present at the ends of the loop and so the capacitor is the limiting factor.

As to sun protection, there is always paint.

White PVC doesn't show sun damage because it remains white but becomes brittle. Grey PVC seems to show it by shifting color. However, I think the color tends to block UV from penetrating more deeply.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@...> wrote:
>
> I have some white PVC that has been out in the sun for
> years and is doing fine. OTOH, I have some gray PVC
> that turned brown on the surfaces exposed to the sun
> after only 1 year.
>
> The microwave oven test at 2 GHz may seem irrelevant
> to low frequencies, however, it turns out that the

> loss tangent of all plastics I have ever looked at
> is fairly constant with frequency. Basically, only
> polyethylene, polystyrene, and teflon have low loss
> (at all frequencies). Other plastics are like PVC.
> PVC is a lossy dielectric at all frequencies, no
> matter who makes it.. I suppose it could get even
> lossier if it was loaded up with carbon or lead, etc.
>
> Rick N6RK
>
> On 9/28/2010 8:21 AM, Andy wrote:
> >
> >
> > > ... The GREY PVC pipe (used for electrical
> > > conduit) has UV protection and can thus be exposed to the sun. ...
> >
> > I'm told that the same characteristic that gives it its UV protection,
> > also adds a small loss factor to the conduit, making it absorb and
> > dissipate some of your RF signal. I think it is supposed to contain
> > carbon.
> >
> > I want to believe that the effect is (hopefully / usually) marginal
> > and something we don't need to think about.
> >
> > On the other hand, I have read an account from someone who used PVC to
> > make their antennas, where suddenly the antennas stopped working
> > right. It was eventually traced to a vendor change in the supply of
> > PVC from the hardware store. So it can happen.
> >
> > The test of putting a piece in a microwave oven to see if it gets
> > warm, is great if you are making 2+ GHz antennas, but I doubt it has
> > much relevance on LF/MF/HF.
> >
> > Andy
>

[Non-text portions of this message have been removed]

7880. Re: [loopantennas] Polyvaricons !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-29 19:45:32 UTC
From: Andy
Topic: 7870 Message: 7880

> Can anyone comment on this or suitability of these minature capacitors for loop tuning ????

I would guess they are acceptable for receiving loop antennas, but you wouldn't want to use them in a transmitting antenna where the circulating RF currents get pretty big!

But that's only a guess.

Andy

7881. Re: [loopantennas] Amazing !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-29 19:55:46 UTC
From: Andy
Topic: 7871 Message: 7881

> The microwave oven test at 2 GHz may seem irrelevant
> to low frequencies, however, it turns out that the
> loss tangent of all plastics I have ever looked at
> is fairly constant with frequency.
...
> I suppose it could get even
> lossier if it was loaded up with carbon or lead, etc.

Bingo!

Adding carbon makes it much more lossy. Carbon is a conductor. Not a
very good one, too.

It might also change its loss vs. frequency characteristics.

I'm not saying it makes enough of a change so that the microwave test
is irrelevant, but it might.

Andy

7882. Re: [loopantennas] Amazing !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-29 20:01:01 UTC
From: Andy
Topic: 7871 Message: 7882

Of course if you're using the PVC only as a support structure, then it hardly matters, and I'd go for UV resistance even if it is RF-lossy.

But for trap coils, or an antenna enclosure on 146 or 440, I'd be "more" concerned. Not enough to reject it outright, but enough to want to investigate.

Andy

7883. Re: [loopantennas] Loop history !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-29 20:05:32 UTC
From: Andy
Topic: 7878 Message: 7883

The URL got truncated. Here it is:

http://www.hobbyprojects.com/electronics_component_symbols/what_is_loop_antenna.html

7884. Re: [loopantennas] Polyvaricons !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-30 06:24:40 UTC
From: brian nsl
Topic: 7870 Message: 7884

Andy,
I quite agree, a puff of RF would no doubt destroy a polyvaricon hi!
Many of the commercial designs with tuning facility just don't seem to have the space for more than a variable capacitor of this type.
72, Brian.
----- Original Message -----
From: Andy
To: loopantennas@yahoogroups.com
Sent: Wednesday, September 29, 2010 8:45 PM
Subject: Re: [loopantennas] Polyvaricons !!!!

[Non-text portions of this message have been removed]

7885. RE: [loopantennas] Polyvaricons !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-30 11:02:42 UTC
From: Collins, Graham
Topic: 7870 Message: 7885

Depends on what you mean by transmitting. There are a number of popular QRP (low power, 5 watts or so) antenna tuner designs which use these polyvaricon variable capacitors.

Cheers, Graham ve3gtc

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of Andy
Sent: September 29, 2010 15:46
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Polyvaricons !!!!

> Can anyone comment on this or suitability of these minature capacitors for loop tuning ????

I would guess they are acceptable for receiving loop antennas, but you wouldn't want to use them in a transmitting antenna where the circulating RF currents get pretty big!

But that's only a guess.

Andy

7886. Re: [loopantennas] Polyvaricons !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-30 14:28:35 UTC
From: brian nsl
Topic: 7870 Message: 7886

Graham,
Since I only run 5 watts ssb from my TS-130V, that's my ' puff ' of RF hi!
But the polyvaricons are for a MW loop receiving antenna indoors.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Collins, Graham
To: loopantennas@yahoogroups.com
Sent: Thursday, September 30, 2010 12:02 PM
Subject: RE: [loopantennas] Polyvaricons !!!!

[Non-text portions of this message have been removed]

7887. DF loop to locate local 20m broadband interference

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-09-30 22:26:47 UTC
From: Eamon Egan
Topic: 7887 Message: 7887

I often experience pretty bad local broadband interference on the 20m band and I want to be able to track down the source. It seems powerline related as it sounds like it's modulated at 60 or 120Hz. It may be on other bands as well, but I am mostly active on 20m at this point. When it happens, it is often reaches up to between S5 and S7 or sometimes S9 on my 20m dipole.

It could conceivably be from somewhere inside my house but I am pretty sure it is from somewhere nearby outside. I plan to move up and down the street with my transceiver on battery power and connected to a loop antenna, to see if I can null out the interference source and thereby locate it. Before I move around on battery power, I will be 100% sure it isn't in my house by momentarily cutting off the AC.

I would like to have some ideas or advice on what sort of loop antenna would be best for this purpose. I already built a pretty crude square shaped loop on two wooden crosspieces, roughly 4 feet across. I was not overly impressed by its directionality, but then again, I did not play with it very long. I only tried rotating it inside my house near where the transceiver is set up. Maybe this will be fine for my purposes.

I don' t need a super sharp null, but I do need to be able to see it well enough to walk in the right direction and stop in front of the right neighbor's house or utility pole :) I know that a simple loop will give two nulls at 180 degrees from each other, and I can deal with this ambiguity.

So here are a few more specific questions:

* How many turns, at what diameter, would be best? Is one turn better or worse than several? Are there any relevant design formulas that yield this kind of guidance?
* What construction details or tolerances are most critical, for the loop to display a useful null for this type of direction finding?
* Do you think I should bother trying to make it shielded (i.e. use coax cable for electrostatic shielding)?
* Should I tune the loop with a variable capacitor? Will this help me in what I am trying to accomplish?
* How important is balance in achieving a useful null? Should I connect the loop to my transceiver with (unbalanced) coax, or use the 300 ohm balanced line terminal on my tuner? Or should I make a separate balun using a ferrite toroid?

Any ideas or advice would be appreciated. I mostly want to know whether I should just start with something very simple like what I've already built, or whether I need to put something fancier together for this application.

Eamon Egan, VE2EGN

[Non-text portions of this message have been removed]

7888. Re: [loopantennas] DF loop to locate local 20m broadband interference

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-01 15:15:52 UTC
From: Andy
Topic: 7887 Message: 7888

I am certainly no expert, but I'll throw in my beliefs and opinions.

With loops, there are small loops (much less than a wavelength), and large loops (similar to a wavelength). The two behave totally differently. The small loop has nulls perpendicular to the loop, whereas a full wavelength loop's null is exactly the opposite. Between the two, you probably get a mishmash of both patterns, with no good null. So keep the dimensions small.

I *think* the dimension in question is the total wire in the loop, so it would seem that a single turn loop might have better nulls than a multi turn loop with the same outer dimensions. For a loop to be considered small, the current in the wire should be everywhere the same. Once the wire length starts to approach a quarter wavelength, that no longer holds true.

Bigger size means more signal gathering capability (more gain). If you get enough signal with a smaller loop, there may be no reason to make it bigger.

Electrical balance is supposed to be an important characteristic for having good nulls. If you unbalance the loop it might screw up the pattern.

So-called "shielded" loops supposedly help maintain that balance.

Tuning the loop with a capacitor increases the amount of signal it receives (its gain), but I think wouldn't affect its pattern. If you get enough signal without tuning it, maybe it's good enough.

Regards,
Andy

7889. Re: DF loop to locate local 20m broadband interference

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-01 17:05:21 UTC
From: tenorman1952
Topic: 7887 Message: 7889

> I would like to have some ideas or advice on what sort of loop antenna would
> be best for this purpose. I already built a pretty crude square shaped loop
> on two wooden crosspieces, roughly 4 feet across. I was not overly impressed
> by its directionality, but then again, I did not play with it very long. I
> only tried rotating it inside my house near where the transceiver is set up.
> Maybe this will be fine for my purposes.
>
>

Build a loop like this:

http://www.mtmscientific.com/swloop.html

using a 365 pf tuning cap and some wire (I used insulated stranded 12 ga hookup wire).

Use Bruce Carter's Calculator:

http://www.angelfire.com/mb/amandx/loop.html

1 turn of wire on a 44" x 44" frame, and 365 pf tuning capacitor should do well.

74
Paul - AE5JU

7890. Re: DF loop to locate local 20m broadband interference

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-01 17:09:23 UTC
From: vbifyz
Topic: 7887 Message: 7890

I tried this at my QTH (typical suburban subdivision) with both tuned and untuned loops. At 14MHz, a 1m diameter loop is already quite big and the null is not deep at all, but it is still there. Tuned loop gives a better null. I used 10-360pF air variable capacitor for tuning and a 15cm diameter coupling loop. The untuned loop was a 1.5m piece of wire connected to the 50 Ohm input and the ground lug of my FT-817.

In my case, I wasn't able to isolate the source. The QRM is radiated from all wiring everywhere in the neighborhood. The only way to reduce it is go at least 50m from all houses. When you move around the powerlines, the direction changes randomly, there is no "point source". It also changes with frequency, i.e. the 14MHz null and 7MHz null may be 90 degrees apart.

I may have found a maximum around 3 or 4 particular houses, but that was the extent of my "direction finding".

Good luck, 73
Mike

7891. Re: DF loop to locate local 20m broadband interference

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-02 12:53:50 UTC
From: legonedijk
Topic: 7887 Message: 7891

--- In loopantennas@yahoogroups.com, Eamon Egan <eamon.egan@...> wrote:
>
> I often experience pretty bad local broadband interference on the 20m band
> and I want to be able to track down the source. It seems powerline related
> as it sounds like it's modulated at 60 or 120Hz. It may be on other bands
> as well, but I am mostly active on 20m at this point. When it happens, it is
> often reaches up to between S5 and S7 or sometimes S9 on my 20m dipole.
>
>
>
> It could conceivably be from somewhere inside my house but I am pretty sure
> it is from somewhere nearby outside. I plan to move up and down the street
> with my transceiver on battery power and connected to a loop antenna, to see
> if I can null out the interference source and thereby locate it. Before I
> move around on battery power, I will be 100% sure it isn't in my house by
> momentarily cutting off the AC.
>
>
>
> I would like to have some ideas or advice on what sort of loop antenna would
> be best for this purpose. I already built a pretty crude square shaped loop
> on two wooden crosspieces, roughly 4 feet across. I was not overly impressed
> by its directionality, but then again, I did not play with it very long. I
> only tried rotating it inside my house near where the transceiver is set up.
> Maybe this will be fine for my purposes.
>
>
>
> I don' t need a super sharp null, but I do need to be able to see it well
> enough to walk in the right direction and stop in front of the right
> neighbor's house or utility pole :) I know that a simple loop will give two
> nulls at 180 degrees from each other, and I can deal with this ambiguity.
>
>
>
> So here are a few more specific questions:
>
> * How many turns, at what diameter, would be best? Is one turn better
> or worse than several? Are there any relevant design formulas that yield
> this kind of guidance?
> * What construction details or tolerances are most critical, for the
> loop to display a useful null for this type of direction finding?
> * Do you think I should bother trying to make it shielded (i.e. use
> coax cable for electrostatic shielding)?
> * Should I tune the loop with a variable capacitor? Will this help me

> in what I am trying to accomplish?
> * How important is balance in achieving a useful null? Should I
> connect the loop to my transceiver with (unbalanced) coax, or use the 300
> ohm balanced line terminal on my tuner? Or should I make a separate balun
> using a ferrite toroid?
>
>
>
> Any ideas or advice would be appreciated. I mostly want to know whether I
> should just start with something very simple like what I've already built,
> or whether I need to put something fancier together for this application.
>
>
>
> Eamon Egan, VE2EGN
>
>
>
> [Non-text portions of this message have been removed]
>

7892. Re:DF loop to locate local 20m broadband interference

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-03 01:30:08 UTC
From: Eamon Egan
Topic: 7887 Message: 7892

Thanks to all who replied so far.

Andy: I was aware of the distinction between "large" and "small" but thanks for mentioning that it is the total length. that seems to make sense. I will keep the diameter small enough, stick with a single turn, and possibly simulate the antenna to see at what size the pattern starts getting complicated.

Paul: thanks for the recommendation on the site for the kit, and the calculator. These look helpful.

Mike: thanks for mentioning how difficult it can be to pinpoint. I will not place my expectations too high. And of course even if I do think I know where it's coming from, knocking on the front door and explaining that they need to stop interfering will not necessarily be easy. You seem to be saying that your untuned loop connected to your receiver (1.5m) was longer than your tuned loop (you call it a 15cm diameter coupling loop). Isn't the loop connected to the radio usually called the coupling loop, and isn't it usually smaller than the tuned loop?

I have two different opinions on whether the tuning capacitor affects the pattern or just the signal strength. I may simulate this to form my own opinion, or since I have a serviceable tuning capacitor I may just have a go at tuning the loop anyway, just to see how it goes.

One more thing I'd like to ask for comments on: does anyone know why it is better to use a separate coupling loop, as opposed to connecting the tuned loop directly to the radio? I know coupling loops are used in transmitting loops also, but I am not sure I understand why. What would happen if you tried to connect the tuned loop directly to the radio?

Eamon VE2EGN

[Non-text portions of this message have been removed]

7893. Re: DF loop to locate local 20m broadband interference

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-03 03:54:21 UTC
From: Eamon Egan
Topic: 7887 Message: 7893

I have found an answer to my own question about coupling loops, at
http://www.radiobanter.com/showthread.php?t=74935

Apparently the impedance ratio equals the square of the diameter ratio. So
it is a matter of impedance matching.

- Eamon

[Non-text portions of this message have been removed]

7894. A O R LA-390 Loop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-03 08:21:36 UTC
From: brian nsl
Topic: 7894 Message: 7894

Hi,
I have been reading various reports etc on the AOR LA-390 loop antenna
and in each case it says the loop is 300mm dia x 60mm dia.
From the photographs it certainly does not look like a 60mm dia tubing element ????
Can anyone using one or having seen one pass comment please ?????
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

7895. RE: [loopantennas] A O R LA-390 Loop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-03 09:37:48 UTC
From: dx11
Topic: 7894 Message: 7895

>>>Hi,
I have been reading various reports etc on the AOR LA-390 loop antenna
and in each case it says the loop is 300mm dia x 60mm dia.
From the photographs it certainly does not look like a 60mm dia tubing
element ????<<<

The 60 mm. size refers to the thickness of the loop, it is determined by the
dimension of the band switch box at the bottom of the loop.

Cor Beijersbergen

7896. Re: DF loop to locate local 20m broadband interference

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-03 16:19:31 UTC
From: dldorrance
Topic: 7887 Message: 7896

Easiest way to track down RFI is to walk your neighborhood with a battery operated portable broadcast band AM radio. It has a ferrite loop built into it.

Dave WA6YSO

--- In loopantennas@yahoogroups.com, Eamon Egan <eamon.egan@...> wrote:
>
> I often experience pretty bad local broadband interference on the 20m band
> and I want to be able to track down the source. It seems powerline related
> as it sounds like it's modulated at 60 or 120Hz. It may be on other bands
> as well, but I am mostly active on 20m at this point. When it happens, it is
> often reaches up to between S5 and S7 or sometimes S9 on my 20m dipole.
>
>
>
> It could conceivably be from somewhere inside my house but I am pretty sure
> it is from somewhere nearby outside. I plan to move up and down the street
> with my transceiver on battery power and connected to a loop antenna, to see
> if I can null out the interference source and thereby locate it. Before I
> move around on battery power, I will be 100% sure it isn't in my house by
> momentarily cutting off the AC.
>
>
>
> I would like to have some ideas or advice on what sort of loop antenna would
> be best for this purpose. I already built a pretty crude square shaped loop
> on two wooden crosspieces, roughly 4 feet across. I was not overly impressed
> by its directionality, but then again, I did not play with it very long. I
> only tried rotating it inside my house near where the transceiver is set up.
> Maybe this will be fine for my purposes.
>
>
>
> I don' t need a super sharp null, but I do need to be able to see it well
> enough to walk in the right direction and stop in front of the right
> neighbor's house or utility pole :) I know that a simple loop will give two
> nulls at 180 degrees from each other, and I can deal with this ambiguity.
>
>
>
> So here are a few more specific questions:
>
> * How many turns, at what diameter, would be best? Is one turn better
> or worse than several? Are there any relevant design formulas that yield
> this kind of guidance?

> * What construction details or tolerances are most critical, for the
> loop to display a useful null for this type of direction finding?
> * Do you think I should bother trying to make it shielded (i.e. use
> coax cable for electrostatic shielding)?
> * Should I tune the loop with a variable capacitor? Will this help me
> in what I am trying to accomplish?
> * How important is balance in achieving a useful null? Should I
> connect the loop to my transceiver with (unbalanced) coax, or use the 300
> ohm balanced line terminal on my tuner? Or should I make a separate balun
> using a ferrite toroid?
>
>
>
> Any ideas or advice would be appreciated. I mostly want to know whether I
> should just start with something very simple like what I've already built,
> or whether I need to put something fancier together for this application.
>
>
>
> Eamon Egan, VE2EGN
>
>
>
> [Non-text portions of this message have been removed]
>

7897. Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-04 22:45:23 UTC
From: klelfmm
Topic: 7897 Message: 7897

I'm looking to add a loop antenna to my radio set up. I live in a large city in Southern California and at certain times of the evening my radios seem to be plagued with noise, even outside. Right now I have been using a "trap" wire antenna which works well but the noise can be unbearable at times. AM can be so noisy that I can only receive a few stations and this shows up in some of the shortwave frequencies as well. I've walked around the neighborhood and it seems to be a large scale noise problem. All wires are underground so I don't really know what is causing it. At 4-5 AM (sometimes much earlier) everything is perfectly quiet and the stations I can hear are incredible. Daytime is pretty good too.
I like the idea of using a loop with a rotator to null out some of the noise.I've looked at the nice Wellbrook antennas. I'd really like to build one if possible and was wondering if there are any home built loop antennas that can compete with a Wellbrook? Any that are not too complex to fabricate? Any help would be greatly appreciated!

7898. Re: [loopantennas] Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-04 23:23:29 UTC
From: wharpt@aol.com
Topic: 7897 Message: 7898

It sounds like you have a noisy RF emitter somewhere near your neighborhood.Try a walk around your neighborhood with a portable SW radio if possible and see if you can localize it. The higher in frequency you can hear it, the closer it is. What businesses nearby are closed during the 'quiet time'?

Wharpt

In a message dated 10/4/2010 6:11:10 P.M. Central Daylight Time, kejoschubert1@... writes:

I'm looking to add a loop antenna to my radio set up. I live in a large city in Southern California and at certain times of the evening my radios seem to be plagued with noise, even outside. Right now I have been using a "trap" wire antenna which works well but the noise can be unbearable at times. AM can be so noisy that I can only receive a few stations and this shows up in some of the shortwave frequencies as well. I've walked around the neighborhood and it seems to be a large scale noise problem. All wires are underground so I don't really know what is causing it. At 4-5 AM (sometimes much earlier) everything is perfectly quiet and the stations I can hear are incredible. Daytime is pretty good too.
I like the idea of using a loop with a rotator to null out some of the noise.I've looked at the nice Wellbrook antennas. I'd really like to build one if possible and was wondering if there are any home built loop antennas that can compete with a Wellbrook? Any that are not too complex to fabricate? Any help would be greatly appreciated!

[Non-text portions of this message have been removed]

7899. Re: [loopantennas] Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-04 23:50:36 UTC
From: Rick Karlquist
Topic: 7897 Message: 7899

klelfmm wrote:
> one if possible and was wondering if there are any home built loop
> antennas that can compete with a Wellbrook? Any that are not too complex
> to fabricate? Any help would be greatly appreciated!

See:

http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf

Rick N6RK

7900. Re: [loopantennas] Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-05 01:01:55 UTC
From: Chris Trask
Topic: 7897 Message: 7900

>
> I like the idea of using a loop with a rotator to null out some of the
noise.
> I've looked at the nice Wellbrook antennas. I'd really like to build one
if
> possible and was wondering if there are any home built loop antennas that
can
> compete with a Wellbrook? Any that are not too complex to fabricate? Any
help
> would be greatly appreciated!
>

There's plenty of information available that will help you make a loop antenna that will work every bit as good as the Wellbrook and cost far less. The details for the loop proper can be found in the "Shielded Loop Aerials Rev 0.pdf" file in the group files section, and the amplifier can be found in the "Wideband Loop Antenna Amplifier RevA.pdf" file that is also in the group files section. Simply ignore the remote tuning portion of the first paper and replace it with the amplifier of the second paper.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

7901. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-05 04:20:07 UTC
From: klelfmm
Topic: 7897 Message: 7901

There is a shopping center that is fairly close by. There is one or two houses were the sound seems to really peak at. When I walk at night with my portable with headphones the strong local Los Angeles station on 640 AM completely dissapears and there is no reception of anything on the AM band. I'll take my portable SW out and give it a try on higher frequencies. Thank you!

--- In loopantennas@yahoogroups.com, wharpt@... wrote:
>
> It sounds like you have a noisy RF emitter somewhere near your
> neighborhood.Try a walk around your neighborhood with a portable SW radio if possible
> and see if you can localize it. The higher in frequency you can hear it,
> the closer it is. What businesses nearby are closed during the 'quiet time'?
>
> Wharpt
>
>
> In a message dated 10/4/2010 6:11:10 P.M. Central Daylight Time,
> kejoschubert1@... writes:
>
>
>
>
> I'm looking to add a loop antenna to my radio set up. I live in a large
> city in Southern California and at certain times of the evening my radios seem
> to be plagued with noise, even outside. Right now I have been using a
> "trap" wire antenna which works well but the noise can be unbearable at times.
> AM can be so noisy that I can only receive a few stations and this shows up
> in some of the shortwave frequencies as well. I've walked around the
> neighborhood and it seems to be a large scale noise problem. All wires are
> underground so I don't really know what is causing it. At 4-5 AM (sometimes much
> earlier) everything is perfectly quiet and the stations I can hear are
> incredible. Daytime is pretty good too.
> I like the idea of using a loop with a rotator to null out some of the
> noise.I've looked at the nice Wellbrook antennas. I'd really like to build one
> if possible and was wondering if there are any home built loop antennas
> that can compete with a Wellbrook? Any that are not too complex to fabricate?
> Any help would be greatly appreciated!
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

7902. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-05 04:43:02 UTC
From: klelfmm
Topic: 7897 Message: 7902

Thank you very much!

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > I like the idea of using a loop with a rotator to null out some of the
> noise.
> > I've looked at the nice Wellbrook antennas. I'd really like to build one
> if
> > possible and was wondering if there are any home built loop antennas that
> can
> > compete with a Wellbrook? Any that are not too complex to fabricate? Any
> help
> > would be greatly appreciated!
> >
>
> There's plenty of information available that will help you make a loop
> antenna that will work every bit as good as the Wellbrook and cost far less.
> The details for the loop proper can be found in the "Shielded Loop Aerials
> Rev 0.pdf" file in the group files section, and the amplifier can be found
> in the "Wideband Loop Antenna Amplifier RevA.pdf" file that is also in the
> group files section. Simply ignore the remote tuning portion of the first
> paper and replace it with the amplifier of the second paper.
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

7903. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-05 04:43:42 UTC
From: klelfmm
Topic: 7897 Message: 7903

Thank you Rick!
--- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>
> klelfmm wrote:
> > one if possible and was wondering if there are any home built loop
> > antennas that can compete with a Wellbrook? Any that are not too complex
> > to fabricate? Any help would be greatly appreciated!
>
> See:
>
> http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf
>
> Rick N6RK
>

7904. RE: [loopantennas] Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-05 13:49:56 UTC
From: dx11
Topic: 7897 Message: 7904

>>I like the idea of using a loop with a rotator to null out some of the noise.I've looked at the nice Wellbrook antennas. I'd really like to build one if possible and was wondering if there are any home built loop antennas that can compete with a Wellbrook? Any that are not too complex to fabricate? Any help would be greatly appreciated!<<<

At the following sites you will find a number of active untuned small magnetic loop designs. They have been subject of dicussion of this Group recently, so when you go back in the archive you may find a number of remarks on them.
Chris Trask already pointed you to his designs in the groups file area

http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm

http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.htm
l

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

http://wl1030.com/content/

In your circumstances a passive tuned or untuned loop may be a good start of experimentation when you can't get rid of the RF interference. Certainly a shielded coax loop is very easy to build and could give you quite an improvement.

Regards,

Cor Beijersbergen

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7905. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-05 14:46:12 UTC
From: Alex P
Topic: 7897 Message: 7905

All,
I was wondering if anyone has made any numeric measurements comparing a shielded loop in comparison to an unshielded loop.

Alex

--- In loopantennas@yahoogroups.com, "dx11" <dx11@...> wrote:
>
> >>I like the idea of using a loop with a rotator to null out some of the
> noise.I've looked at the nice Wellbrook antennas. I'd really like to build
> one if possible and was wondering if there are any home built loop antennas
> that can compete with a Wellbrook? Any that are not too complex to
> fabricate? Any help would be greatly appreciated!<<<
>
>
> At the following sites you will find a number of active untuned small
> magnetic loop designs. They have been subject of dicussion of this Group
> recently, so when you go back in the archive you may find a number of
> remarks on them.
> Chris Trask already pointed you to his designs in the groups file area
>
> http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
>
> http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.htm
> l
>
> http://www.qrss.thersgb.net/active-loop-receiving-antenna.html
>
> http://wl1030.com/content/
>
>
> In your circumstances a passive tuned or untuned loop may be a good start of
> experimentation when you can't get rid of the RF interference. Certainly a
> shielded coax loop is very easy to build and could give you quite an
> improvement.
>
> Regards,
>
> Cor Beijersbergen
>
>
>
>
>
>

>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>

7906. Re: [loopantennas] Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-05 16:41:15 UTC
From: Andy Ikin
Topic: 7897 Message: 7906

Alex wrote on October 5.

"All,
I was wondering if anyone has made any numeric measurements comparing a shielded loop in comparison to an unshielded loop.

Alex"

Alex,

14 years ago I performed noise (E Field) imunity tests with two prototype Wellbrook ALA1530. One was screened and the other not. The tests were performed below about 4MHz. As far as I could determine there was no imunity improvement with the screened version verses the unscreened Balanced loop. The reason for not conducting the tests above 4MHz, was because at HF the near field (H) distance from the loop where the E field rejection is high, is too close to the antenna to make any meaningfull comparisions.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

7907. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-06 01:33:14 UTC
From: Alex P
Topic: 7897 Message: 7907

Andrew,

Thanks for responding with the results of your testing. I wanted to know if anyone had done these comparisons and your experience is similar to mine. A dozen years ago did this kind of test comparing various, unamplified, 'untuned', same dimension, coaxial type shielded loops using RG-58, RG-59, RG-6, RG-6Q, versus a variety of unshielded loops and found no significant difference in presumed local E-field transients and electrical 'noise' measurements. What I did find is a lowering of the natural resonance of the loop when shielded, and changes in the resonant 'Q'. After having spent a large amount of time looking at IEEE and IRE papers over the years, haven't found any comparison paper quantifying the differences, and/or immunities to local noise, if any. What I have found, is a lot of marketing claims, loads of opinions and impressions, many published in the amateur literature, but no hard comparative numeric data on the subject. Much of the data that was found did not address the resonant frequency shift and 'Q' differences which should have been compensated for in these articles.

Maybe someone else in our group can share their experiences on the subject. If anyone has some test data to share that would be great.

Best regards
Alex

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
> Alex wrote on October 5.
>
> "All,
> I was wondering if anyone has made any numeric measurements comparing a shielded loop in comparison to an unshielded loop.
>
> Alex"
>
>
> Alex,
>
> 14 years ago I performed noise (E Field) imunity tests with two prototype Wellbrook ALA1530. One was screened and the other not. The tests were performed below about 4MHz. As far as I could determine there was no imunity improvement with the screened version verses the unscreened Balanced loop. The reason for not conducting the tests above 4MHz, was because at HF the near field (H) distance from the loop where the E field rejection is high, is too close to the antenna to make any meaningfull comparisions.
>
> Kind regards
>
> Andrew Ikin
>

> [Non-text portions of this message have been removed]
>

7908. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-08 06:22:15 UTC
From: klelfmm
Topic: 7897 Message: 7908

Thanks to all of you for your help. There are some great designs out there. Looking foward to building and trying out a loop! This noise is driving me crazy.

--- In loopantennas@yahoogroups.com, "dx11" <dx11@...> wrote:
>
> >>I like the idea of using a loop with a rotator to null out some of the
> noise.I've looked at the nice Wellbrook antennas. I'd really like to build
> one if possible and was wondering if there are any home built loop antennas
> that can compete with a Wellbrook? Any that are not too complex to
> fabricate? Any help would be greatly appreciated!<<<
>
>
> At the following sites you will find a number of active untuned small
> magnetic loop designs. They have been subject of dicussion of this Group
> recently, so when you go back in the archive you may find a number of
> remarks on them.
> Chris Trask already pointed you to his designs in the groups file area
>
> http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
>
> http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.htm
> l
>
> http://www.qrss.thersgb.net/active-loop-receiving-antenna.html
>
> http://wl1030.com/content/
>
>
> In your circumstances a passive tuned or untuned loop may be a good start of
> experimentation when you can't get rid of the RF interference. Certainly a
> shielded coax loop is very easy to build and could give you quite an
> improvement.
>
> Regards,
>
> Cor Beijersbergen
>
>
>
>
>
>
>
>
> ------------------------------------
>

> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>

7909. Re: [loopantennas] Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-08 06:46:54 UTC
From: ve7sl@shaw.ca
Topic: 7897 Message: 7909

Are you able to null out the noise significantly with a portable AM radio and its built-in loopstick antenna? If not, the noise may be so strong that even a larger loop will not solve the problem...as well, if there is more than one noise source, the task will be even more difficult. The real problem is the noise and that is what should be tackled as a first line of defence...first try to gather as much data about the noise that you can collect...is it time dependent?...any particular direction from your home (here is where the portable radio comes in handy)....what are it's characteristics? Nowadays, most of this stuff is coming from switching power supplies which seem to be part of every modern day appliance. The switching pulses can radiate along the powerlines and even a source a block away can seem like it is coming from next door. Low voltage halogen lamps (like a string of pot lights) can create a terrible racket as can light dimmers and plasma TVs. Try and tackle the source first. Eliminating the source is the best solution.

Steve

WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

7910. Pixel Technologies RF PRO-1A Shielded Loop vs Wellbook ALA1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-09 16:31:10 UTC
From: lexluthor6969
Topic: 7910 Message: 7910

I have been using the new Pixel Technologies RF PRO-1A loop .

http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf
<http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf>

And also running side by side tests comparing it to the latest version
of the Wellbrook ALA1530

http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&\
path=20&product_id=34
<http://www.wellbrook.uk.com/antennashop/index.php?route=product/product\
&path=20&product_id=34>

Both antennas are somewhat similar in size and price.

- The Pixel antenna is made in the US, while the Wellbrook is made in
England.

- I believe both antennas have 30 db (approximately) low- noise preamps
that cover up to 30 MHz

- Both are broadband "receive-only" antennas that require no tuning
adjustments

- I believe both have noise-figures in the 2 -3 dB range

- The Pixel antenna has substantially better IMD specs (OIP2 > 100dB,
OIP3=48dB) vs the Wellbrook (OIP2 = 80dBm, OIP3 = 43 dBm). This is
significant in locations where there are strong AM broadcast band
signals and other high power signals present that might overload the
amplifier.

- Both amps have internal low - pass filters that knock out local high
power TV and FM stations above 30 MHz that could overload the amp

- The Pixel loop is a shielded 2-turn (effective) Moebius configuration
(similar to the antenna Chris Trask has described elsewhere) while the
Wellbrook is a traditional unshielded single-turn configuration. The
Pixel and Trask antennas are based on the work of Dr. Carl Baum who
developed this architecture for a classified US Air Force project.

- Both are about 1 meter in diameter

- Both use 3/4 inch aluminum tubing construction.

- The Pixel antenna is anodized a satin gray color to prevent
corrosion. The Wellbrook is natural aluminum not anodized

- The Pixel antenna weights a little more since it has a center support brace that provides more support for the Moebius junction box .

- The Pixel antenna is provided with a standard L-bracket, U- bolts and saddle clamps to mount it to a flat surface or any pole up to 2 inches in diameter, while the Wellbrook does not include these items and it's up to the user to improvise mounting

- Both can be used at ground level to provide good reception. In my setup I have them mounted about 6 feet off the ground on rotors.

- No special grounding for good signal reception is required for either antenna, although the Pixel antenna has a large lug to attach a grounding wire to provide standard lightening protection.

- Both antennas include a power supply and power inserter that duplexes power and signal onto one cable lead that goes to the antenna and preamp

- The Wellbrook uses standard BNC connectors on the antenna which must be weather- proofed while the Pixel uses water ☐proof F-connectors that are provided

- The Pixel is designed to work with standard low- cost RG-6 75 ohm cable (the same as that used with satellite TV dishes). There is an impedance matching device and PL-259 adapter to mate with standard 50 ohm input Z radios. Wellbrook recommends RG-58 50 ohm cable that must be fitted with BNC plugs.

- The low- noise amplifier in the Wellbrook is encapsulated in tamper ☐proof epoxy in an unshielded plastic enclosure that is attached to the aluminum loop structure. There is no easy way to remove it from the loop or get access to the interface between the loop and the amp to insert, for example, a broadcast AM radio band elimination filter in certain circumstances. This configuration makes the amp very difficult to repair or replace. I'm not sure how Wellbrook deals with this, but sending the entire 1 meter antenna to England for repair has got to be an expensive time-consuming process. On the other hand, the Pixel amplifier is a separate assembly that is mounted inside a metal shielded enclosure that attaches to the loop antenna through a short cable that is easy to access to add input filters or remove for repair or replacement.

- Pixel at present only sells this in a North American version while the Wellbrook is available with power supplies for Japan, Europe and North America. Both companies provide highly filtered specially designed low- noise linear power supplies. The Pixel has an internal self-reseting fuse to protect the supply in case of an inadvertent short or over current condition while the Wellbrook has a standard user-replaceable slow-blow fuse for protection. The Pixel has a high voltage discharge- tube for lightening protection on the lead in wire from the amplifier. I'm not sure if the Wellbrook provides any special protection for induced high-voltage transients on its lead in wire.

- The Pixel antenna includes an internal Transmit /Receive switch that permit the user to optionally connect it to a transceiver's "KEY" output to automatically remove preamp power and also disconnect it from the receiver when you are transmitting. A handy feature if you are mounting the loop in the vicinity of a transmitting antenna. With the Wellbrook, you need to purchase a T/R switch separately or place the antenna at least 80 feet away from the transmit antenna. The Wellbrook's amplifier when it is saturated outputs nearly 1 watt into your receiver which could cause damage in some receivers, so some considerable care should be taken when using this antenna in conjunction with a transmitter. Since the amplifier has nearly 30 dB gain, it does not take much power coupled from a transmit antenna to saturate it.

- I'm using these antennas with a software □defined- radio (SDR) that allows me to view and receive the entire 30 MHz spectrum at one time. These kind of broadband loops are a perfect match for SDR's since no narrow- band Hi-Q antenna tuning is utilized.

- From the standpoint of performance, definitive side- by- side tests of the two antennas is still a work in progress but my initial reactions are that the Pixel antenna has the edge especially at frequencies below 10 MHz where the Moebius loop provides a very noticeable improvement in received S/N. More definitive quantitative results will be provided in a future post.

- Both antennas exhibited very impressive and significant rejection of local near-field QRM and mains/power line radiated noise as compared to common E-field electric antennas. I'd say they were both equal in this regard. Both had the classic "figure eight" reception pattern with very sharp 30 dB nulls at right angles to the plane of the loop.

- Andy Ikin from Wellbrook has posted results of side by side tests taken at a test facility of a Moebius antenna he made compared to his improved ALA1530. He used a magnetic signal source in near-field conditions. From these tests he concludes that the Moebius is vastly inferior above 18 MHz. However I have not been able to observe these results with reception of real-world far □ field signals. The tests he did only considered near- field reception of H-field magnetic signals. Both kinds of loops have significant E-field response as well as H-field response to far field-signals. It's possible that the increased loop area (a factor of 6 dB) of the Moebius loop provides superior E-field response that compensates for the lower H-field magnetic response he observed. The jury is still out on exactly how the physics of all this works since the Moebius loop is new to the shortwave community. But so far this evaluation, Chris Trask's results and the observation of others that have built these new Moebius loops seem to confirm the superiority of the Moebius shielded loop architecture. More later.

73

Lex

[Non-text portions of this message have been removed]

7911. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 00:42:37 UTC
From: klelfmm
Topic: 7897 Message: 7911

Thank you Steve. No I can't null it out with a protable AM radio. The noise comes on between 3 and 4 PM and usually, but not always lasts all night. At first I was thinking mabey the street lamps. But several times I have heard nothing as far as noise waking up and tuning in at 2 or 3 AM and the lights were still on. I'm not sure what it is. Last night I could only get the local clear channel KFI and a couple other strong signals on my portable Zenith Transoceanic radio as I walked the neighborhood. During the day there is never noise and the noise level is very low.

--- In loopantennas@yahoogroups.com, <ve7sl@...> wrote:

> Are you able to null out the noise significantly with a portable AM radio
> and its built-in loopstick antenna? If not, the noise may be so strong that
> even a larger loop will not solve the problem...as well, if there is more
> than one noise source, the task will be even more difficult. The real
> problem is the noise and that is what should be tackled as a first line of
> defence...first try to gather as much data about the noise that you can
> collect...is it time dependent?...any particular direction from your home
> (here is where the portable radio comes in handy)....what are it's
> characteristics? Nowadays, most of this stuff is coming from switching power
> supplies which seem to be part of every modern day appliance. The switching
> pulses can radiate along the powerlines and even a source a block away can
> seem like it is coming from next door. Low voltage halogen lamps (like a
> string of pot lights) can create a terrible racket as can light dimmers and
> plasma TVs. Try and tackle the source first. Eliminating the source is the
> best solution.
>
> Steve
>
> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
>

7912. INFO PLEASE

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-09 03:17:22 UTC
From: Robert Gallo
Topic: 7912 Message: 7912

BEST LOOP ANTENNA FOR APARTMENT DWELLERS

7913. Re: [loopantennas] Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 01:05:58 UTC
From: ve7sl@shaw.ca
Topic: 7897 Message: 7913

If you are unable to null it with a portable AM radio and it's built-in loopstick (these things are very responsive and highly directional) then it is unlikely that a loop of larger aperture will null it effectively either. Your 'evening' noise source is something that may or may not be coming on automatically. Carefully noting the switch-on times will indicate if it is on 'auto-mode' or if it is being manually switched on. If you are living in a strictly residential neighborhood then some of the obvious sources will be backyard or security lighting, or porch lights. It sounds as if they may be manually shut down (at bedtime??...again...watch the timing) but sometimes they are not which may hint that they are not inside a house but, being outside, are sometimes forgotten to be switched off perhaps. The fact that it cannot be nulled may also mean that it is extremely close and that you are basically sitting 'on top' of the source. Have you eliminated your own house completely, as the source??

Your best solution to this noise problem will not be via different antenna systems but rather by finding and eliminating the source if you can. Time to put on your Sherlock Holmes coat!

Steve

>
> Thank you Steve. No I can't null it out with a protable AM radio. The
> noise comes on between 3 and 4 PM and usually, but not always lasts all
> night. At first I was thinking mabey the street lamps. But several times I
> have heard nothing as far as noise waking up and tuning in at 2 or 3 AM
> and the lights were still on. I'm not sure what it is. Last night I could
> only get the local clear channel KFI and a couple other strong signals on
> my portable Zenith Transoceanic radio as I walked the neighborhood. During
> the day there is never noise and the noise level is very low.
> --- In loopantennas@yahoogroups.com, <ve7sl@...> wrote:
>>
>> Are you able to null out the noise significantly with a portable AM radio
>> and its built-in loopstick antenna? If not, the noise may be so strong
>> that
>> even a larger loop will not solve the problem...as well, if there is more
>> than one noise source, the task will be even more difficult. The real
>> problem is the noise and that is what should be tackled as a first line
>> of
>> defence...first try to gather as much data about the noise that you can
>> collect...is it time dependent?...any particular direction from your home
>> (here is where the portable radio comes in handy)....what are it's
>> characteristics? Nowadays, most of this stuff is coming from switching
>> power
>> supplies which seem to be part of every modern day appliance. The
>> switching

>> pulses can radiate along the powerlines and even a source a block away
>> can
>> seem like it is coming from next door. Low voltage halogen lamps (like a
>> string of pot lights) can create a terrible racket as can light dimmers
>> and
>> plasma TVs. Try and tackle the source first. Eliminating the source is
>> the
>> best solution.
>>
>> Steve
>>
>> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
>>
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

7914. Re: [loopantennas] Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 01:16:27 UTC
From: wharpt@aol.com
Topic: 7897 Message: 7914

What version is your Zenith TransOceanic?

Wharpt

In a message dated 10/9/2010 8:06:01 P.M. Central Daylight Time,
ve7sl@... writes:

[Non-text portions of this message have been removed]

7915. Re: [loopantennas] INFO PLEASE

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 01:50:46 UTC
From: Tom Humes
Topic: 7912 Message: 7915

go to this groups site there are many, many postings for all kinds of loops for all kinds of situations

--- On Fri, 10/8/10, Robert Gallo <robertnmitch@...> wrote:

From: Robert Gallo <robertnmitch@...>
Subject: [loopantennas] INFO PLEASE
To: loopantennas@yahoogroups.com
Date: Friday, October 8, 2010, 8:17 PM

BEST LOOP ANTENNA FOR APARTMENT DWELLERS

[Non-text portions of this message have been removed]

7916. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 16:32:17 UTC
From: Alex P
Topic: 7897 Message: 7916

I have similar situation here in the Westminster-HB area. What general area of LA-OC county are you located where this late afternoon interference is happening? If it's in the beach cities, the marine layer comes in about 3-4 PM and salty moisture immerses and/or lays on the high tension line insulators which then arc/spark creating broadband noise and wreaks havoc on reception.

Alex P

--- In loopantennas@yahoogroups.com, "klelfmm" <kejoschubert1@...> wrote:
>
>
> Thank you Steve. No I can't null it out with a protable AM radio. The noise comes on between 3 and 4 PM and usually, but not always lasts all night. At first I was thinking mabey the street lamps. But several times I have heard nothing as far as noise waking up and tuning in at 2 or 3 AM and the lights were still on. I'm not sure what it is. Last night I could only get the local clear channel KFI and a couple other strong signals on my portable Zenith Transoceanic radio as I walked the neighborhood. During the day there is never noise and the noise level is very low.
> --- In loopantennas@yahoogroups.com, <ve7sl@> wrote:
> >
> > Are you able to null out the noise significantly with a portable AM radio
> > and its built-in loopstick antenna? If not, the noise may be so strong that
> > even a larger loop will not solve the problem...as well, if there is more
> > than one noise source, the task will be even more difficult. The real
> > problem is the noise and that is what should be tackled as a first line of
> > defence...first try to gather as much data about the noise that you can
> > collect...is it time dependent?...any particular direction from your home
> > (here is where the portable radio comes in handy)....what are it's
> > characteristics? Nowadays, most of this stuff is coming from switching power
> > supplies which seem to be part of every modern day appliance. The switching
> > pulses can radiate along the powerlines and even a source a block away can
> > seem like it is coming from next door. Low voltage halogen lamps (like a
> > string of pot lights) can create a terrible racket as can light dimmers and
> > plasma TVs. Try and tackle the source first. Eliminating the source is the
> > best solution.
> >
> > Steve
> >
> > WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
> >
>

7917. Re: Pixel Technologies RF PRO-1A Shielded Loop vs Wellbook ALA1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 16:40:30 UTC
From: Alex P
Topic: 7910 Message: 7917

I'm interested in knowing if anyone has done testing between the mobius and any other loops comparing numeric S/N or NF or 'transient' E-field "noise reduction". Would like to see the test data.
Regards.
Alex

--- In loopantennas@yahoogroups.com, "lexluthor6969" <lexluthor6969@...> wrote:
>
>
> I have been using the new Pixel Technologies RF PRO-1A loop .
>
> http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf
> <http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf>
>
> And also running side by side tests comparing it to the latest version
> of the Wellbrook ALA1530
>
> http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&\
> path=20&product_id=34
> <http://www.wellbrook.uk.com/antennashop/index.php?route=product/product\
> &path=20&product_id=34>
>
> Both antennas are somewhat similar in size and price.
>
> - The Pixel antenna is made in the US, while the Wellbrook is made in
> England.
>
> - I believe both antennas have 30 db (approximately) low- noise preamps
> that cover up to 30 MHz
>
> - Both are broadband "receive-only" antennas that require no tuning
> adjustments
>
> - I believe both have noise-figures in the 2 -3 dB range
>
> - The Pixel antenna has substantially better IMD specs (OIP2 > 100dB,
> OIP3=48dB) vs the Wellbrook (OIP2 = 80dBm, OIP3 = 43 dBm). This is
> significant in locations where there are strong AM broadcast band
> signals and other high power signals present that might overload the
> amplifier.
>
> - Both amps have internal low - pass filters that knock out local high
> power TV and FM stations above 30 MHz that could overload the amp
>

> - The Pixel loop is a shielded 2-turn (effective) Moebius configuration
> (similar to the antenna Chris Trask has described elsewhere) while the
> Wellbrook is a traditional unshielded single-turn configuration. The
> Pixel and Trask antennas are based on the work of Dr. Carl Baum who
> developed this architecture for a classified US Air Force project.
>
> - Both are about 1 meter in diameter
>
> - Both use 3/4 inch aluminum tubing construction.
>
> - The Pixel antenna is anodized a satin gray color to prevent
> corrosion. The Wellbrook is natural aluminum not anodized
>
> - The Pixel antenna weights a little more since it has a center support
> brace that provides more support for the Moebius junction box .
>
> - The Pixel antenna is provided with a standard L-bracket, U- bolts and
> saddle clamps to mount it to a flat surface or any pole up to 2 inches
> in diameter, while the Wellbrook does not include these items and
> it's up to the user to improvise mounting
>
> - Both can be used at ground level to provide good reception. In my
> setup I have them mounted about 6 feet off the ground on rotors.
>
> - No special grounding for good signal reception is required for either
> antenna, although the Pixel antenna has a large lug to attach a
> grounding wire to provide standard lightening protection.
>
> - Both antennas include a power supply and power inserter that duplexes
> power and signal onto one cable lead that goes to the antenna and preamp
>
> - The Wellbrook uses standard BNC connectors on the antenna which must
> be weather- proofed while the Pixel uses water □proof F-connectors
> that are provided
>
> - The Pixel is designed to work with standard low- cost RG-6 75 ohm
> cable (the same as that used with satellite TV dishes). There is an
> impedance matching device and PL-259 adapter to mate with standard 50
> ohm input Z radios. Wellbrook recommends RG-58 50 ohm cable that must
> be fitted with BNC plugs.
>
> - The low- noise amplifier in the Wellbrook is encapsulated in tamper
> □proof epoxy in an unshielded plastic enclosure that is attached to
> the aluminum loop structure. There is no easy way to remove it from the
> loop or get access to the interface between the loop and the amp to
> insert, for example, a broadcast AM radio band elimination filter in
> certain circumstances. This configuration makes the amp very difficult
> to repair or replace. I'm not sure how Wellbrook deals with this,
> but sending the entire 1 meter antenna to England for repair has got to

> be an expensive time-consuming process. On the other hand, the Pixel
> amplifier is a separate assembly that is mounted inside a metal shielded
> enclosure that attaches to the loop antenna through a short cable that
> is easy to access to add input filters or remove for repair or
> replacement.
>
> - Pixel at present only sells this in a North American version while
> the Wellbrook is available with power supplies for Japan, Europe and
> North America. Both companies provide highly filtered specially designed
> low- noise linear power supplies. The Pixel has an internal self-
> reseting fuse to protect the supply in case of an inadvertent short or
> over current condition while the Wellbrook has a standard user-
> replaceable slow-blow fuse for protection. The Pixel has a high voltage
> discharge- tube for lightening protection on the lead in wire from the
> amplifier. I'm not sure if the Wellbrook provides any special
> protection for induced high-voltage transients on its lead in wire.
>
>
>
> - The Pixel antenna includes an internal Transmit /Receive switch that
> permit the user to optionally connect it to a transceiver's
> "KEY" output to automatically remove preamp power and also
> disconnect it from the receiver when you are transmitting. A handy
> feature if you are mounting the loop in the vicinity of a transmitting
> antenna. With the Wellbrook, you need to purchase a T/R switch
> separately or place the antenna at least 80 feet away from the transmit
> antenna. The Wellbrook's amplifier when it is saturated outputs
> nearly 1 watt into your receiver which could cause damage in some
> receivers, so some considerable care should be taken when using this
> antenna in conjunction with a transmitter. Since the amplifier has
> nearly 30 dB gain, it does not take much power coupled from a transmit
> antenna to saturate it.
>
> - I'm using these antennas with a software □defined- radio (SDR)
> that allows me to view and receive the entire 30 MHz spectrum at one
> time. These kind of broadband loops are a perfect match for SDR's
> since no narrow- band Hi-Q antenna tuning is utilized.
>
> - From the standpoint of performance, definitive side- by- side tests of
> the two antennas is still a work in progress but my initial reactions
> are that the Pixel antenna has the edge especially at frequencies below
> 10 MHz where the Moebius loop provides a very noticeable improvement in
> received S/N. More definitive quantitative results will be provided in a
> future post.
>
> - Both antennas exhibited very impressive and significant rejection of
> local near-field QRM and mains/power line radiated noise as compared to
> common E-field electric antennas. I'd say they were both equal in
> this regard. Both had the classic "figure eight" reception

> pattern with very sharp 30 dB nulls at right angles to the plane of the
> loop.
>
> - Andy Ikin from Wellbrook has posted results of side by side tests
> taken at a test facility of a Moebius antenna he made compared to his
> improved ALA1530. He used a magnetic signal source in near-field
> conditions. From these tests he concludes that the Moebius is vastly
> inferior above 18 MHz. However I have not been able to observe these
> results with reception of real-world far □ field signals. The tests
> he did only considered near- field reception of H-field magnetic
> signals. Both kinds of loops have significant E-field response as well
> as H-field response to far field-signals. It's possible that the
> increased loop area (a factor of 6 dB) of the Moebius loop provides
> superior E-field response that compensates for the lower H-field
> magnetic response he observed. The jury is still out on exactly how the
> physics of all this works since the Moebius loop is new to the shortwave
> community. But so far this evaluation, Chris Trask's results and the
> observation of others that have built these new Moebius loops seem to
> confirm the superiority of the Moebius shielded loop architecture. More
> later.
>
> 73
>
> Lex
>
>
>
> [Non-text portions of this message have been removed]
>

7918. Re: [loopantennas] Re: Pixel Technologies RF PRO-1A Shielded Loop vs Wellbook ALA1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 17:55:44 UTC
From: Paul V Birke PEng
Topic: 7910 Message: 7918

you need to look closely at the M=2 Baum Moebius device as the M=1 is not really effective at noise reduction IMHO

you need to read the original Dr Carl Baum notes on the higher order Moebius antenna devices he developed and used

best Paul VE3PVB

I'm interested in knowing if anyone has done testing between the mobius and any other loops comparing numeric S/N or NF or 'transient' E-field "noise reduction". Would like to see the test data.

Regards.
Alex

[Non-text portions of this message have been removed]

7919. -New Member, not sure I'm at the right place

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 16:41:44 UTC
From: Ken
Topic: 7919 Message: 7919

Howdy All, Name is Ken. Mostly I'm interested in large loop antennas. I curently have a full wave vertical loop for 40 meters (142 ft. total,top at 60 feet or so,bottom at 30 ft.). I also have many other hf antennas up- I live on top of a hill in the Ozarks. I'm looking to get more active on 80 and 160 meters, thus my interest in large loops. Thanks, Ken AC0ML

7920. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 17:07:37 UTC
From: Malcolm G
Topic: 7897 Message: 7920

If a loop null is inconclusive, you may be able to use a radio location method sometimes used for search and rescue. Using signal strength alone, you pass in a straight line, continuing past the maximum signal, if possible from zero signal to zero signal. You then turn 180 degrees and go half the distance back again. You then turn either left or right and you either get to the signal source, or move away from it. If the latter, just do another about turn and you will get there. I appreciate that street layout etc may not lend itself to this, but you may be able to apply the technique in some form or another.
VHF is notorious for reflections. It may pay to use a portable beam on a handheld or mobile from 3+ locations some distance away, and attempt a triangulation fix.
Sorry a bit off loop topic.

malcolm gi8afs

--- In loopantennas@yahoogroups.com, <ve7sl@...> wrote:
>
> If you are unable to null it with a portable AM radio and it's built-in
> loopstick (these things are very responsive and highly directional) then it
> is unlikely that a loop of larger aperture will null it effectively either.
> Your 'evening' noise source is something that may or may not be coming on
> automatically. Carefully noting the switch-on times will indicate if it is
> on 'auto-mode' or if it is being manually switched on. If you are living in
> a strictly residential neighborhood then some of the obvious sources will be
> backyard or security lighting, or porch lights. It sounds as if they may be
> manually shut down (at bedtime??...again...watch the timing) but sometimes
> they are not which may hint that they are not inside a house but, being
> outside, are sometimes forgotten to be switched off perhaps. The fact that
> it cannot be nulled may also mean that it is extremely close and that you
> are basically sitting 'on top' of the source. Have you eliminated your own
> house completely, as the source??
>
> Your best solution to this noise problem will not be via different antenna
> systems but rather by finding and eliminating the source if you can. Time to
> put on your Sherlock Holmes coat!
>
> Steve
>
>
> >
> > Thank you Steve. No I can't null it out with a protable AM radio. The
> > noise comes on between 3 and 4 PM and usually, but not always lasts all
> > night. At first I was thinking mabey the street lamps. But several times I
> > have heard nothing as far as noise waking up and tuning in at 2 or 3 AM
> > and the lights were still on. I'm not sure what it is. Last night I could
> > only get the local clear channel KFI and a couple other strong signals on
> > my portable Zenith Transoceanic radio as I walked the neighborhood. During

> > the day there is never noise and the noise level is very low.
> > --- In loopantennas@yahoogroups.com, <ve7sl@> wrote:
> >>
> >> Are you able to null out the noise significantly with a portable AM radio
> >> and its built-in loopstick antenna? If not, the noise may be so strong
> >> that
> >> even a larger loop will not solve the problem...as well, if there is more
> >> than one noise source, the task will be even more difficult. The real
> >> problem is the noise and that is what should be tackled as a first line
> >> of
> >> defence...first try to gather as much data about the noise that you can
> >> collect...is it time dependent?...any particular direction from your home
> >> (here is where the portable radio comes in handy)....what are it's
> >> characteristics? Nowadays, most of this stuff is coming from switching
> >> power
> >> supplies which seem to be part of every modern day appliance. The
> >> switching
> >> pulses can radiate along the powerlines and even a source a block away
> >> can
> >> seem like it is coming from next door. Low voltage halogen lamps (like a
> >> string of pot lights) can create a terrible racket as can light dimmers
> >> and
> >> plasma TVs. Try and tackle the source first. Eliminating the source is
> >> the
> >> best solution.
> >>
> >> Steve
> >>
> >> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
> >>
> >
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the
> > Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF
> > into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >

> >
> >
>
>
> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
>

7921. Re: [loopantennas] -New Member, not sure I'm at the right place

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 21:48:35 UTC
From: Andy
Topic: 7919 Message: 7921

Welcome, Ken.

This seems to be a good group for all loops, large or small.

There are a couple of other Yahoogroups about large loop antennas, including [Skywires] and [LoopSkywire]. If I remember right, one or both groups may not be moderated very well so expect some spam on them from time to time. (Or maybe I'm thinking about two different groups...)

Andy

7922. Re: [loopantennas] Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-10 22:05:38 UTC
From: Andy
Topic: 7897 Message: 7922

> The noise comes on between 3 and 4 PM

About the time kids get home from school and turn on their TVs, right?

> and usually, but not always lasts all night.

But earlier you said it's often gone by 4 AM, which might be when the
last of the late-night-TV-movie-fans has given up and gone to bed.

If there's more than one TV (or whatever) causing it, it could make it
impossible to null out because you can't null all of them at once.

Just some thoughts.

Andy

7923. Re: Pixel Technologies RF PRO-1A Shielded Loop vs Wellbook ALA1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-11 15:04:37 UTC
From: Alex P
Topic: 7910 Message: 7923

Hi Paul,
Thanks for your info. I think I'm missing something. I've read Baum's paper several times, but don't see a reference to the M=2 viz M=1 reference in his paper. Can you point me to what I'm not seeing? The Baum paper I reviewed is "Characteristics of the Moebius Strip Loop" Regards,
Alex

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> you need to look closely at the M=2 Baum Moebius device as the M=1 is not really
> effective at noise reduction IMHO
>
> you need to read the original Dr Carl Baum notes on the higher order Moebius
> antenna devices he developed and used
>
> best Paul VE3PVB
>
>
>
> I'm interested in knowing if anyone has done testing between the mobius and any
> other loops comparing numeric S/N or NF or 'transient' E-field "noise
> reduction". Would like to see the test data.
>
> Regards.
> Alex
>
> [Non-text portions of this message have been removed]
>

7924. Wellbrook loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-11 15:04:16 UTC
From: jasonwell9657
Topic: 7924 Message: 7924

Hello

Does anybody have any experience of combining the output of 2 Wellbrook loops ?

Regards to all

Jason

7925. Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-11 18:12:54 UTC
From: Doug Kniffen
Topic: 7897 Message: 7925

On 10/10/2010 9:57 AM, loopantennas@yahoogroups.com wrote:
> Your best solution to this noise problem will not be via different antenna
> systems but rather by finding and eliminating the source if you can.

Resistive termination! Solved my noise problems!

We discussed this a while back when somebody posted a question about T2FD antennas. Most seemed to decide that losing no less than half your signal through the resistor wasn't worth it. Taking that position completely ignores the advantage of using resistive termination antennas.

If your noise problem is off frequency (most all of it is) then the real problem is front end overload. You first have to reduce the strength of undesired signal to the point that your receiver can reject it, then try to tune in your desired signal.

Historically, the popularity of using resistively terminated antennas went out with spark gap transmitters. Talk about splatter! Back then those operators knew how to best work around off frequency interference. Resistive termination used to be a necessity. With all the electromagnetic noise nowadays resistive termination is again a necessity for people plagued by noise problems that can't be solved any other way.

Tracing down a noise problem might help, but you may not be able to do anything about it even if you find it. In my case; The power company refused to do anything about their insulators/splices (you could even hear it without a radio), and the neighbors weren't going to do anything about their noise either. That really didn't matter because I caused some of my own noise problems, but I needed to keep those computers running. Directional antennas often don't work well for noise problems because every conductive object will absorb and re-radiate the noise.

I'm glad I re-discovered the advantages of using antennas with resistive termination, because nothing else worked. There are limits to what you can do with resistive termination, but if your desired signal isn't extremely weak (DX) start experimenting.

Doug Kniffen

7926. Re: [loopantennas] Re: Very interested in a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-11 22:20:09 UTC
From: Andy
Topic: 7897 Message: 7926

> Resistive termination! Solved my noise problems!

I don't get it.

Are you saying that by adding a resistor at a special location in your antenna, you changed its directional pattern so that it no longer receives the low-angle noise sources while not reducing the desired signals?

Or that by using a dummy load instead of an antenna, all the noise is gone? (Hint: There's an easier way: it's called the power on/off switch.)

If what you're saying is what I think you are saying, you recommend using an inefficient antenna, as a means of making it more 'deaf'. I hope this is only your receive antenna you are doing this to, not your transmit antenna. That would be a waste if it were, to be doing it on purpose. Especially since there are easier ways of reducing the received signal while not affecting the transmit signal (such as the ATTenuator switch or the RF gain control, both of which affect only the receive side).

Regards,
Andy

7927. Re: Wellbrook loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-11 22:27:50 UTC
From: lloydprevatte
Topic: 7924 Message: 7927

I have had good results phasing a Wellbrook FLG 100 and A Wellbrook LMS 100 using a MFJ 1026.

Best regards,

Lloyd

7928. Ferrite bar loop antenna experiments with the Satellit 750

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-12 14:09:16 UTC
From: salmonguyrep
Topic: 7928 Message: 7928

An interesting experiment last night using my Satellit 750 and two different home brew ferrite bar antennas; one made from a 19" 125 mu and one made from a 27" 125 mu ferrite bar□both purchased from Stormwise and both with a primary coil made from 38 turns of 630/46 Litz wire, where the 27" antenna also has a secondary pick up coil of 4 turns placed over the center of the primary coil. It was a perfect fall evening in Houston weather-wise, and so I moved my equipment to a small roof deck about 50' above street level, at a location that is RF quiet compared to my usual indoor location.

The 19" antenna inductively couples to the ferrite bar antenna of the Satellit 750. Previous tests demonstrated essentially no difference in the magnitude of RF gain when comparing the 19" and 27" antennas using inductive coupling, as confirmed in the more RF quiet roof deck location. The Satellit 750 is a fun radio to use because you can manipulate both the RF gain and the volume for optimal reception. The 19" antenna, inductively coupled, overloaded the radio when the RF gain pot was set at 3 o'clock or more. The 27" antenna when direct coupled to the female jack on the ferrite bar antenna of the Satellit 750 (another really nice feature for antenna experimenters) was much quieter than the 19" inductively coupled antenna, so much so that I had to run the RF gain control at maximum level to be able to hear much of anything. When I interposed an old BAX-1 RF broadband preamplifier between the 27"er and the Satellit 750 ferrite bar antenna the radio overloaded even with the RF gain control set at the most minimal level.

The nulls were sharpest with the 19" antenna, although the 27"er is mounted on a tripod so I could get some additional nulling with it by using the altazimuth adjustments possible with the tripod and not possible with the 19"er inductively coupled to the radio.
All in all, the 19" antenna provides the best combination of RF gain, nullability, and portability. Tonight I will test this set up versus the 27"er direct coupled to an E1.

73s;

Salmonguy

7929. Re: [loopantennas] Digest Number 1732

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-12 17:31:52 UTC
From: Doug Kniffen
Topic: 7929 Message: 7929

On 10/12/2010 11:24 AM, loopantennas@yahoogroups.com wrote:
> Are you saying that by adding a resistor at a special location in your
> antenna, you changed its directional pattern so that it no longer
> receives the low-angle noise sources while not reducing the desired
> signals?
No, not the pattern.
> If what you're saying is what I think you are saying, you recommend
> using an inefficient antenna, as a means of making it more 'deaf'.
Yes, but mostly more "deaf" off frequency than on frequency.
> I
> hope this is only your receive antenna you are doing this to, not your
> transmit antenna.
For some antennas you would want to switch out the resistor, for others
you can leave it in (e.g. T2FD, terminated resonant rhombic)
> there are easier ways of reducing the
> received signal while not affecting the transmit signal (such as the
> ATTenuator switch or the RF gain control, both of which affect only
> the receive side).
But that attenuates everything equally, not off frequency signals more
than on frequency signals the way a resistively terminated antenna can.

Doug Kniffen

7930. Re: Digest Number 1732

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-13 18:35:33 UTC
From: Mike
Topic: 7929 Message: 7930

Guys, Guys, leave the resistor out.

All resonant antennas are bandpass filters, resistor loading broadens them just the opposite of what you want.

Seriously!

--- In loopantennas@yahoogroups.com, Doug Kniffen <dkniffen@...> wrote:
>
> On 10/12/2010 11:24 AM, loopantennas@yahoogroups.com wrote:
> > Are you saying that by adding a resistor at a special location in your
> > antenna, you changed its directional pattern so that it no longer
> > receives the low-angle noise sources while not reducing the desired
> > signals?
> No, not the pattern.
> > If what you're saying is what I think you are saying, you recommend
> > using an inefficient antenna, as a means of making it more 'deaf'.
> Yes, but mostly more "deaf" off frequency than on frequency.
> > I
> > hope this is only your receive antenna you are doing this to, not your
> > transmit antenna.
> For some antennas you would want to switch out the resistor, for others
> you can leave it in (e.g. T2FD, terminated resonant rhombic)
> > there are easier ways of reducing the
> > received signal while not affecting the transmit signal (such as the
> > ATTenuator switch or the RF gain control, both of which affect only
> > the receive side).
> But that attenuates everything equally, not off frequency signals more
> than on frequency signals the way a resistively terminated antenna can.
>
>
>
> Doug Kniffen
>

7931. Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-13 23:43:53 UTC
From: nickbeee
Topic: 7931 Message: 7931

Hi,

Just joined this group. Does anyone recall a design for a spiral medium wave loop that was published in Short Wave Magazine around 1990? The loop was wound in a heaxagonal shape and the article included details of how to make your own litz wire by taking a few strands of 36 gauge wire and twisting them together with a drill.

Well this was an unfinished project that I was hoping to complete. I've got most of the parts including my reel of DIY litz wire but I've lost the original article. Can anyone help me with a description of the design or a copy of the original article?

Many thanks,
Nick.

7932. Re: [loopantennas] Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-14 03:46:20 UTC
From: crabtreejr@aol.com
Topic: 7931 Message: 7932

Hello Nick

The article was "A Hexagonal Loop Antenna" by John Ratcliffe. It appeared
in the April 1989 issue, pp28-29. A scan will follow in due course.

73 John KC0G

In a message dated 10/13/2010 8:38:44 PM Central Daylight Time,
nick@... writes:
> Hi,
>
> Just joined this group. Does anyone recall a design for a spiral medium
> wave loop that was published in Short Wave Magazine around 1990? The loop was
> wound in a heaxagonal shape and the article included details of how to
> make your own litz wire by taking a few strands of 36 gauge wire and twisting
> them together with a drill.
>
> Well this was an unfinished project that I was hoping to complete. I've
> got most of the parts including my reel of DIY litz wire but I've lost the
> original article. Can anyone help me with a description of the design or a
> copy of the original article?
>
> Many thanks,
> Nick.
>

[Non-text portions of this message have been removed]

7933. Re: [loopantennas] Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-14 07:41:27 UTC
From: brian nsl
Topic: 7931 Message: 7933

Nick,
This website might provide some ideas along the lines you have described,

a.. Dave's Homemade Loop Antennas, Second Page
Here is a little twist on my loop designs. This is a 6 sided loop antenna. From what
a.. I can tell, there isn't any difference between a square and a hex loop ...
makearadio.com/loops/loops2.php

72, Brian, G0NSL-QRP.
----- Original Message -----
From: nickbeee
To: loopantennas@yahoogroups.com
Sent: Thursday, October 14, 2010 12:43 AM
Subject: [loopantennas] Spiral MW loop design (Short Wave Magazine around 1990)

[Non-text portions of this message have been removed]

7934. Re: Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-14 10:55:36 UTC
From: nickbeee
Topic: 7931 Message: 7934

That's the one!

Many thanks John.
73,
Nick.

--- In loopantennas@yahoogroups.com, crabtreejr@... wrote:
>
> Hello Nick
>
> The article was "A Hexagonal Loop Antenna" by John Ratcliffe. It appeared
> in the April 1989 issue, pp28-29. A scan will follow in due course.
>
> 73 John KC0G
>
>
>
> In a message dated 10/13/2010 8:38:44 PM Central Daylight Time,
> nick@... writes:
> > Hi,
> >
> > Just joined this group. Does anyone recall a design for a spiral medium
> > wave loop that was published in Short Wave Magazine around 1990? The loop was
> > wound in a heaxagonal shape and the article included details of how to
> > make your own litz wire by taking a few strands of 36 gauge wire and twisting
> > them together with a drill.
> >
> > Well this was an unfinished project that I was hoping to complete. I've
> > got most of the parts including my reel of DIY litz wire but I've lost the
> > original article. Can anyone help me with a description of the design or a
> > copy of the original article?
> >
> > Many thanks,
> > Nick.
> >
>
>
> [Non-text portions of this message have been removed]
>

7935. Re: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-14 10:59:14 UTC
From: brian nsl
Topic: 7931 Message: 7935

John,
If possible may I see the loop article too ????
Thank you,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: nickbeee
To: loopantennas@yahoogroups.com
Sent: Thursday, October 14, 2010 11:55 AM
Subject: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

That's the one!

Many thanks John.
73,
Nick.

[Non-text portions of this message have been removed]

7936. RE: [loopantennas] Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-14 11:12:31 UTC
From: Dominique Kremp
Topic: 7931 Message: 7936

Hi John,
I'd be glad to have a copy too !
Thanks in advance + have a nice day

Dominique
Normandy,France

-----Message d'origine-----
De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de crabtreejr@...
Envoyé : jeudi 14 octobre 2010 05:46
À : loopantennas@yahoogroups.com
Objet : Re: [loopantennas] Spiral MW loop design (Short Wave Magazine around 1990)

Hello Nick

The article was "A Hexagonal Loop Antenna" by John Ratcliffe. It appeared in the April 1989 issue, pp28-29. A scan will follow in due course.

73 John KC0G

In a message dated 10/13/2010 8:38:44 PM Central Daylight Time,
nick@... writes:
> Hi,
>
> Just joined this group. Does anyone recall a design for a spiral medium
> wave loop that was published in Short Wave Magazine around 1990? The loop was
> wound in a heaxagonal shape and the article included details of how to
> make your own litz wire by taking a few strands of 36 gauge wire and twisting
> them together with a drill.
>
> Well this was an unfinished project that I was hoping to complete. I've
> got most of the parts including my reel of DIY litz wire but I've lost the

> original article. Can anyone help me with a description of the design or a

> copy of the original article?
>
> Many thanks,
> Nick.
>

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7937. RE: [loopantennas] Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-14 13:01:23 UTC
From: Lee Badman
Topic: 7931 Message: 7937

Dominique Kremp <dominique.kremp@wanadoo.fr> wrote:

>Hi John,
>I'd be glad to have a copy too !
>Thanks in advance + have a nice day
>
>Dominique
>Normandy,France
>
>-----Message d'origine-----
>De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De
>la part de crabtreejr@aol.com
>Envoyé : jeudi 14 octobre 2010 05:46
>À : loopantennas@yahoogroups.com
>Objet : Re: [loopantennas] Spiral MW loop design (Short Wave Magazine around
>1990)
>
>
>Hello Nick
>
>The article was "A Hexagonal Loop Antenna" by John Ratcliffe. It appeared
>in the April 1989 issue, pp28-29. A scan will follow in due course.
>
>73 John KC0G
>
>
>
>In a message dated 10/13/2010 8:38:44 PM Central Daylight Time,
>nick@nowindows.net writes:
>> Hi,
>>
>> Just joined this group. Does anyone recall a design for a spiral medium
>> wave loop that was published in Short Wave Magazine around 1990? The loop
>was
>> wound in a heaxagonal shape and the article included details of how to
>> make your own litz wire by taking a few strands of 36 gauge wire and
>twisting
>> them together with a drill.
>>
>> Well this was an unfinished project that I was hoping to complete. I've
>> got most of the parts including my reel of DIY litz wire but I've lost the
>
>> original article. Can anyone help me with a description of the design or a
>

>> copy of the original article?
>>
>> Many thanks,
>> Nick.
>>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in the
>Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG and GIF
>into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

7938. RE: [loopantennas] Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-14 13:20:17 UTC
From: Chris Trask
Topic: 7931 Message: 7938

Here also. Might make a nice addition to the group files section. If needed, you can send me the scans and I'll turn out a PDF file.

Chris

-----Original Message-----
>From: Dominique Kremp <dominique.kremp@...>
>Sent: Oct 14, 2010 4:12 AM
>To: loopantennas@yahoogroups.com
>Subject: RE: [loopantennas] Spiral MW loop design (Short Wave Magazine around 1990)
>
>Hi John,
>I'd be glad to have a copy too !
>Thanks in advance + have a nice day
>
>Dominique
>Normandy,France
>
>-----Message d'origine-----
>De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De
>la part de crabtreejr@...
>Envoyé : jeudi 14 octobre 2010 05:46
>À : loopantennas@yahoogroups.com
>Objet : Re: [loopantennas] Spiral MW loop design (Short Wave Magazine around
>1990)
>
>
>Hello Nick
>
>The article was "A Hexagonal Loop Antenna" by John Ratcliffe. It appeared
>in the April 1989 issue, pp28-29. A scan will follow in due course.
>
>73 John KC0G
>
>
>
>In a message dated 10/13/2010 8:38:44 PM Central Daylight Time,
>nick@... writes:
>> Hi,
>>
>> Just joined this group. Does anyone recall a design for a spiral medium
>> wave loop that was published in Short Wave Magazine around 1990? The loop
>was
>> wound in a heaxagonal shape and the article included details of how to

>> make your own litz wire by taking a few strands of 36 gauge wire and
>twisting
>> them together with a drill.
>>
>> Well this was an unfinished project that I was hoping to complete. I've
>> got most of the parts including my reel of DIY litz wire but I've lost the
>
>> original article. Can anyone help me with a description of the design or a
>
>> copy of the original article?
>>
>> Many thanks,
>> Nick.
>>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in the
>Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG and GIF
>into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

7939. Posting !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-16 13:50:07 UTC
From: brian nsl
Topic: 7939 Message: 7939

Hi,
As anyone located this posting in the files section,

loopantennas
nickbeee posted a link HF Active Loop Antenna - balanced amplifier.

The latest files posting I can find is early August, 2010 !!!!!!
Thanks,
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

7940. RE: [loopantennas] Posting !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-16 15:06:27 UTC
From: dx11
Topic: 7939 Message: 7940

It is in the "links" section!

>>nickbeee posted a link HF Active Loop Antenna - balanced amplifier.<<

[

7941. Re: [loopantennas] Posting !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-16 15:54:07 UTC
From: brian nsl
Topic: 7939 Message: 7941

Hi,
Many thanks, I overlooked the vital word ' links ' and went straight to
the files section.
My excuse is I am 78 does that count hi!
72, Brian.
----- Original Message -----
From: dx11
To: loopantennas@yahoogroups.com
Sent: Saturday, October 16, 2010 4:06 PM
Subject: RE: [loopantennas] Posting !!!!

It is in the "links" section!

[Non-text portions of this message have been removed]

7942. Re: Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-16 19:30:59 UTC
From: nickbeee
Topic: 7931 Message: 7942

I've almost completed my loop... Just need to finish off the feed from the coupling winding and make a base for it. I ended up with 10 turns of home-brew litz and a 500pF variable capacitor. Tuning is very sharp so I have a reduction drive with a vernier scale to fit.

Initial tests with it sitting next to my ICF2001D sound promising.

If anyone is interested to see what it looks like I've uploaded some photos to

http://picasaweb.google.com/nickb333/HexagonalLoopAntenna#
<http://picasaweb.google.com/nickb333/HexagonalLoopAntenna#>

73
Nick.

--- In loopantennas@yahoogroups.com, crabtreejr@... wrote:
>
> Hello Nick
>
> The article was "A Hexagonal Loop Antenna" by John Ratcliffe. It appeared
> in the April 1989 issue, pp28-29. A scan will follow in due course.
>
> 73 John KC0G
>
>
>
> In a message dated 10/13/2010 8:38:44 PM Central Daylight Time,
> nick@... writes:
> > Hi,
> >
> > Just joined this group. Does anyone recall a design for a spiral medium
> > wave loop that was published in Short Wave Magazine around 1990? The loop was
> > wound in a heaxagonal shape and the article included details of how to
> > make your own litz wire by taking a few strands of 36 gauge wire and twisting
> > them together with a drill.
> >
> > Well this was an unfinished project that I was hoping to complete. I've
> > got most of the parts including my reel of DIY litz wire but I've lost the

> > original article. Can anyone help me with a description of the
design or a
> > copy of the original article?
> >
> > Many thanks,
> > Nick.
> >
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

7943. Re: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-16 19:36:30 UTC
From: Myamiphil
Topic: 7931 Message: 7943

Nicely done!

Best Regards

Phil
Lat: 40.8367633
Long: -74.1768412

From: nickbeee <nick@...>
To: loopantennas@yahoogroups.com
Sent: Sat, October 16, 2010 3:30:59 PM
Subject: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

I've almost completed my loop... Just need to finish off the feed from
the coupling winding and make a base for it. I ended up with 10 turns of
home-brew litz and a 500pF variable capacitor. Tuning is very sharp so I
have a reduction drive with a vernier scale to fit.

Initial tests with it sitting next to my ICF2001D sound promising.

If anyone is interested to see what it looks like I've uploaded some
photos to

http://picasaweb.google.com/nickb333/HexagonalLoopAntenna#
<http://picasaweb.google.com/nickb333/HexagonalLoopAntenna#>

73
Nick.

--- In loopantennas@yahoogroups.com, crabtreejr@... wrote:
>
> Hello Nick
>
> The article was "A Hexagonal Loop Antenna" by John Ratcliffe. It
appeared
> in the April 1989 issue, pp28-29. A scan will follow in due course.
>
> 73 John KC0G
>
>
>
> In a message dated 10/13/2010 8:38:44 PM Central Daylight Time,
> nick@... writes:
> > Hi,

> >
> > Just joined this group. Does anyone recall a design for a spiral
medium
> > wave loop that was published in Short Wave Magazine around 1990? The
loop was
> > wound in a heaxagonal shape and the article included details of how
to
> > make your own litz wire by taking a few strands of 36 gauge wire and
twisting
> > them together with a drill.
> >
> > Well this was an unfinished project that I was hoping to complete.
I've
> > got most of the parts including my reel of DIY litz wire but I've
lost the
> > original article. Can anyone help me with a description of the
design or a
> > copy of the original article?
> >
> > Many thanks,
> > Nick.
> >
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7944. RE: [loopantennas] Posting !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-16 20:09:01 UTC
From: dx11
Topic: 7939 Message: 7944

Hello Brian,
There is no need of an excuse of any kind. I knew so well, because I myself made the same "mistake" many times over and I am only 62! And, I just went to the indicated adress and downloaded the page. It happened to be a design for which I have the components laying around waiting to be built into a nice active loop. I have found this design from different sources now, all with different transistors in it, so it appears to me to be a kind of generic design. They have one thing in common, all those that built it have a very positive judgement on it.

Regards,

Cor Beijersbergen

>>Hi,
Many thanks, I overlooked the vital word ' links ' and went straight to the files section.<<

7945. RE: [loopantennas] Posting !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-16 20:42:17 UTC
From: dx11
Topic: 7939 Message: 7945

Hello Brian,
This is one of the other variations

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

regards,

Cor Beijersbergen

7946. Re: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-16 21:28:52 UTC
From: brian nsl
Topic: 7931 Message: 7946

Nick,
I know several members including myself requested a copy of
the scanned document from Short Wave Magazine, did it appear anywhere
for you to build the loop ????
The photos look impressive, well done.
Regards,
72, Brian.
----- Original Message -----
From: nickbeee
To: loopantennas@yahoogroups.com
Sent: Saturday, October 16, 2010 8:30 PM
Subject: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

I've almost completed my loop... Just need to finish off the feed from
the coupling winding and make a base for it. I ended up with 10 turns of
home-brew litz and a 500pF variable capacitor. Tuning is very sharp so I
have a reduction drive with a vernier scale to fit.

Initial tests with it sitting next to my ICF2001D sound promising.

If anyone is interested to see what it looks like I've uploaded some
photos to

http://picasaweb.google.com/nickb333/HexagonalLoopAntenna#
<http://picasaweb.google.com/nickb333/HexagonalLoopAntenna#>

73
Nick.

[Non-text portions of this message have been removed]

7947. Re: [loopantennas] Posting !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-17 06:51:24 UTC
From: brian nsl
Topic: 7939 Message: 7947

Cor,
Thank you for your comments.
As we are so often told ' always read the small print ' hi!
Using the same technique I have now located the Spiral Antenna
details buried in loopantennas group data.
Regards,
72, Brian.
----- Original Message -----
From: dx11
To: loopantennas@yahoogroups.com
Sent: Saturday, October 16, 2010 9:09 PM
Subject: RE: [loopantennas] Posting !!!!

[Non-text portions of this message have been removed]

7948. Re: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-17 09:07:46 UTC
From: Nick B.
Topic: 7931 Message: 7948

Brian & All,

I've uploaded to the files section as a PDF - entitled "Hexagonal Loop Antenna". The original I received was two .gif files, if anybody wants those I'll gladly forward them on.

73
Nick.

On 16/10/2010 22:28, brian nsl wrote:
>
> Nick,
> I know several members including myself requested a copy of
> the scanned document from Short Wave Magazine, did it appear anywhere
> for you to build the loop ????
> The photos look impressive, well done.
> Regards,
> 72, Brian.
> ----- Original Message -----
> From: nickbeee
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Sent: Saturday, October 16, 2010 8:30 PM
> Subject: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine
> around 1990)
>
> I've almost completed my loop... Just need to finish off the feed from
> the coupling winding and make a base for it. I ended up with 10 turns of
> home-brew litz and a 500pF variable capacitor. Tuning is very sharp so I
> have a reduction drive with a vernier scale to fit.
>
> Initial tests with it sitting next to my ICF2001D sound promising.
>
> If anyone is interested to see what it looks like I've uploaded some
> photos to
>
> http://picasaweb.google.com/nickb333/HexagonalLoopAntenna#
> <http://picasaweb.google.com/nickb333/HexagonalLoopAntenna#>
>
> 73
> Nick.
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

7949. Re: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-17 10:09:34 UTC
From: brian nsl
Topic: 7931 Message: 7949

Nick,
There are some nice ideas for loops at,
stonevintageradio.com/items.php?CA=10 - Cached

Look at the Radiola 26 for a compact version.
72, Brian.
----- Original Message -----
From: Nick B.
To: loopantennas@yahoogroups.com
Sent: Sunday, October 17, 2010 10:07 AM
Subject: Re: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

[Non-text portions of this message have been removed]

7950. Re: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-17 12:57:14 UTC
From: brian nsl
Topic: 7931 Message: 7950

Nick,
Thanks for your efforts.
I was trawling the files by ' date ' and missed it initially, all ok now.
----- Original Message -----
From: Nick B.
To: loopantennas@yahoogroups.com
Sent: Sunday, October 17, 2010 10:07 AM
Subject: Re: [loopantennas] Re: Spiral MW loop design (Short Wave Magazine around 1990)

Brian & All,

[Non-text portions of this message have been removed]

7951. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-17 14:36:25 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7951

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Rhombic-Math.pdf
Uploaded by : n6jsx <n6jsx@...>
Description : Rhombic & termintor - design/math

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Rhombic-Math.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

n6jsx <n6jsx@...>

7952. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-17 14:38:22 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 7952

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /AntSpreaders.pdf
Uploaded by : n6jsx <n6jsx@...>
Description : Easy home-made spreaders/insulators

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/AntSpreaders.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/forms/general.htmlfiles

Regards,

n6jsx <n6jsx@...>

7953. Slightly OT to "Spiral MW loop design"

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-17 17:55:38 UTC
From: BriggsL
Topic: 7931 Message: 7953

This may be a basic question but I'm new to loop ants...

What would be the significant differences (performance, etc) to a spiral loop constructed in a single plane to a loop of same turns count but with 3D parallel turns (hope this makes sense)?? I am asking wrt primarily MW reception only. Tnx for any/all replies.
Briggs in Gloucester, Ma.

7954. Re: [loopantennas] Slightly OT to "Spiral MW loop design"

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-18 15:25:45 UTC
From: Myamiphil
Topic: 7931 Message: 7954

From what I've seen they were popular in the early days of radio. They accomodated the need for a loop antenna mounted to the back of a radio...

Consider they early radios were large and some floor models. IN any event it would have been cumbersome to have a large broadcast band, 550-1600 KHz, loop in the house!

The basket weave was developed out of need. and it worked great. Some pieces of art!

Best Regards

Phil
Lat: 40.8367633
Long: -74.1768412

From: BriggsL <bruggo@verizon.net>
To: loopantennas@yahoogroups.com
Sent: Sun, October 17, 2010 1:55:38 PM
Subject: [loopantennas] Slightly OT to "Spiral MW loop design"

This may be a basic question but I'm new to loop ants...

What would be the significant differences (performance, etc) to a spiral loop constructed in a single plane to a loop of same turns count but with 3D parallel turns (hope this makes sense)?? I am asking wrt primarily MW reception only.
Tnx for any/all replies.
Briggs in Gloucester, Ma.

[Non-text portions of this message have been removed]

7955. Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-18 16:09:13 UTC
From: brian nsl
Topic: 7955 Message: 7955

Hi,
Can anyone help me with a route to details of the Ramsey Superloop Antenna ????
There is a photograph in the groups archives posted by ' alienrelics ' in August, 2006 with a note saying ' compressed to save space ' but no text description and Google provides no details so far.
The design looks intriguing hence the query hi!
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

7956. Re: [loopantennas] Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-18 18:45:55 UTC
From: k0occ@comcast.net
Topic: 7955 Message: 7956

Google dr ace super loop and you will get a whole bunch of sites with details of super loop antennas. Radio Works sells a a couple of models of super loop antennas and has details on their website. dxzone.com has a bunch of info on super loops as well.

I am thinking of putting one up after the leaves fall off the trees.

Has anyone in the group tried one or modeled one?

73,

Ernie, k0occ
Atlanta

----- Original Message -----
From: "brian nsl" <brian.nsl@...>
To: loopantennas@yahoogroups.com
Sent: Monday, October 18, 2010 12:09:13 PM
Subject: [loopantennas] Ramsey Superloop Antenna !!!!!

Hi,
Can anyone help me with a route to details of the Ramsey Superloop Antenna ????
There is a photograph in the groups archives posted by ' alienrelics ' in August, 2006 with a note saying ' compressed to save space ' but no text description and Google provides no details so far.
The design looks intriguing hence the query hi!
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7957. Re: Slightly OT to "Spiral MW loop design"

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-18 19:30:15 UTC
From: neilbellgroups
Topic: 7931 Message: 7957

Spiral wound loops are more sharply directional.

Neil Bell
KJ6FBA

--- In loopantennas@yahoogroups.com, "BriggsL" <bruggo@...> wrote:
>
> This may be a basic question but I'm new to loop ants...
>
> What would be the significant differences (performance, etc) to a spiral loop constructed in a single plane to a loop of same turns count but with 3D parallel turns (hope this makes sense)?? I am asking wrt primarily MW reception only. Tnx for any/all replies.
> Briggs in Gloucester, Ma.
>

7958. Re: [loopantennas] Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-18 19:30:23 UTC
From: M HOLDEN
Topic: 7955 Message: 7958

I think it is my 283 footer, or very similar, slung up in the vertical plane.
Regards from Mike G4HOL

--- On Mon, 18/10/10, brian nsl <brian.nsl@btinternet.com> wrote:

From: brian nsl <brian.nsl@...>
Subject: [loopantennas] Ramsey Superloop Antenna !!!!!
To: loopantennas@yahoogroups.com
Date: Monday, 18 October, 2010, 17:09

Hi,

Can anyone help me with a route to details of the Ramsey Superloop Antenna ????

There is a photograph in the groups archives posted by ' alienrelics ' in August, 2006

with a note saying ' compressed to save space ' but no text description and Google

provides no details so far.

The design looks intriguing hence the query hi!

72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7959. Re: Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-18 19:42:45 UTC
From: lowalacrity
Topic: 7955 Message: 7959

Brian,
That would be one of my creations, or should I say modifications. It was my own loop "head" coupled to a Ramsey Signal Magnet. It worked well and did an excellent job shielding noise out, (as did the stock rod assembly). Refer to msssages 655 and 686 in this group and various posts from #6-27 in the "ferriterodantennaexperimenters group.
Let me know if you need any more details.

Here's a link to the kit, which i think is still available.
http://www.ramseyelectronics.com/cgi-bin/commerce.exe?preadd=action&key=SM100.

Regards,
John

> Hi,
> Can anyone help me with a route to details of the Ramsey Superloop Antenna ????
> There is a photograph in the groups archives posted by ' alienrelics ' in August, 2006
> with a note saying ' compressed to save space ' but no text description and Google
> provides no details so far.
> The design looks intriguing hence the query hi!
> 72, Brian, G0NSL-QRP.
>
> [Non-text portions of this message have been removed]
>

7960. Re: Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-18 21:39:07 UTC
From: tenorman1952
Topic: 7955 Message: 7960

Dr. Ace's site is apparently gone now. What a shame, an excellent resource!

This antenna is called the Super Loop 80, and here are two similar ones to the one on Dr. Ace's site:

http://larc.hamgate.net/SuperLoop.htm

http://www.radioworks.com/csuperlo.html

http://www.iw5edi.com/ham-radio/30/super-loop-antenna (same as the first link)

I have the picture from Dr. Ace's site. It shows the wires on top to be each 49'9", or, roughly 100' across the top.

The diagonal wires are each 59' sloping down to the balun, which is 4:1 current balun. The ladderline stub, which is wired across the top center insulator, is 29' 10" and shorted on the bottom.

From the 4:1 balun, 50 ohm coax back to the shack.

For the Super Loop 112' across the top, of course, each horizontal wire would be 56', less a little bit for the insulator, and the diagonals would each be 63.5'. And that shows the stub to be 30'.

I know of a number of hams using the Super Loop 80 to good effect.

Paul - AE5JU

--- In loopantennas@yahoogroups.com, k0occ@... wrote:
>
> Google dr ace super loop and you will get a whole bunch of sites with details of super loop antennas. Radio Works sells a a couple of models of super loop antennas and has details on their website. dxzone.com has a bunch of info on super loops as well.
>
>
> I am thinking of putting one up after the leaves fall off the trees.
>
>
> Has anyone in the group tried one or modeled one?
>
>
> 73,
>
>
> Ernie, k0occ
> Atlanta
>
>

>
>
>
>
> ----- Original Message -----
> From: "brian nsl" <brian.nsl@...>
> To: loopantennas@yahoogroups.com
> Sent: Monday, October 18, 2010 12:09:13 PM
> Subject: [loopantennas] Ramsey Superloop Antenna !!!!!
>
>
>
>
>
>
>
> Hi,
> Can anyone help me with a route to details of the Ramsey Superloop Antenna ????
> There is a photograph in the groups archives posted by ' alienrelics ' in August, 2006
> with a note saying ' compressed to save space ' but no text description and Google
> provides no details so far.
> The design looks intriguing hence the query hi!
> 72, Brian, G0NSL-QRP.
>
> [Non-text portions of this message have been removed]
>
>
>
>
> [Non-text portions of this message have been removed]
>

7961. Re: [loopantennas] Re: Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-19 02:04:32 UTC
From: Andy
Topic: 7955 Message: 7961

> Dr. Ace's site is apparently gone now. What a shame, an excellent resource!

This might (or might not) help:

http://web.archive.org/web/*/http://www.bloomington.in.us/~wh2t/ant.htm

(Might not, because I'm getting errors from almost any attempts to
access archived websites at www.archive.org lately. It was a nice
idea when it worked.)

Andy

7962. Re: [loopantennas] Re: Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-19 07:34:28 UTC
From: brian nsl
Topic: 7955 Message: 7962

Hi,
Thanks to all for the comments / links on the ' Super Loop ',
I am studying the various texts etc.
72, Brian, G0NSL-QRP
----- Original Message -----
From: Andy
To: loopantennas@yahoogroups.com
Sent: Tuesday, October 19, 2010 3:04 AM
Subject: Re: [loopantennas] Re: Ramsey Superloop Antenna !!!!!

[Non-text portions of this message have been removed]

7963. Re: [loopantennas] Re: Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-19 10:57:03 UTC
From: van wd8aam
Topic: 7955 Message: 7963

I accessed it Just fine with this URL at 5am CDT in the morning
when web traffic was light.
http://web.archive.org/web/20080529172241/http://www.bloomington.in.us/~wh2t/ant.htm
you may have to cut and paste if the email program splits this URL.....
van
wd8aam

At 02:04 10/19/2010, you wrote:
> > Dr. Ace's site is apparently gone now. What a shame, an
> excellent resource!
>
>This might (or might not) help:
>
> http://web.archive.org/web/*/http://www.bloomington.in.us/~wh2t/ant.htm
>
>(Might not, because I'm getting errors from almost any attempts to
>access archived websites at www.archive.org lately. It was a nice
>idea when it worked.)
>
>Andy
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>

7964. Re: [loopantennas] Re: Ramsey Superloop Antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-19 14:45:28 UTC
From: brian nsl
Topic: 7955 Message: 7964

Van,
I got time to try the link given and found it opened first click,
so it appears all is well.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: van wd8aam
To: loopantennas@yahoogroups.com
Sent: Tuesday, October 19, 2010 11:57 AM
Subject: Re: [loopantennas] Re: Ramsey Superloop Antenna !!!!!

[Non-text portions of this message have been removed]

7965. Re: Slightly OT to "Spiral MW loop design"

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-19 17:47:25 UTC
From: d29602960
Topic: 7931 Message: 7965

Hi riggs in Gloucester and the group,

I am a little unsure if I have understood your question correctly but here goes anyway :-)

When you wrote "spiral loop constructed in a single plane to a loop of same turns count but with 3D parallel turns" I took this to mean side-by-side windings as compared to "basket weave" windings.

If so then the most significant difference between the regular side-by-side winding and the 3d basket weave is that basket weaving reduces the self-capacitance of the windings which roughly translates to the possibility of a lower loss winding (higher performance/Q), sharper tuning and maximised tuning range.

Self capacitance is an unwanted side-effect of winding a coil so if the self capacitance can be minimised then the performance of the coil/loop will be better plus basket weave looks cool too :-) Basket weave would allways be my first choice for a MW tuned loop antenna.

Hope this helps?

73,s

Des (M0AYF) in Lincolnshire.

--- In loopantennas@yahoogroups.com, "BriggsL" <bruggo@...> wrote:
>
> This may be a basic question but I'm new to loop ants...
>
> What would be the significant differences (performance, etc) to a spiral loop constructed in a single plane to a loop of same turns count but with 3D parallel turns (hope this makes sense)?? I am asking wrt primarily MW reception only. Tnx for any/all replies.
> Briggs in Gloucester, Ma.
>

7966. Hexagonal Loop Antenna - Needs improvement.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-19 21:42:45 UTC
From: Nick B.
Topic: 7966 Message: 7966

I played around with this antenna using the 1-turn coupling loop fed into my RX320 Receiver. Results seemed average, I can null strong locals but the tuning seemed to get flatter the higher I go in frequency.

I've run a few approximations through RJELOOP3 and realized that the output impedance of the 1-turn loop to the receiver is going to be anything between 500Ω (500kHz) and 2k4Ω (1700kHz). Sticking this straight into the 50Ω input of a receiver is seriously degrading the Q of the loop, getting worse as the frequency increases. I think the design as it stands needs an improvement, the simplest one I can think of being a broadband matching transformer with a 16:1 ratio. Can anyone recommend a design?

I'll put some ferrites on my shopping list when I visit QRP rally at the weekend. I could also try a spare Wellbrook UMB130 although that's only 9:1.

BTW I've slimmed down the PDF in the files section from 3M to 800K.

73
Nick.

7967. Re: Hexagonal Loop Antenna - Needs improvement.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-20 03:43:05 UTC
From: Alex P
Topic: 7966 Message: 7967

Try a balanced hi impedance (FET) amp.

--- In loopantennas@yahoogroups.com, "Nick B." <nick@...> wrote:
>
> I played around with this antenna using the 1-turn coupling loop fed
> into my RX320 Receiver. Results seemed average, I can null strong locals
> but the tuning seemed to get flatter the higher I go in frequency.
>
> I've run a few approximations through RJELOOP3 and realized that the
> output impedance of the 1-turn loop to the receiver is going to be
> anything between 500Î© (500kHz) and 2k4Î© (1700kHz). Sticking this
> straight into the 50Î© input of a receiver is seriously degrading the Q
> of the loop, getting worse as the frequency increases. I think the
> design as it stands needs an improvement, the simplest one I can think
> of being a broadband matching transformer with a 16:1 ratio. Can anyone
> recommend a design?
>
> I'll put some ferrites on my shopping list when I visit QRP rally at the
> weekend. I could also try a spare Wellbrook UMB130 although that's only 9:1.
>
> BTW I've slimmed down the PDF in the files section from 3M to 800K.
>
> 73
> Nick.
>

7968. Re: [loopantennas] Re: Hexagonal Loop Antenna - Needs improvement.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-20 04:55:41 UTC
From: John Kolb
Topic: 7966 Message: 7968

The ability to use a balanced amp is the advantage a box loop
(basketweave or not) has
over a spiral wound loop. The box loop would be centertapped to the
amp gnd and the two
ends tuned with a dual gang variable cap, and the two amp inputs
connected at these points.

John

At 08:43 PM 10/19/2010, you wrote:

>Try a balanced hi impedance (FET) amp.
>
>--- In loopantennas@yahoogroups.com, "Nick B." <nick@...> wrote:
> >
> > I played around with this antenna using the 1-turn coupling loop fed
> > into my RX320 Receiver. Results seemed average, I can null strong locals
> > but the tuning seemed to get flatter the higher I go in frequency.

7969. Re: [loopantennas] Re: Hexagonal Loop Antenna - Needs improvement.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-21 20:06:09 UTC
From: Nick B.
Topic: 7966 Message: 7969

Thanks but I'm trying to avoid an amplifier in this case. Some free
time to hunt around for articles on transformers tonight and this one by
John Bryant came up :
http://home.comcast.net/~markwa1ion/exaol2/z_transformers.pdf

So hopefully I can get my hands on some -75 and -43 toroids this weekend.

73
Nick.

On 20/10/2010 05:55, John Kolb wrote:
>
>
>
> The ability to use a balanced amp is the advantage a box loop
> (basketweave or not) has
> over a spiral wound loop. The box loop would be centertapped to the
> amp gnd and the two
> ends tuned with a dual gang variable cap, and the two amp inputs
> connected at these points.
>
> John
>
> At 08:43 PM 10/19/2010, you wrote:
>
> >Try a balanced hi impedance (FET) amp.
> >
> >--- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, "Nick B." <nick@...> wrote:
> > >
> > > I played around with this antenna using the 1-turn coupling loop fed
> > > into my RX320 Receiver. Results seemed average, I can null strong
> locals
> > > but the tuning seemed to get flatter the higher I go in frequency.
>
>

[Non-text portions of this message have been removed]

7970. Looking for Article from The Lowdown.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-22 17:34:41 UTC
From: kugellagers
Topic: 7970 Message: 7970

Is there anyone who has a copy, can make a copy or scan an old article from The Lowdown?

Specifically I am looking for this article:

"Analysis & Design of Broadband Low Frequency Loops," Lowdown, April and May 1985

Thanks,

John
];')

7971. Re: [loopantennas] Looking for Article from The Lowdown.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-22 18:08:23 UTC
From: Chris Trask
Topic: 7970 Message: 7971

>
> Is there anyone who has a copy, can make a copy or scan an old article from
> The Lowdown?
>
> Specifically I am looking for this article:
>
> "Analysis & Design of Broadband Low Frequency Loops," Lowdown, April and May 1985
>

Are you sure about those dates? There's an article "Broadband LW Receiving Loop" in the May 19895 issue, and nothing in the April 1985 issue.

Chris

7972. Re: Looking for Article from The Lowdown.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-22 18:22:33 UTC
From: kugellagers
Topic: 7970 Message: 7972

I got the reference for the article from here:

http://users.tpg.com.au/users/ldbutler/VLF-LFLoopAerial.htm

So I am not sure other than that.

The article in the link as I am re-reading it says "... is described in the April 1989 issue of Lowdown (ref 3)."

But the reference labeled as 3 in "References" section at the bottom is exactly as in my original request.

Maybe it is actually from the 1989 issues?

If nothing else can be found matching the reference in the link I would also be interested in reading the article with the title you mentioned.

Cheers,

John
];')

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Is there anyone who has a copy, can make a copy or scan an old article
> from
> > The Lowdown?
> >
> > Specifically I am looking for this article:
> >
> > "Analysis & Design of Broadband Low Frequency Loops," Lowdown, April and
> May 1985
> >
>
> Are you sure about those dates? There's an article "Broadband LW
> Receiving Loop" in the May 19895 issue, and nothing in the April 1985 issue.
>
> Chris
>

7973. Re: Looking for Article from The Lowdown.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-22 18:18:55 UTC
From: kugellagers
Topic: 7970 Message: 7973

I got the reference for the article from here:

http://users.tpg.com.au/users/ldbutler/VLF-LFLoopAerial.htm

So I am not sure other than that.

The article in the link as I am re-reading it says "... is described in the April 1989 issue of Lowdown (ref 3)."

But the reference labeled as 3 in "References" section at the bottom is exactly as in my original request.

Maybe it is actually from the 1989 issues?

If nothing else can be found matching the reference in the link I would also be interested in reading the article with the title you mentioned.

Cheers,

John
];')

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Is there anyone who has a copy, can make a copy or scan an old article
> from
> > The Lowdown?
> >
> > Specifically I am looking for this article:
> >
> > "Analysis & Design of Broadband Low Frequency Loops," Lowdown, April and
> May 1985
> >
>
> Are you sure about those dates? There's an article "Broadband LW
> Receiving Loop" in the May 19895 issue, and nothing in the April 1985 issue.
>
> Chris
>

7974. Re: [loopantennas] Re: Looking for Article from The Lowdown.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-22 18:55:36 UTC
From: Chris Trask
Topic: 7970 Message: 7974

>
> I got the reference for the article from here:
>
> http://users.tpg.com.au/users/ldbutler/VLF-LFLoopAerial.htm
>
> So I am not sure other than that.
>
> The article in the link as I am re-reading it says "... is described in
the
> April 1989 issue of Lowdown (ref 3)."
>
> But the reference labeled as 3 in "References" section at the bottom is
> exactly as in my original request.
>
> Maybe it is actually from the 1989 issues?
>

Yes, that's where they are. I'll scan them later today.

Chris

7975. Re: Looking for Article from The Lowdown.

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-22 19:17:19 UTC
From: kugellagers
Topic: 7970 Message: 7975

Thanks. That would be greatly appreciated.

John
];')

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > I got the reference for the article from here:
> >
> > http://users.tpg.com.au/users/ldbutler/VLF-LFLoopAerial.htm
> >
> > So I am not sure other than that.
> >
> > The article in the link as I am re-reading it says "... is described in
> the
> > April 1989 issue of Lowdown (ref 3)."
> >
> > But the reference labeled as 3 in "References" section at the bottom is
> > exactly as in my original request.
> >
> > Maybe it is actually from the 1989 issues?
> >
>
> Yes, that's where they are. I'll scan them later today.
>
> Chris
>

7976. Capacitor Terminated Loop Arrays

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-22 20:22:53 UTC
From: longjohn119
Topic: 7976 Message: 7976

New article by Dallas Lankford

http://www.kongsfjord.no/dl/dl.htm

Dallas' work is always worth a look

JR

7977. Quantum QX Loop for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-10-24 16:11:59 UTC
From: neilbellgroups
Topic: 7977 Message: 7977

I have a Quantum QX Loop v2.0 PLUS for sale. I have two loops and find now that I only need one since I am rearranging my listening posts. The Quantum loop is a great DX tool. It sells or $239 plus S&H. see this for more info:

http://dxtools.com/QXv2+.htm

I would like to sell it here before I have to put it up on eBay. Asking price is $165 which includes shipping by priority mail! It is relatively new, acquired this year. Includes the AC Adapter and a 3 foot coax cable.

My eBay rating is 100% positive, user name is "neilbell"

Contact me in the next 5-6 days by E-MAIL, not on the group. I accept USPS money orders, paypal or personal check (10 days to clear).

Thanks for reading this,

Neil Bell
KJ6FBA

7978. Wellbrook ALA 100 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-04 14:05:58 UTC
From: jasonwell9657
Topic: 7978 Message: 7978

Hello

I have recently installed this antenna with disappointing results.

I used 3mm pvc covered stranded copper wire strung 2.5m above the ground. Would I be better off using plain solid copper wire not pvc covered stranded ?

Regards to all

Jason

7979. RE: [loopantennas] Wellbrook ALA 100 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-04 15:00:43 UTC
From: Mike Mayer
Topic: 7978 Message: 7979

The wire or insulation should not ne a problem. When you say disappointing results are you comparing it to a different antenna? I do not have experience with the ALA 100 but my understanding is that it should be very quiet, so make sure you are judging it on signal to noise ratio instead of the straight output level.

==========
Mike Mayer
mwmayer@...
-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of jasonwell9657
Sent: Thursday, November 04, 2010 9:06 AM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Wellbrook ALA 100 loop

Hello

I have recently installed this antenna with disappointing results.

I used 3mm pvc covered stranded copper wire strung 2.5m above the ground. Would I be better off using plain solid copper wire not pvc covered stranded ?

Regards to all

Jason

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

7980. Re: Wellbrook ALA 100 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-04 15:57:33 UTC
From: Craig D. Smith
Topic: 7978 Message: 7980

Can you be more descriptive than "2.5 meters above the ground"? What are the DIMENSIONS and shape of the loop??

73 Craig AC0DS

7981. Re: [loopantennas] Wellbrook ALA 100 loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-04 18:03:51 UTC
From: Don
Topic: 7978 Message: 7981

Hi Jason,

I installed an ALA-100 a few months ago and it is now my main E/W antenna for Dxing NDB's. Performance is equal to the PA0RDT as far as signal strength. This is usually a very quiet antenna except for occasional man made junk/rubbish RF.

My loop is a rectangle 32ft long x 12ft high (88ft circumference) in a fixed position with the bottom wire 3ft above the ground and the antenna module mounted on a short pole in the center of the bottom wires. I used these dimensions which are slightly greater than what Wellbrook recommends as I had two supports that were already in place 32ft apart. The wire I use is normal insulation 20ga stranded. Normally in my experience the type/size of wire doesn't matter much for receive antennas except for the obvious mechanical strength and mixing of different materials that could cause corrosion. I have also insured that 12vdc is at the ALA-100 Antenna module through a 100ft run of coax. I have also installed a 7ft RF ground stake in the ground near the antennas and common mode chokes on all coax ends.

Would be interested in what you mean by disappointing results??? If you can't resolve the problem you may want to contact Andy Akin at Wellbrook. I wish I had installed this antenna sooner! Hope to reach 1000 logs by the New Year!

Don
Upland, CA
34.10 -117.63 1250ft ASL
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
2x PA0RDT Mini-Whip @ 22ft
LFL1010 ALA100

On 04-Nov-10 07:05, jasonwell9657 wrote:
> Hello
>
> I have recently installed this antenna with disappointing results.
>
> I used 3mm pvc covered stranded copper wire strung 2.5m above the ground. Would I be better off using plain solid copper wire not pvc covered stranded ?
>
> Regards to all
>
> Jason
>
>
>
>
>

>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.864 / Virus Database: 271.1.1/3235 - Release Date: 11/03/10 01:36:00
>

7982. Just seen this....not good news

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-05 10:00:48 UTC
From: jasonwell9657
Topic: 7982 Message: 7982

Have I read this correctly
http://groups-announcements.blogspot.com/2010/09/notice-about-pages-and-\
files.html?hl=en
<http://http://groups-announcements.blogspot.com/2010/09/notice-about-pa\
ges-and-files.html?hl=en>

[Non-text portions of this message have been removed]

7983. Re: [loopantennas] Just seen this....not good news

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-05 13:00:11 UTC
From: Chris Trask
Topic: 7982 Message: 7983

>
>Have I read this correctly
>http://groups-announcements.blogspot.com/2010/09/notice-about-pages-and-\
>files.html?hl=en
>

I unsubscribed from a Google group recently. Seems that they have no control over spamming, etc., and I got tired of the obscene postings that nobody seemed to have any control over.

What is is about "quality control" that they don't understand?

Chris

7984. Chris Trask: Your opinion please

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-07 17:57:09 UTC
From: al_ka5jgv
Topic: 7984 Message: 7984

Hello Chris,

If one looks on the internet for opinions on shielded vs un-shielded loop antennas, they are numerous and somewhat emotion driven. If I were to build two tuned loops (for the 200 - 550kHz band) as identical as possible, one made with pvc pipe for the outside frame, the other from copper (say both were 3/4" or 1" dia.), which would you recommend as the better choice and why?

Thank you.

Al KA5JGV
San Antonio, TX

7985. Re: [loopantennas] Chris Trask: Your opinion please

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-07 21:00:56 UTC
From: Chris Trask
Topic: 7984 Message: 7985

>
> If one looks on the internet for opinions on shielded vs un-shielded loop
> antennas, they are numerous and somewhat emotion driven. If I were to
build
> two tuned loops (for the 200 - 550kHz band) as identical as possible, one
> made with pvc pipe for the outside frame, the other from copper (say both
> were 3/4" or 1" dia.), which would you recommend as the better choice and
why?
>

I'm assuming that you would be using the PVC pipe to support a heavy-gage wire. If so, then there is a great deal of advantage in using the copper pipe, which has to do with the bulk (ie - loss) resistance of the conductor. Given two conductors made with the came material, therefore having the same conductivity and skin depth, the larger diameter material will have a greater surface area, and therefore a lower loss (or bulk) resistance.

There are two distinct advantages in having a lower loss resistance. First, with lower losses the equivalent noise temperature of the antenna will be lower, which will improve the NF of the receiving system. Since loops have significantly lower radiation resistances than most other forms of antennas, this is a significant factor.

Secondly, the lower loss resistance will equate to a lower total resistance of the antenna, which in turn will result in a higher antenna Q. For a wideband active loop this may not be an issue, but for a higher performing loop using series tuning, the higher Q of the loop using the larger conductor will result in greater selectivity at the earliest point in the receiving system, which may be an important issue when having to contend with strong adjacent signals.

Chris

7986. Wellbrook Loop Earthing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-08 17:23:53 UTC
From: jasonwell9657
Topic: 7986 Message: 7986

Hi

I hope this does not come across as a silly question, I have a Wellbrook 1530s & 1010 both of which suffer badly from noise. Tried everything over several weeks but cannot improve reception.

Both the SDR I use and the PC have liner power supplies to reduce noise but now I am thinking can I or should I earth the loops?

Regards to all

7987. Re: Chris Trask: Your opinion please

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-08 17:25:23 UTC
From: vbifyz
Topic: 7984 Message: 7987

Somewhat unrelated question: what minimum loop diameter one can achieve with 1" PVC pipe or copper pipe before it breaks/dents? Just curious.

Mike

--- In loopantennas@yahoogroups.com, "al_ka5jgv" <aburzynski@...> wrote:
>
> Hello Chris,
>
> If one looks on the internet for opinions on shielded vs un-shielded loop antennas, they are numerous and somewhat emotion driven. If I were to build two tuned loops (for the 200 - 550kHz band) as identical as possible, one made with pvc pipe for the outside frame, the other from copper (say both were 3/4" or 1" dia.), which would you recommend as the better choice and why?
>
> Thank you.
>
> Al KA5JGV
> San Antonio, TX
>

7988. Re: [loopantennas] Re: Chris Trask: Your opinion please

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-08 17:45:21 UTC
From: Chris Trask
Topic: 7984 Message: 7988

>
> Somewhat unrelated question: what minimum loop diameter one can achieve with
> 1" PVC pipe or copper pipe before it breaks/dents? Just curious.
>

That I cannot say as I have no first-hand experience bending either.
It's much easier for me to use flexible 1/4" and 1/2" copper tubing, and it's available up to 1". It's quite expensive in the larger diameters, but it's far easier to work with than rigid copper pipe. To bend copper pipe you would need a bending fixture of some sort so that it won't collapse, and PVC pipe needs to be heated in order to bend it.

Chris

7989. Re: [loopantennas] Re: Chris Trask: Your opinion please

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-08 19:25:29 UTC
From: brian nsl
Topic: 7984 Message: 7989

Mike,
I have bent 3/4in PVC tube (electrical conduit grade, not water pipe)
to a 2ft diameter using a wooden former to suit the radius and a hair dryer
to warm the tube.
The secret is to let the tube bend naturally and not force the process
(you could put a length of plastic garden hose down to prevent kinking).
My latest loops are octagonal using 8mm dia copper tube but the bending
is the same method on a wooden former, 120 degree angle)
Good Luck,
72,Brian.
----- Original Message -----
From: vbifyz
To: loopantennas@yahoogroups.com
Sent: Monday, November 08, 2010 5:25 PM
Subject: [loopantennas] Re: Chris Trask: Your opinion please

[Non-text portions of this message have been removed]

7990. Re: [loopantennas] Wellbrook Loop Earthing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-08 19:48:28 UTC
From: Andy Ikin
Topic: 7986 Message: 7990

Jason wrote on Nov. 8.

"I hope this does not come across as a silly question, I have a Wellbrook 1530s & 1010 both of which suffer badly from noise. Tried everything over several weeks but cannot improve reception.

Both the SDR I use and the PC have liner power supplies to reduce noise but now I am thinking can I or should I earth the loops?

Regards to all"

Jason, If you are going to earth the loop, then you should do this at the Rx end of the feeder screen. Grounding the loop directly; say connecting the feeder screen to earth may increase the noise due to the feeder acting as a loop antenna via the mains power earth. The noise problem could be the SDR and PC; is the noise still there if you use a conventional Rx?
Alternatively the house mains wiring could be inducing conducted or radiating noise to the antenna. If the noise is mainly above say 3MHz this could be due to a nearby Power Line Transmission device used providing data over mains wiring. LFand MF noise could be due to a nearby switched mode power supply. You could try using a mains filter with an earth line choke to feed the SDR, PC and loop PSU.

Some types of linear PSU are switching regulator types, these can be noisy!!!!

Also the loop power supply could be faulty, this is not likely with Power Supplies provided to North American customers.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

7991. Re: [loopantennas] Wellbrook Loop Earthing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-09 00:14:59 UTC
From: Don
Topic: 7986 Message: 7991

In addition to what Andy Akin wrote you might try using some common mode chokes. I built and installed them on all my coaxes and they did help. Usually there is
no magic wand cure for noise, but several things may help. Even moving your antenna(s) may help as well. Good luck!

Don
Upland, CA
34.10 -117.63 1250ft ASL
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
2x PA0RDT Mini-Whip @ 22ft
LFL1010 ALA100

On 08-Nov-10 09:23, jasonwell9657 wrote:
> Hi
>
> I hope this does not come across as a silly question, I have a Wellbrook 1530s& 1010
> both of which suffer badly from noise. Tried everything over several weeks but cannot improve reception.
>
> Both the SDR I use and the PC have liner power supplies to reduce noise but now I am thinking can I or should I earth the loops?
>
> Regards to all
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.864 / Virus Database: 271.1.1/3243 - Release Date: 11/07/10 11:34:00
>

7992. Re: Chris Trask: Your opinion please

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-09 00:57:45 UTC
From: al_ka5jgv
Topic: 7984 Message: 7992

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
> I'm assuming that you would be using the PVC pipe to support a
> heavy-gage wire.
> Chris

Chris,
Thank you for your reply. I am considering and analyzing your answer.

Perhaps I wasn't clear on the antenna question. I have already built a tuned loop antenna. It consists of a 3/4" pvc frame in an octagonal shape, 4-1/2 feet across the flats. I fed 12 turns of wire into the pvc pipe as my antenna primary with varactor diodes and additional switched capacitance paralleling the primary for tuning. I have one turn of wire within the pvc pipe as my pickup coil along with a multi-impedance matching transformer for best guess connection to the receiver. The antenna is used strictly for reception and is resonant from about 180-550kHz. The antenna works quite well. I have received over 1,100 signals in that band, mostly NDBs, NAVTEX, and DGPS.

My worst problem is, like others here, noise. Horrible noise. My question is, if I built another antenna just like the present, except I replaced the PVC pipe with 3/4" copper tubing, would the copper tubing help me get rid of some, hopefully a lot, of the noise? I know that I'm not detailing the noise problem to you, but just in general concept, would the grounded copper tubing, with an opened gap at the top, help with noise reduction?

I have read a lot of your papers, a lot of them are above me. But I feel you are contributing a lot to this group with your technical knowledge. Thank you.

Al KA5JGV
San Antonio, TX

7993. Re: [loopantennas] Re: Chris Trask: Your opinion please

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-09 14:25:52 UTC
From: John Kolb
Topic: 7984 Message: 7993

Al, I think you could test the effect of the shield by wrapping your current PVC loop
with aluminum foil, with a gap at the top. Foil could be connected directly to ground,
isolated from the antenna wiring, or as Andy suggested, connected to coax shield,
which is then grounded near the receiver.

John
KK6IL

At 04:57 PM 11/8/2010, you wrote:

>Chris,
>Thank you for your reply. I am considering and analyzing your answer.
>
>Perhaps I wasn't clear on the antenna question. I have already built
>a tuned loop antenna. It consists of a 3/4" pvc frame in an
>octagonal shape, 4-1/2 feet across the flats. I fed 12 turns of wire
>into the pvc pipe as my antenna primary with varactor diodes and
>additional switched capacitance paralleling the primary for tuning.
>I have one turn of wire within the pvc pipe as my pickup coil along
>with a multi-impedance matching transformer for best guess
>connection to the receiver. The antenna is used strictly for
>reception and is resonant from about 180-550kHz. The antenna works
>quite well. I have received over 1,100 signals in that band, mostly
>NDBs, NAVTEX, and DGPS.
>
>My worst problem is, like others here, noise. Horrible noise. My
>question is, if I built another antenna just like the present,
>except I replaced the PVC pipe with 3/4" copper tubing, would the
>copper tubing help me get rid of some, hopefully a lot, of the
>noise? I know that I'm not detailing the noise problem to you, but
>just in general concept, would the grounded copper tubing, with an
>opened gap at the top, help with noise reduction?
>
>I have read a lot of your papers, a lot of them are above me. But I
>feel you are contributing a lot to this group with your technical
>knowledge. Thank you.
>
>Al KA5JGV
>San Antonio, TX

7994. Re: [loopantennas] Wellbrook Loop Earthing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-09 09:38:07 UTC
From: Jason Well
Topic: 7986 Message: 7994

Hello Andrew
Thank you for your suggestions.
I have a 2 very quite custom built (expensive) linear power supplies that powers everything DC including my PC.
I also use several ISOL-8 units within the house.
Tried moving the Wellbrook loops around the garden, higher / lower nothing helps
Tried an earth from just before the antenna cable enters the DCblock that goes to a copper earth stake in the garden
Will dig out my old AOR 3000a and try that and will also go hunting for PLT's but would have expected to have heard those on my portables.

Kind regards

Jason

From: Andy Ikin <andrew.ikin@...>
To: loopantennas@yahoogroups.com
Sent: Mon, November 8, 2010 7:48:28 PM
Subject: Re: [loopantennas] Wellbrook Loop Earthing ?

Jason wrote on Nov. 8.

"I hope this does not come across as a silly question, I have a Wellbrook 1530s & 1010
both of which suffer badly from noise. Tried everything over several weeks but cannot improve reception.

Both the SDR I use and the PC have liner power supplies to reduce noise but now I am thinking can I or should I earth the loops?

Regards to all"

Jason, If you are going to earth the loop, then you should do this at the Rx end of the feeder screen. Grounding the loop directly; say connecting the feeder screen to earth may increase the noise due to the feeder acting as a loop antenna via the mains power earth. The noise problem could be the SDR and PC; is the noise still there if you use a conventional Rx?
Alternatively the house mains wiring could be inducing conducted or radiating noise to the antenna. If the noise is mainly above say 3MHz this could be due to a nearby Power Line Transmission device used providing data over mains wiring. LFand MF noise could be due to a nearby switched mode power supply. You could try using a mains filter with an earth line choke to feed the SDR, PC and loop PSU.

Some types of linear PSU are switching regulator types, these can be noisy!!!!

Also the loop power supply could be faulty, this is not likely with Power Supplies provided to North American customers.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

7995. Re: [loopantennas] Wellbrook Loop Earthing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-09 11:12:30 UTC
From: Jason Well
Topic: 7986 Message: 7995

Hello Don
Thanks for the idea, had tried this and it makes a very small difference up towards the 15m band.
Regards

Jason

From: Don <stb55@...>
To: loopantennas@yahoogroups.com
Sent: Tue, November 9, 2010 12:14:59 AM
Subject: Re: [loopantennas] Wellbrook Loop Earthing ?

In addition to what Andy Akin wrote you might try using some common mode chokes. I built and installed them on all my coaxes and they did help. Usually there is

no magic wand cure for noise, but several things may help. Even moving your antenna(s) may help as well. Good luck!

Don
Upland, CA
34.10 -117.63 1250ft ASL
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
2x PA0RDT Mini-Whip @ 22ft
LFL1010 ALA100

On 08-Nov-10 09:23, jasonwell9657 wrote:
> Hi
>
> I hope this does not come across as a silly question, I have a Wellbrook 1530s&
>1010
> both of which suffer badly from noise. Tried everything over several weeks but
>cannot improve reception.
>
> Both the SDR I use and the PC have liner power supplies to reduce noise but now
>I am thinking can I or should I earth the loops?
>
> Regards to all
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!

> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links
>rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into
>Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.864 / Virus Database: 271.1.1/3243 - Release Date: 11/07/10
>11:34:00
>

[Non-text portions of this message have been removed]

7996. Re: [loopantennas] Wellbrook Loop Earthing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-09 15:56:42 UTC
From: Don
Topic: 7986 Message: 7996

Hi Jason,

Yes, I just saw your other post. I would think the next step would be to try to determine where all the noise is coming from with a portable rx and checking
electrical devices in your home.

Don
Upland, CA
34.10 -117.63 1250ft ASL
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
2x PA0RDT Mini-Whip @ 22ft
LFL1010 ALA100

On 09-Nov-10 03:12, Jason Well wrote:
> Hello Don
> Thanks for the idea, had tried this and it makes a very small difference up
> towards the 15m band.
> Regards
>
> Jason
>
>
>
>
> _____
> From: Don<stb55@...>
> To: loopantennas@yahoogroups.com
> Sent: Tue, November 9, 2010 12:14:59 AM
> Subject: Re: [loopantennas] Wellbrook Loop Earthing ?
>
>
> In addition to what Andy Akin wrote you might try using some common mode chokes.
> I built and installed them on all my coaxes and they did help. Usually there is
>
> no magic wand cure for noise, but several things may help. Even moving your
> antenna(s) may help as well. Good luck!
>
> Don
> Upland, CA
> 34.10 -117.63 1250ft ASL
> 2x R-75 w/250Hz R-71A w/250Hz R-70
> SDR-IQ SR-AF& LPF DSP599zx
> MFJ-784B HD-1418 AF-1 MSB-1
> 2x PA0RDT Mini-Whip @ 22ft

> LFL1010 ALA100
>
> On 08-Nov-10 09:23, jasonwell9657 wrote:
>> Hi
>>
>> I hope this does not come across as a silly question, I have a Wellbrook 1530s&
>> 1010
>> both of which suffer badly from noise. Tried everything over several weeks but
>> cannot improve reception.
>>
>> Both the SDR I use and the PC have liner power supplies to reduce noise but now
>> I am thinking can I or should I earth the loops?
>>
>> Regards to all
>>
>>
>>
>> ------------------------------------
>>
>> If you've got links, post them in the Links section!
>> http://groups.yahoo.com/group/loopantennas/links
>>
>> Post files here. If the file comes from a website, please put it in the Links
>> rather than uploading the file.
>> http://groups.yahoo.com/group/loopantennas/files
>>
>> You can now view images at higher resolution in Photos. Upload JPG and GIF into
>> Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>> http://ph.groups.yahoo.com/group/loopantennas/photos
>>
>> And please trim all this when replying!Yahoo! Groups Links
>>
>>
>>
>>
>>
>> No virus found in this incoming message.
>> Checked by AVG - www.avg.com
>> Version: 9.0.864 / Virus Database: 271.1.1/3243 - Release Date: 11/07/10
>> 11:34:00
>>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>

> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.864 / Virus Database: 271.1.1/3245 - Release Date: 11/08/10 11:34:00
>

7997. Best Bet Loop Type Made with Surplus Cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-09 16:42:08 UTC
From: kugellagers
Topic: 7997 Message: 7997

I have about 50 +/-ft of a gray covered mil-spec looking cable with no numbering or lettering on it.

With a freshly stripped area it looks like it consists of a 12-14 gauge twisted pair of multi-strand wire wrapped in a foil shield wrapped with a 16-18 gauge bare ground wire.

Is this useful for anything loop antenna-wise? Or would I be better off using it as a shielded power cord?

John
];')

7998. Re: Best Bet Loop Type Made with Surplus Cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-12 15:50:51 UTC
From: Bruce Carter
Topic: 7997 Message: 7998

It is too short to be made into a loop antenna for AM. I use about 120 feet for each loop. In addition - the larger gauge wire is shielded. A lot of conversation of this group has been about shielded loops so I just fade into the audit mode when that stuff is posted here - I've NEVER had any luck making a shielded loop. My advice is - don't even try.

For shortwave, it might be of some use, but loop antenna efficiency falls off rapidly as the frequency rises. By 30 MHz, it is probably not worth the effort.

--- In loopantennas@yahoogroups.com, "kugellagers" <kugellager@...> wrote:
>
> I have about 50 +/-ft of a gray covered mil-spec looking cable with no numbering or lettering on it.
>
> With a freshly stripped area it looks like it consists of a 12-14 gauge twisted pair of multi-strand wire wrapped in a foil shield wrapped with a 16-18 gauge bare ground wire.
>
> Is this useful for anything loop antenna-wise? Or would I be better off using it as a shielded power cord?
>
> John
>];')
>

7999. Re: Best Bet Loop Type Made with Surplus Cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-12 20:35:05 UTC
From: Stephan
Topic: 7997 Message: 7999

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> A lot of conversation of this group has been about shielded loops
> so I just fade into the audit mode when that stuff is posted here -
> I've NEVER had any luck making a shielded loop. My advice is -
> don't even try.

Shielded loops are only of use under very specific conditions, as
outlined in the old RWP King book:
http://www.w8ji.com/loop_text.htm

The cable in question might make a half-decent balanced feed cable,
or a pretty good balanced microphone cable.

BTW, Bruce, your loop antenna pages have not exactly been the very
definition of availability lately. Since I recently set up a little
page on physically small antennas anyway (still learning a lot), I
adapted your JS inductance calculators for use on there.

Stephan

8000. Re: Best Bet Loop Type Made with Surplus Cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-14 23:02:48 UTC
From: xtemporize
Topic: 7997 Message: 8000

A similar cable but with solid conductors of about 24 guage used to
be used a lot in telecom wiring, but seems to be mostly replaced now
with tighter twisted CAT5 pair wire. I have a good supply myself of that 2-conductor with
foil and runner cable. I was thinking of trying it
for the coax downlead from loop or other antenna. I do not know the
characteristic impedance at this time of this cable. It was usually used at T1 speed data
and the usual impedance for that work is 93 ohms,
i believe. Still, a mismatch in receiving, as compared to transmitting,
is not that big a deal, and especially for moderate length runs. I was
mostly interested in learning if true balanced to ground and shielded
antenna feed wire would cut down on pickup of close-in noise.
-Hue Miller / Newport, Oregon, USA

8001. Re: Best Bet Loop Type Made with Surplus Cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-15 19:52:31 UTC
From: Chris and Symon Kennedy
Topic: 7997 Message: 8001

Hue

A commentary on small loop's and an interesting loop amplifier design that includes a shielded twisted pair feeder can be found at:

http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm

Certainly worth a visit for anyone interested in small receiving loops and amplifiers.

73, Symon G4DND

I am using the Free version of SPAMfighter <http://www.spamfighter.com/len>
.
SPAMfighter has removed 57 of my spam emails to date.

Do you have a slow PC? <http://www.spamfighter.com/SLOW-PCfighter?cid=sigen>
Try free scan!

[Non-text portions of this message have been removed]

8002. Re: [loopantennas] Re: Best Bet Loop Type Made with Surplus Cable (LZ1AQ article)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-15 22:27:41 UTC
From: Steve Ratzlaff
Topic: 8002 Message: 8002

This past summer I did a number of loop and loop preamp experiments, including building the LZ1AQ loop preamp and the "crossed-parallel" loops. In his preamp I substituted transformers with more inductance to get response down to LF. I found the preamp to be noisy over the whole LF-HF range and inferior to other loop preamps I was testing. I built four 38 inch diameter loops and connected them in the "cross-parallel" configuration, and compared their performance from LF-HF to a single-turn loop of the same combined area, with the same conductor width as the C-P loops (I used the outer shield of RG-8 coax cable for all loops). At no frequency did I find the "crossed-parallel" loops with lower inductance to be superior to the single-turn loop with higher inductance, no matter which loop preamp was used. My results did not come close to matching his claimed results. I would be very interested to hear of other's results should they build the LZ1AQ loop preamp and/or the "crossed-parallel" loops, and have compared them with single-turn loops, and other loop preamps.
73,
Steve

----- Original Message -----
From: "Chris and Symon Kennedy" <torview@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, November 15, 2010 11:52 AM
Subject: [loopantennas] Re: Best Bet Loop Type Made with Surplus Cable

> Hue
>
> A commentary on small loop's and an interesting loop amplifier design that
> includes a shielded twisted pair feeder can be found at:
>
> http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
>
> Certainly worth a visit for anyone interested in small receiving loops and
> amplifiers.
>
> 73, Symon G4DND
>
>
>
>
> _____
>
> I am using the Free version of SPAMfighter
> <http://www.spamfighter.com/len>
> .

> SPAMfighter has removed 57 of my spam emails to date.
>
> Do you have a slow PC?
> <http://www.spamfighter.com/SLOW-PCfighter?cid=sigen>
> Try free scan!
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

8003. Re: [loopantennas] Re: Best Bet Loop Type Made with Surplus Cable (LZ1AQ article)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-15 22:31:36 UTC
From: Steve Ratzlaff
Topic: 8002 Message: 8003

This past summer I did a number of loop and loop preamp experiments, including building the LZ1AQ loop preamp and the "crossed-parallel" loops in the mentioned article.
In his preamp I substituted transformers with more inductance to get response down to LF. But I found the preamp to be noisy over the whole LF-HF range and inferior to most other loop preamps I was testing. I built four 38 inch
diameter loops and connected them in the "cross-parallel" configuration, and compared their performance from LF-HF to a single-turn loop of the same combined area (about 73 inch diameter), with the same conductor width as the C-P loops. At no frequency did I find the "crossed-parallel" loops with lower inductance to be superior to the single-turn loop with higher inductance, no matter which loop preamp was used. My results did not come close to matching his claimed results. I would
be very interested to hear of other's results should they build the LZ1AQ loop preamp and/or the "crossed-parallel" loops, and compare them with single-turn loops, and other loop preamps.
73,
Steve

----- Original Message -----
From: "Chris and Symon Kennedy" <torview@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, November 15, 2010 11:52 AM
Subject: [loopantennas] Re: Best Bet Loop Type Made with Surplus Cable

> Hue
>
> A commentary on small loop's and an interesting loop amplifier design that
> includes a shielded twisted pair feeder can be found at:
>
> http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
>
> Certainly worth a visit for anyone interested in small receiving loops and
> amplifiers.
>
> 73, Symon G4DND

8004. Can someone explain to me

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-16 19:03:53 UTC
From: Lew
Topic: 8004 Message: 8004

Why in all the loop literature I've seen (not read every post here yet) does the capacitor in a loop antenna HAVE to be at the opposite side of the loop to the feedpoint?

I intend to make a small loop, maybe 3-4M in circumference for reception only at first but at some stage I will be using it for transmit, and I cant work out why the capacitor HAS to be at the opposite side,
WHY cant it be "at" the feedpoint?

8005. Re: Can someone explain to me

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-16 21:43:03 UTC
From: vbifyz
Topic: 8004 Message: 8005

My guess is that you want to avoid high electric fields near the feedpoint. For RX-only this shouldn't be a problem. In fact, I've made a small RX-only loop with the coupling loop attached to it very close to the tuning capacitor (15-20 degrees). It works just fine.

Mike

--- In loopantennas@yahoogroups.com, "Lew" <lew247@...> wrote:
>
> Why in all the loop literature I've seen (not read every post here yet) does the capacitor in a loop antenna HAVE to be at the opposite side of the loop to the feedpoint?
>
> I intend to make a small loop, maybe 3-4M in circumference for reception only at first but at some stage I will be using it for transmit, and I cant work out why the capacitor HAS to be at the opposite side,
> WHY cant it be "at" the feedpoint?
>

8006. Re: [loopantennas] Re: Can someone explain to me

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-16 22:38:22 UTC
From: Chris Trask
Topic: 8004 Message: 8006

```
>
> > Why in all the loop literature I've seen (not read every post here yet)
does
> > the capacitor in a loop antenna HAVE to be at the opposite side of the
loop
> > to the feedpoint?
> >
> > I intend to make a small loop, maybe 3-4M in circumference for reception
only
> > at first but at some stage I will be using it for transmit, and I cant
work
> > out why the capacitor HAS to be at the opposite side,
> > WHY cant it be "at" the feedpoint?
>
>
> My guess is that you want to avoid high electric fields near the
feedpoint. For
> RX-only this shouldn't be a problem. In fact, I've made a small RX-only
loop
> with the coupling loop attached to it very close to the tuning capacitor
(15-20
> degrees). It works just fine.
>

I dismissed the "far side" capacitor years ago as they were expensive
and mechanically awkward. Instead, I devised a series of transmitting and
receive-only loop antennas that have a dual variable tuning capacitor at the
feedpoint:

http://www.home.earthlink.net/~christrask/Paper012.html

http://www.home.earthlink.net/~christrask/Paper011.html

http://www.home.earthlink.net/~christrask/Paper018.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/
```

8007. Re: Best Bet Loop Type Made with Surplus Cable

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-17 18:27:03 UTC
From: Bruce Carter
Topic: 7997 Message: 8007

> BTW, Bruce, your loop antenna pages have not exactly been the very
> definition of availability lately.

Tell me about it! I am so disgusted at Mindspring - well Earthlink - if I found a decent free unlimited host I'd probably switch. The only thing holding me to them is email addresses and web pages - some of which I haven't touched in 12 years. My wife wouldn't want to change email addresses, either.

> page on physically small antennas anyway (still learning a lot), I
> adapted your JS inductance calculators for use on there.

I don't mind as long as you credit me for the original work.

8008. wireless solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-18 09:30:14 UTC
From: James
Topic: 8008 Message: 8008

I have a Sony receiver for my garage. It has an intermittent static crackle across all inputs and AM radio. Some days it has it, some days not. I've determined that it only happens when the AM loop is connected. I've tried inserting solid copper ground wire in either AM terminal, and bending it over to both terminals. The crackle persists when either terminal is contacted.
Would a wireless antenna like Terk AM Advantage improve my reception at all on a unit like that? Would somehow grounding the receiver or antenna help?
My goal is to hear my local ESPN affiliate, virtually next door, and static free ipod use without having to unplug my antenna.
Any help would be appreciated.

8009. Re: [loopantennas] wireless solution?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-18 17:17:02 UTC
From: Tom Humes
Topic: 8008 Message: 8009

It would have taken less time to just try grounding the ant or radio than to post this. Now that I have spanked you, it sounds like an open circuit somewhere. It probably is not a complete open but a frayed open. An example would be if the shielding strands around a cable were half torn off; that could cause a problem. I don't think it will be as simple as that though. Just try grounding it in a variety of ways. Direct to a copper rod driven into earth is my favorite way. I use 5/8" copper rod. It is expensive, but does the job. That will prove the grounding theory or show the problem is different.

--- On Thu, 11/18/10, James <harmie79@...> wrote:

From: James <harmie79@...>
Subject: [loopantennas] wireless solution?
To: loopantennas@yahoogroups.com
Date: Thursday, November 18, 2010, 2:30 AM

I have a Sony receiver for my garage. It has an intermittent static crackle across all inputs and AM radio. Some days it has it, some days not. I've determined that it only happens when the AM loop is connected. I've tried inserting solid copper ground wire in either AM terminal, and bending it over to both terminals. The crackle persists when either terminal is contacted.
Would a wireless antenna like Terk AM Advantage improve my reception at all on a unit like that? Would somehow grounding the receiver or antenna help?
My goal is to hear my local ESPN affiliate, virtually next door, and static free ipod use without having to unplug my antenna.
Any help would be appreciated.

[Non-text portions of this message have been removed]

8010. Gear Drive Ball Bearing Antique Tuning Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-24 17:21:37 UTC
From: Ken
Topic: 8010 Message: 8010

I know people always seem to be hunting for these.
Is this to low cap to be useful for loops?

http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992

CK

8011. Re: Gear Drive Ball Bearing Antique Tuning Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-24 17:43:36 UTC
From: Klaus Kranich
Topic: 8010 Message: 8011

--- In loopantennas@yahoogroups.com, "Ken" <faxcap@...> wrote:
>
> I know people always seem to be hunting for these.
> Is this to low cap to be useful for loops?
>
>
> http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992
>
> CK
>
I think this is not good for loops. The capacity is much to less,
you will not achieve a wide frequence range. It´s better to look for at least 375 - 1000pf types. It depends on what a frequence range you intend to reach with your loop. - sorry for my english, my tonge is german.

cu Klaus

8012. Re: [loopantennas] Gear Drive Ball Bearing Antique Tuning Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-24 18:21:08 UTC
From: Chris Trask
Topic: 8010 Message: 8012

>
> I know people always seem to be hunting for these.
> Is this to low cap to be useful for loops?
>
> http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992
>

Unfortunately, far too low for use with loops. But, very nice for a VHF or UHF VFO.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8013. Re: Gear Drive Ball Bearing Antique Tuning Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-24 19:43:34 UTC
From: Klaus Kranich
Topic: 8010 Message: 8013

--- In loopantennas@yahoogroups.com, "Ken" <faxcap@...> wrote:
>
> I know people always seem to be hunting for these.
> Is this to low cap to be useful for loops?
>
>
> http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992
>
> CK
>
by the way: if you´re looking for an very good loop antenna calculator, here´s a helpful link:

http://www.dl0hst.de/magnetlooprechner.htm

With this tool you can calculate by typing in the diameter of your loop antenna you intend tobuild and the capacitiy what for frequence- and frequence range, Q, bandwith and more you can estimate.
If you´re looking for appropriate variable capacitors, there´s no problem to get one, also able for transmission up to 100 Watts or more. Here in germany there is an manufacturer...

cheers Klaus

8014. RE: [loopantennas] Re: Gear Drive Ball Bearing Antique Tuning Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-24 23:43:10 UTC
From: Ray Phillips
Topic: 8010 Message: 8014

The suitability of a capacitor depends, to a large extent, on how wide the frequency range you want your loop to tune.
But, the wider the range of the capacitor, the greater the pF variation per degree of plate rotation and the more difficult it is to tune accurately.
Take a capacitor with 180 degree rotation for a change of 360pF - that's 2pF per degree.
But what if the range of the capacitor was only 90pF - that's .5pF per degree - a lot easier to tune.

My loop (5.8M circumference circle - 15mm copper pipe) is used for 7MHz to 7.2MHz only.
I need a variation of only 6pF to tune all of my frequencies of interest.
If I wanted to tune to the (say) 20M band as well, I would need a capacitor with a range of 80pF.
If I was to use a 9M loop of the same material, I would need a capacitor with a range of 140pF to tune the 40M-20M bands.

I currenly use a piece of RG58 cut to length to provide coarse tuning and an 8-90pF air variable for the fine tuning.
Due to the range of the variable capacitor, I could do away with the RG58 but I will be testing the high voltage abilities of the coax.
Even with a rotation speed of 1 RPM, tuning is very fiddly. Reducing the RPM further is not an option because geartrain backlash is already significant.
I am currently building a 15-35pF variable capacitor to make tuning easier and will prune it smaller if success permits.

The other significant parameter of a capacitor is its voltage rating.
If you are going to use the loop for receiving only then just about any capacitor of the right pF range will do.
If you are going to use the loop for transmitting, you need to be aware that loops can produce VERY LARGE VOLTAGES.
100Watts into a tuned loop will produce 4KV to >7KV depending on who's paper you believe.
Either way you need a good high-voltage capacitor.

To summarise: the suitability of a variable capacitor depends on the loop itself and the use to which the loop is put.

I use loopcalc and capcalc, both available from http://www.magneticloopantenna.com.

To answer your question - in the right circumstances, yes those capacitors are OK. The range of 5-20pF would give a frequency swing of
(on their own) 2:1 and so they are not suitable for covering a wide band such the AM band but would certainly be suitable to cover a single ham band.
The plate spacing looks to be a bit wider than a "receiving" capacitor and so they might be OK in a low power transmitting loop (not the full 100Watts though).

All the best,
Ray

vk5ugs

To: loopantennas@yahoogroups.com
From: kranichklaus@...
Date: Wed, 24 Nov 2010 19:43:34 +0000
Subject: [loopantennas] Re: Gear Drive Ball Bearing Antique Tuning Capacitor

--- In loopantennas@yahoogroups.com, "Ken" <faxcap@...> wrote:

>

> I know people always seem to be hunting for these.

> Is this to low cap to be useful for loops?

>

>

> http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992

>

> CK

>

by the way: if you?re looking for an very good loop antenna calculator, here?s a helpful link:

http://www.dl0hst.de/magnetlooprechner.htm

With this tool you can calculate by typing in the diameter of your loop antenna you intend tobuild and the capacitiy what for frequence- and frequence range, Q, bandwith and more you can estimate.

If you?re looking for appropriate variable capacitors, there?s no problem to get one, also able for transmission up to 100 Watts or more. Here in germany there is an manufacturer...

cheers Klaus

[Non-text portions of this message have been removed]

8015. Loop calculator !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-25 08:44:57 UTC
From: brian nsl
Topic: 8015 Message: 8015

Klaus,
The calculator link looks very interesting, is there an English version
that you are aware of ????
I tried the normal ' translate ' route but keep getting ' programme is too large
to translate ' !!!!
Any help please ????
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Klaus Kranich
To: loopantennas@yahoogroups.com
Sent: Wednesday, November 24, 2010 7:43 PM
Subject: [loopantennas] Re: Gear Drive Ball Bearing Antique Tuning Capacitor

[Non-text portions of this message have been removed]

8016. Re: Loop calculator !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-25 14:09:43 UTC
From: Klaus Kranich
Topic: 8015 Message: 8016

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Klaus,
> The calculator link looks very interesting, is there an English version
> that you are aware of ????
> I tried the normal ' translate ' route but keep getting ' programme is too large
> to translate ' !!!!
> Any help please ????
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: Klaus Kranich
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, November 24, 2010 7:43 PM
> Subject: [loopantennas] Re: Gear Drive Ball Bearing Antique Tuning Capacitor
>
>
>
>
> [Non-text portions of this message have been removed]
>
Hello Brian,

I think there is no english version available.
I will try to translate it. Plaese give me some time.
Currently I lay in the hospital after a heavy surgery so I have time... :-)

Yes, the calculater is very comfortable indeed ! Since I discovered
this helpful tool, it helps me a lot in developing some antennas.

I will give you a hint, when my work is done !

If you have problems to download the zip, I can send it to you. I sent it to my father too,
it was easy for him to unzip and to play around with.
If you have once the program running, it is nearly self-explaining...

stay tuned

vy 73, cheers Klaus (xcuse my english....)

8017. Re: [loopantennas] Re: Loop calculator !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-25 14:38:01 UTC
From: brian nsl
Topic: 8015 Message: 8017

Klaus,
Sorry to hear about your surgery, hope all goes well for you.
At your convenience for the loop calculator, no problem.
Regards,
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Klaus Kranich
To: loopantennas@yahoogroups.com
Sent: Thursday, November 25, 2010 2:09 PM
Subject: [loopantennas] Re: Loop calculator !!!!

[Non-text portions of this message have been removed]

8018. Re: Gear Drive Ball Bearing Antique Tuning Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-25 17:08:50 UTC
From: tenorman1952
Topic: 8010 Message: 8018

--- In loopantennas@yahoogroups.com, "Ken" <faxcap@...> wrote:
>
> I know people always seem to be hunting for these.
> Is this to low cap to be useful for loops?
>
>
> http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992
>
> CK
>

Stormwise.com has some wide range variable capacitors:

http://www.stormwise.com/page3.htm

And Midnight Science has wide range variable caps, and some with gear reduction. There is a 6:1 gear reduction that can be added to variable caps, and one very neat one with built in 8:1 drive:

http://www.midnightscience.com/catalog5.html#part3

Paul C.

8019. Re: [loopantennas] Re: Gear Drive Ball Bearing Antique Tuning Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-25 18:59:43 UTC
From: Nick B.
Topic: 8010 Message: 8019

Two sources I'm aware of (and have visited in person)... No connection
with either apart from being a happy customer.

In the US, Fair Radio, Lima, OH have a selection
https://www.fairradio.com/catalog.php?mode=view&categoryid=954

In the UK, J Birkett, The Strait, Lincoln has an amazing selection of 2
and 3 gang receiver but unfortunately they don't do business on the
internet (they do a mail order service and advertise in Practical
Wireless). I'm sure there are a few enterprising people who buy stock
from him and re-sell on Ebay.

On 25/11/2010 17:08, tenorman1952 wrote:
>
>
>
> --- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, "Ken" <faxcap@...> wrote:
> >
> > I know people always seem to be hunting for these.
> > Is this to low cap to be useful for loops?
> >
> >
> > http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992
> >
> > CK
> >
>
> Stormwise.com has some wide range variable capacitors:
>
> http://www.stormwise.com/page3.htm
>
> And Midnight Science has wide range variable caps, and some with gear
> reduction. There is a 6:1 gear reduction that can be added to variable
> caps, and one very neat one with built in 8:1 drive:
>
> http://www.midnightscience.com/catalog5.html#part3
>
> Paul C.
>

[Non-text portions of this message have been removed]

8020. Re: Gear Drive Ball Bearing Antique Tuning Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-25 19:10:09 UTC
From: Klaus Kranich
Topic: 8010 Message: 8020

```
--- In loopantennas@yahoogroups.com, "Nick B." <nick@...> wrote:
>
> Two sources I'm aware of (and have visited in person)... No connection
> with either apart from being a happy customer.
>
> In the US, Fair Radio, Lima, OH have a selection
> https://www.fairradio.com/catalog.php?mode=view&categoryid=954
>
> In the UK, J Birkett, The Strait, Lincoln has an amazing selection of 2
> and 3 gang receiver but unfortunately they don't do business on the
> internet (they do a mail order service and advertise in Practical
> Wireless). I'm sure there are a few enterprising people who buy stock
> from him and re-sell on Ebay.
>
> On 25/11/2010 17:08, tenorman1952 wrote:
> >
> >
> >
> > --- In loopantennas@yahoogroups.com
> > <mailto:loopantennas%40yahoogroups.com>, "Ken" <faxcap@> wrote:
> > >
> > > I know people always seem to be hunting for these.
> > > Is this to low cap to be useful for loops?
> > >
> > >
> > > http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992
> > >
> > > CK
> > >
> >
> > Stormwise.com has some wide range variable capacitors:
> >
> > http://www.stormwise.com/page3.htm
> >
> > And Midnight Science has wide range variable caps, and some with gear
> > reduction. There is a 6:1 gear reduction that can be added to variable
> > caps, and one very neat one with built in 8:1 drive:
> >
> > http://www.midnightscience.com/catalog5.html#part3
> >
> > Paul C.
> >
>
>
>
```

> [Non-text portions of this message have been removed]
>
Big variable capacitors for transmission use, capable some kV, brandnew as Kit available:

http://www.schubert-gehaeuse.de/prod04.htm

cheers Klaus

8022. Re: Loop calculator !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-25 19:14:35 UTC
From: Klaus Kranich
Topic: 8015 Message: 8022

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Klaus,
> Sorry to hear about your surgery, hope all goes well for you.
> At your convenience for the loop calculator, no problem.
> Regards,
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: Klaus Kranich
> To: loopantennas@yahoogroups.com
> Sent: Thursday, November 25, 2010 2:09 PM
> Subject: [loopantennas] Re: Loop calculator !!!!
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

Hello Brian,

after you downloaded and unzipped the file

http://www.dl0hst.de/software/magnetloop106.zip

for the calculator a mask will appaer.
I put in the mask to the photos with same translations. More is coming soon !

In this mask you can see my antenne I intend to build, 5mtr diameter !
...a giant!

cheers Klaus

8023. loop phasing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-25 20:20:34 UTC
From: Dean Wayman
Topic: 8023 Message: 8023

After having the Pixel pro 1A up and hauling in the dx ,i have come to the place where i want to reach out even further from my listening post,I'm still getting a few new ones but it takes more time because of drift or conditions at the time.

One frustrating thing about a figure 8 pattern of a loop is having a strong station 180 degrees from a weak station,i can hear them there but the strong sig just swamps the weaker one most of the time ,i have Id'ed a few by just staying parked ,but it can be a time waster if later in the evening the weak one just goes away or another comes in over it ,and maybe i can get some stuff under my local with a phased setup.

I have been thinking about getting a second loop ,in order to get a better null and possibly do some phasing.

I already know i need a good phaser, i've been told the Quantum phaser is probably the best available right now? so my question is ?

How much distance between loops am i going to need to get the phasing too work at it's best ?

I've seen anything from 6 feet ,to a full wave so, i'm not sure now,maybe someone has a similar setup or knows the proper distance ?

Thanks for the help
Dean_0

8024. Re: [loopantennas] loop phasing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-26 02:04:42 UTC
From: Steve Ratzlaff
Topic: 8023 Message: 8024

----- Original Message -----
From: "Dean Wayman" <dean_0_way@...>
To: <loopantennas@yahoogroups.com>
Sent: Thursday, November 25, 2010 12:20 PM
Subject: [loopantennas] loop phasing ?

>
> After having the Pixel pro 1A up and hauling in the dx ,i have come to the
> place where i want to reach out even further from my listening post,I'm
> still getting a few new ones but it takes more time because of drift or
> conditions at the time.
>
> One frustrating thing about a figure 8 pattern of a loop is having a
> strong station 180 degrees from a weak station,i can hear them there but
> the strong sig just swamps the weaker one most of the time ,i have Id'ed a
> few by just staying parked ,but it can be a time waster if later in the
> evening the weak one just goes away or another comes in over it ,and maybe
> i can get some stuff under my local with a phased setup.
>
> I have been thinking about getting a second loop ,in order to get a better
> null and possibly do some phasing.
>
> I already know i need a good phaser, i've been told the Quantum phaser is
> probably the best available right now? so my question is ?
>
> How much distance between loops am i going to need to get the phasing too
> work at it's best ?
>
> I've seen anything from 6 feet ,to a full wave so, i'm not sure now,maybe
> someone has a similar setup or knows the proper distance ?
>
> Thanks for the help
> Dean_0
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>

> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

8025. Re: [loopantennas] loop phasing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-26 12:01:09 UTC
From: Andy Ikin
Topic: 8023 Message: 8025

Dean Wayman wrote on the Nov.25,

"After having the Pixel pro 1A up and hauling in the dx ,i have come to the place where i want to reach out even further from my listening post,I'm still getting a few new ones but it takes more time because of drift or conditions at the time.

One frustrating thing about a figure 8 pattern of a loop is having a strong station 180 degrees from a weak station,i can hear them there but the strong sig just swamps the weaker one most of the time ,i have Id'ed a few by just staying parked ,but it can be a time waster if later in the evening the weak one just goes away or another comes in over it ,and maybe i can get some stuff under my local with a phased setup.

I have been thinking about getting a second loop ,in order to get a better null and possibly do some phasing.

I already know i need a good phaser, i've been told the Quantum phaser is probably the best available right now? so my question is ?

How much distance between loops am i going to need to get the phasing too work at it's best ?

I've seen anything from 6 feet ,to a full wave so, i'm not sure now,maybe someone has a similar setup or knows the proper distance ?"

Dean, I assume by dx you are referring to MW dx. If so you need to keep the loop spacing to about 40-50m. This reason why this is required; Close space arrays are gain degenerative, with reduced S/N i.e. the gain drops compared to a single antenna, but the active antenna amplifier noise doesn't. Ideally one should use larger lower noise loops for this application e.g. Wellbrook ALA100 or the ALA100M with a Variable Cross-fire Phasing Unit to ensure minimal knob twiddling over the MW Band.

There is an other option; Phase your loop with a decent active whip antenna (fellow group member Steve Ratzlaff builds these). I believe the Quantum phaser will work for this application. This has the advantage of not requiring any antenna spacing. This is because there is no loss of gain. The down side is; it is much more difficult to use and requires constant phase and amplitude adjustment with small frequency changes.

Kind regards

Andrew

[Non-text portions of this message have been removed]

8026. Re: loop phasing ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-28 03:52:38 UTC
From: Dean Wayman
Topic: 8023 Message: 8026

Thanks for the reply Andy and Steve:

I'm going to have to do some thinking on this ,the most distance i could get would be maybe 20 feet?

The vertical sounds like a good alternative if i can understand how to set it up.

Maybe Steve can post a link or email me off list with a link ,i can't seem to find info on his whip?

Dean-0

8027. Spiral loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-29 21:36:23 UTC
From: Lurch
Topic: 8027 Message: 8027

Just finished the frame and winding on my MW [BCB] spiral loop. I put the one-turn coupling link on the outside. I'm wondering if it would be better on the inside or in the middle of the winding; nulls don't seem very deep up around 1500-1700 kc. Then too the rx I'm using it with, a Collins R390A, is so sensitive it can pull some semi-local and all local BCB stations up out of the noise without an antenna at all.

Has anyone here ever done q comparison of differe3nt link locations on tuned spiral loops?

Thanks in advance,
Brian KA9EGW

8028. Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-29 22:42:16 UTC
From: Lurch
Topic: 8028 Message: 8028

I moved the pickup link from 1 turn onte the perimeter to 2 turns inside the tank winding. Nulls on the top end are defintiely deeper.

If anyone wants to know, the crossarms are 32", windings 31.25 diagonal measure on the first turn, then 3/8 smaller on each successive turn. There are 17 turns ending up at ~10" diagonal measure.

The 2-turn pickup link is in the center at a diagnal measure of about 6" on the outer of the 2 turns.

Not bad for a couple hours work--an hour before nominal local sunset I had broadcast-quality copy on WSM 650 AM from greater Beloit, WI...and IIRC we're almost in one of WSM's pattern nulls.

Now to get all the tube shields, drill bits, test equipment, toolboxes, etc out of the loop's near field LOL.

73, Brian KA9EGW

8029. Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-29 22:44:42 UTC
From: Lurch
Topic: 8028 Message: 8029

My bad--the innermost tank winding is 19.25 diagonal measure, half of that is ~10". I'll try to post a pic after I get the base built.

--- In loopantennas@yahoogroups.com, "Lurch" <ka9egw@...> wrote:
>
> I moved the pickup link from 1 turn onte the perimeter to 2 turns inside the tank winding. Nulls on the top end are defintiely deeper.
>
> If anyone wants to know, the crossarms are 32", windings 31.25 diagonal measure on the first turn, then 3/8 smaller on each successive turn. There are 17 turns ending up at ~10" diagonal measure.
>
> The 2-turn pickup link is in the center at a diagnal measure of about 6" on the outer of the 2 turns.
>
> Not bad for a couple hours work--an hour before nominal local sunset I had broadcast-quality copy on WSM 650 AM from greater Beloit, WI...and IIRC we're almost in one of WSM's pattern nulls.
>
> Now to get all the tube shields, drill bits, test equipment, toolboxes, etc out of the loop's near field LOL.
>
> 73, Brian KA9EGW
>

8030. Re: [loopantennas] Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-29 22:55:27 UTC
From: K4DTT@aol.com
Topic: 8028 Message: 8030

Hey, Brian, what kind of mounting did you use to stand your loop up? I'm building a Box type loop about the same size as yours.....73 Glenn K4DTT

In a message dated 11/29/2010 5:42:32 P.M. Eastern Standard Time, ka9egw@... writes:

I moved the pickup link from 1 turn onte the perimeter to 2 turns inside the tank winding. Nulls on the top end are defintiely deeper.

If anyone wants to know, the crossarms are 32", windings 31.25 diagonal measure on the first turn, then 3/8 smaller on each successive turn. There are 17 turns ending up at ~10" diagonal measure.

The 2-turn pickup link is in the center at a diagnal measure of about 6" on the outer of the 2 turns.

Not bad for a couple hours work--an hour before nominal local sunset I had broadcast-quality copy on WSM 650 AM from greater Beloit, WI...and IIRC we're almost in one of WSM's pattern nulls.

Now to get all the tube shields, drill bits, test equipment, toolboxes, etc out of the loop's near field LOL.

73, Brian KA9EGW

[Non-text portions of this message have been removed]

8031. 90-110 KHz

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-29 23:36:58 UTC
From: greg_ella53
Topic: 8031 Message: 8031

Has anyone found anything interesting in the 90-110 KHz region now that LORAN is gone in North America? Sure is strange dialing to 100 KHz and hearing dead air!

Greg Ella
Livermore, CA

8032. Re: [loopantennas] 90-110 KHz Loran (remaining Asian chains still active)

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 00:11:05 UTC
From: Steve Ratzlaff
Topic: 8032 Message: 8032

Hi Greg,
Perhaps you need a better LF antenna. All North American Loran activity has ceased, but I can get the remaining Asian Loran stations most any morning around sunrise. I can easily audibly hear the familiar Loran "clatter" too then; sometimes it's even strong enough to show on the S meter and usually lasts for an hour or more. COAA has a nice decoder for 100kc Loran that I use to verify the chain I'm receiving.
73,
Steve
Northeast Oregon, USA
R75, longwires

----- Original Message -----
From: "greg_ella53" <gregella@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, November 29, 2010 3:36 PM
Subject: [loopantennas] 90-110 KHz

> Has anyone found anything interesting in the 90-110 KHz region now that
> LORAN is gone in North America? Sure is strange dialing to 100 KHz and
> hearing dead air!
>
> Greg Ella
> Livermore, CA

8033. Re: [loopantennas] Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 07:54:35 UTC
From: brian nsl
Topic: 8028 Message: 8033

Hi,
If you happen to have a photographic tripod use that as a stand,
it will give you 360 degree rotation and 180 degree tilt, well my model does,
and is 6 ft high fully extended. hi!
72.s Brian, G0NSL-QRP.
----- Original Message -----
From: Lurch
To: loopantennas@yahoogroups.com
Sent: Monday, November 29, 2010 10:44 PM
Subject: [loopantennas] Re: Question answered

[Non-text portions of this message have been removed]

8034. Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 09:38:59 UTC
From: Lurch
Topic: 8028 Message: 8034

The base mount is a 'yet' project. The first loop I built, in '78, I used a piece of 1x8 on the bottom, 2 pieces of 1x4 up the sides and a piece of 1x4 across the top and bored a hole all the way through the top piece and halfway through the bottom piece. It worked quite well until I got rid of that loop for other reasons not related to it's functionality.

Spiral loops don't have to deal with azimuth-tilt unbalance...

If I don't go that route again, PVC pipe should offer possibilities...but finding flanges for plastic pipe locally is a challenge, mcmaster dot com has them...at close to $10 each. I already have plenty of scrap wood to build a base from.

Some people use camera tripods or tv-antenna roof mounting tripods.

I'd just take my 2x8 base and 3 or 4 table legs if I were going that route. You know the kind? They screw into a plate that screws to the bottom of the table, and if you get the right kind of plate the legs splay out ~5 degrees. I think you can buy 'em at the big-box stores.

73, Brian KA9EGW

--- In loopantennas@yahoogroups.com, K4DTT@... wrote:
>
> Hey, Brian, what kind of mounting did you use to stand your loop up? I'm
> building a Box type loop about the same size as yours.............73 Glenn
> K4DTT
>
>
> In a message dated 11/29/2010 5:42:32 P.M. Eastern Standard Time,
> ka9egw@... writes:
>
>
>
>
>
> I moved the pickup link from 1 turn onte the perimeter to 2 turns inside
> the tank winding. Nulls on the top end are defintiely deeper.
>
> If anyone wants to know, the crossarms are 32", windings 31.25 diagonal
> measure on the first turn, then 3/8 smaller on each successive turn. There
> are 17 turns ending up at ~10" diagonal measure.
>
> The 2-turn pickup link is in the center at a diagnal measure of about 6"
> on the outer of the 2 turns.
>
> Not bad for a couple hours work--an hour before nominal local sunset I had
> broadcast-quality copy on WSM 650 AM from greater Beloit, WI...and IIRC
> we're almost in one of WSM's pattern nulls.

>
> Now to get all the tube shields, drill bits, test equipment, toolboxes,
> etc out of the loop's near field LOL.
>
> 73, Brian KA9EGW
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8035. Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 09:40:12 UTC
From: Lurch
Topic: 8028 Message: 8035

I answered Glen's question before I looked at our message, sorry.
73, Brian KA9EGW

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Hi,
> If you happen to have a photographic tripod use that as a stand,
> it will give you 360 degree rotation and 180 degree tilt, well my model does,
> and is 6 ft high fully extended. hi!
> 72.s Brian, G0NSL-QRP.
> ----- Original Message -----
> From: Lurch
> To: loopantennas@yahoogroups.com
> Sent: Monday, November 29, 2010 10:44 PM
> Subject: [loopantennas] Re: Question answered
>
>
>
>
> [Non-text portions of this message have been removed]
>

8036. Re: [loopantennas] Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 10:09:40 UTC
From: brian nsl
Topic: 8028 Message: 8036

Hi,
Look at www.flexpvc.com the company must have been founded with
antenna builders in mind I feel hi!
Wish we had a similar company in the UK !!!!!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Lurch
To: loopantennas@yahoogroups.com
Sent: Tuesday, November 30, 2010 9:38 AM
Subject: [loopantennas] Re: Question answered

[Non-text portions of this message have been removed]

8037. Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 10:11:56 UTC
From: Lurch
Topic: 8028 Message: 8037

http://members.verizon.net/~vze24qhw/loop.html

--- In loopantennas@yahoogroups.com, K4DTT@... wrote:
>
> Hey, Brian, what kind of mounting did you use to stand your loop up? I'm
> building a Box type loop about the same size as yours.....73 Glenn
> K4DTT
>
>
> In a message dated 11/29/2010 5:42:32 P.M. Eastern Standard Time,
> ka9egw@... writes:
>
>
>
>
> I moved the pickup link from 1 turn onte the perimeter to 2 turns inside
> the tank winding. Nulls on the top end are defintiely deeper.
>
> If anyone wants to know, the crossarms are 32", windings 31.25 diagonal
> measure on the first turn, then 3/8 smaller on each successive turn. There
> are 17 turns ending up at ~10" diagonal measure.
>
> The 2-turn pickup link is in the center at a diagnal measure of about 6"
> on the outer of the 2 turns.
>
> Not bad for a couple hours work--an hour before nominal local sunset I had
> broadcast-quality copy on WSM 650 AM from greater Beloit, WI...and IIRC
> we're almost in one of WSM's pattern nulls.
>
> Now to get all the tube shields, drill bits, test equipment, toolboxes,
> etc out of the loop's near field LOL.
>
> 73, Brian KA9EGW
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8038. Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 10:38:40 UTC
From: Lurch
Topic: 8028 Message: 8038

I went to the auction site and found a 1" PVC 5 way [4 out, one up] for $3.60 plus $1.99 shipping. Minimum qty 1. The seller, formufit, has others as well. No connection, we'll see how fast it gets here.
73, Brian KA9EGW

--- In loopantennas@yahoogroups.com, K4DTT@... wrote:
>
> Hey, Brian, what kind of mounting did you use to stand your loop up? I'm
> building a Box type loop about the same size as yours.....73 Glenn
> K4DTT
>
>
> In a message dated 11/29/2010 5:42:32 P.M. Eastern Standard Time,
> ka9egw@... writes:
>
>
>
>
> I moved the pickup link from 1 turn onte the perimeter to 2 turns inside
> the tank winding. Nulls on the top end are defintiely deeper.
>
> If anyone wants to know, the crossarms are 32", windings 31.25 diagonal
> measure on the first turn, then 3/8 smaller on each successive turn. There
> are 17 turns ending up at ~10" diagonal measure.
>
> The 2-turn pickup link is in the center at a diagnal measure of about 6"
> on the outer of the 2 turns.
>
> Not bad for a couple hours work--an hour before nominal local sunset I had
> broadcast-quality copy on WSM 650 AM from greater Beloit, WI...and IIRC
> we're almost in one of WSM's pattern nulls.
>
> Now to get all the tube shields, drill bits, test equipment, toolboxes,
> etc out of the loop's near field LOL.
>
> 73, Brian KA9EGW
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8039. Re: 90-110 KHz

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 17:29:11 UTC
From: tenorman1952
Topic: 8031 Message: 8039

--- In loopantennas@yahoogroups.com, "greg_ella53" <gregella@...> wrote:
>
> Has anyone found anything interesting in the 90-110 KHz region now that LORAN is gone in North America? Sure is strange dialing to 100 KHz and hearing dead air!
>
> Greg Ella
> Livermore, CA
>

Even when I was picking up signals there, the programming was boring.

Paul - AE5JU

8040. Re: [loopantennas] Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 17:41:35 UTC
From: K4DTT@aol.com
Topic: 8028 Message: 8040

Thanks Brian and Lurch. I think I will try the wood base as I have no tripods at hand.....73 Glenn K4DTT

In a message dated 11/30/2010 4:39:06 A.M. Eastern Standard Time, ka9egw@... writes:

The base mount is a 'yet' project. The first loop I built, in '78, I used a piece of 1x8 on the bottom, 2 pieces of 1x4 up the sides and a piece of 1x4 across the top and bored a hole all the way through the top piece and halfway through the bottom piece. It worked quite well until I got rid of that loop for other reasons not related to it's functionality.

Spiral loops don't have to deal with azimuth-tilt unbalance...

If I don't go that route again, PVC pipe should offer possibilities...but finding flanges for plastic pipe locally is a challenge, mcmaster dot com has them...at close to $10 each. I already have plenty of scrap wood to build a base from.

Some people use camera tripods or tv-antenna roof mounting tripods.

I'd just take my 2x8 base and 3 or 4 table legs if I were going that route. You know the kind? They screw into a plate that screws to the bottom of the table, and if you get the right kind of plate the legs splay out ~5 degrees. I think you can buy 'em at the big-box stores.

73, Brian KA9EGW

--- In _loopantennas@yahoogroups.com_ (mailto:loopantennas@yahoogroups.com) , K4DTT@... wrote:
>
> Hey, Brian, what kind of mounting did you use to stand your loop up? I'm
> building a Box type loop about the same size as yours.....73
Glenn
> K4DTT
>
>
> In a message dated 11/29/2010 5:42:32 P.M. Eastern Standard Time,
> ka9egw@... writes:
>
>
>
>
>
> I moved the pickup link from 1 turn onte the perimeter to 2 turns inside
> the tank winding. Nulls on the top end are defintiely deeper.
>
> If anyone wants to know, the crossarms are 32", windings 31.25 diagonal

> measure on the first turn, then 3/8 smaller on each successive turn.
There
> are 17 turns ending up at ~10" diagonal measure.
>
> The 2-turn pickup link is in the center at a diagnal measure of about 6"

> on the outer of the 2 turns.
>
> Not bad for a couple hours work--an hour before nominal local sunset I
had
> broadcast-quality copy on WSM 650 AM from greater Beloit, WI...and IIRC
> we're almost in one of WSM's pattern nulls.
>
> Now to get all the tube shields, drill bits, test equipment, toolboxes,
> etc out of the loop's near field LOL.
>
> 73, Brian KA9EGW
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

8041. Re: Question answered

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-11-30 23:14:22 UTC
From: Lurch
Topic: 8028 Message: 8041

Hmm...my mama named me Brian, my biker friends call me "Lurch".

Anyway, I knocked together a base for mine in about an hour this afternoon. Just a foot of 1x8 and 3 pieces of a deck board left over from the deck. The frame of the loop is 3/4 square stock, so a 1" brace and bit [thanks, Grandpa] and a bit of sandpaper work chamfering the corners of the frame stock about 1/16" and all I have left to do is wait for the right variable cap to arrive [one with tapped holes on the bottom; the current stud-mount cap works but isn't amenable to decent mounting] and I'm off and running.

"Work good, last long time".

Let me know if you need a pic.

73, Brian aka "Lurch" KA9EGW

--- In loopantennas@yahoogroups.com, K4DTT@... wrote:
>
> Thanks Brian and Lurch. I think I will try the wood base as I have no
> tripods at hand.......73 Glenn K4DTT
>
>
> In a message dated 11/30/2010 4:39:06 A.M. Eastern Standard Time,
> ka9egw@... writes:
>
>
>
>
> The base mount is a 'yet' project. The first loop I built, in '78, I used a
> piece of 1x8 on the bottom, 2 pieces of 1x4 up the sides and a piece of
> 1x4 across the top and bored a hole all the way through the top piece and
> halfway through the bottom piece. It worked quite well until I got rid of that
> loop for other reasons not related to it's functionality.
>
> Spiral loops don't have to deal with azimuth-tilt unbalance...
>
> If I don't go that route again, PVC pipe should offer possibilities...but
> finding flanges for plastic pipe locally is a challenge, mcmaster dot com
> has them...at close to $10 each. I already have plenty of scrap wood to
> build a base from.
>
> Some people use camera tripods or tv-antenna roof mounting tripods.
>
> I'd just take my 2x8 base and 3 or 4 table legs if I were going that
> route. You know the kind? They screw into a plate that screws to the bottom of
> the table, and if you get the right kind of plate the legs splay out ~5
> degrees. I think you can buy 'em at the big-box stores.

>
> 73, Brian KA9EGW
>
> --- In _loopantennas@...m_ (mailto:loopantennas@yahoogroups.com)
> , K4DTT@ wrote:
> >
> > Hey, Brian, what kind of mounting did you use to stand your loop up? I'm
> > building a Box type loop about the same size as yours.....73
> Glenn
> > K4DTT
> >
> >
> > In a message dated 11/29/2010 5:42:32 P.M. Eastern Standard Time,
> > ka9egw@ writes:
> >
> >
> >
> >
> > I moved the pickup link from 1 turn onte the perimeter to 2 turns inside
> > the tank winding. Nulls on the top end are defintiely deeper.
> >
> > If anyone wants to know, the crossarms are 32", windings 31.25 diagonal
> > measure on the first turn, then 3/8 smaller on each successive turn.
> There
> > are 17 turns ending up at ~10" diagonal measure.
> >
> > The 2-turn pickup link is in the center at a diagnal measure of about 6"
>
> > on the outer of the 2 turns.
> >
> > Not bad for a couple hours work--an hour before nominal local sunset I
> had
> > broadcast-quality copy on WSM 650 AM from greater Beloit, WI...and IIRC
> > we're almost in one of WSM's pattern nulls.
> >
> > Now to get all the tube shields, drill bits, test equipment, toolboxes,
> > etc out of the loop's near field LOL.
> >
> > 73, Brian KA9EGW
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
>
>
>

>
> [Non-text portions of this message have been removed]
>

8042. FS variable caps

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-01 00:14:24 UTC
From: Lurch
Topic: 8042 Message: 8042

Now that my loop project is dialing in, time to clear the clutter off the workbench. I have several variable caps surplus to my needs. One is a 2-section, looks like 365pf MOL per section, with a reduction drive, with 3 studs hanging out the bottom for mounting. Two more are single-hole panel mount with a 3/8-24 threaded bushing--I suspect maybe came from an MFJ-901 antenna tuner, if so then they're supposed to be 10-324pf apiece but I'm not positive that's where they came from. They came out of a $5 homebrew antenna tuner I bought years ago at a hamfest, and I suspect an MFJ-901 or the like was cannibalized to build it; the only markings on them are "KAAR ENG CO" on the ceramic endplates.

I'm asking $12 each shipped CONUS or $30 for all 3. Please reply off-list to ka9egw[at]britewerkz[dot]com

73, Brian KA9EGW

8043. Faraday Loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-02 18:47:04 UTC
From: Neil
Topic: 8043 Message: 8043

I have a few questions regarding the Faraday loop method of feeding a magnetic loop antenna.

1. I understand that the loop needs to be about 1/5 of the diameter of the main loop. What is the theory behind this?

2. What are the advantages of using a Faraday loop over a simple loop of wire?

3. Does the feed point of the Faraday loop need to be adjacent to the main loop? Does it make any difference if the feeder connection is towards the centre of the main loop?

Neil
G7AQK

8044. Band Pass filter for Medium Wave band

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-02 19:09:46 UTC
From: notareallyreal
Topic: 8044 Message: 8044

Hello !
Has anyone experience on band pass filters for Medium Wave band ?
I think that some times very strong local transmitter can spoil your whole medium wave band, even if it was outside the MW band.
To minimize strong noise/interference from outside of medium wave band I have thought to build a band pass filter. I think that it would help also for other kind of local noise source.
Cut off frequencies could be about 530kHz and 1700 kHz.
Some attenuation in MW band is not a problem nowadays because there is lot of amplifier solutions available.
BR

8045. RE: [loopantennas] Band Pass filter for Medium Wave band

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-02 22:57:27 UTC
From: David Taylor
Topic: 8044 Message: 8045

I just downloaded the Ham filter design program Elsie to the files section.

Download it, install it, and have a blast making all kinds of LC filters.

Dave

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of notareallyreal
Sent: Thursday, December 02, 2010 12:10 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Band Pass filter for Medium Wave band

Hello !
Has anyone experience on band pass filters for Medium Wave band ?
I think that some times very strong local transmitter can spoil your whole medium wave band, even if it was outside the MW band.
To minimize strong noise/interference from outside of medium wave band I have thought to build a band pass filter. I think that it would help also for other kind of local noise source.
Cut off frequencies could be about 530kHz and 1700 kHz.
Some attenuation in MW band is not a problem nowadays because there is lot of amplifier solutions available.
BR

[Non-text portions of this message have been removed]

8046. Re: Faraday Loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-03 18:31:03 UTC
From: la7sja
Topic: 8043 Message: 8046

1. Impedance
2. The Faradays loop only picks up the current in the tuned loop (i.e. primary the loops tuned frequency all others are more shielded).
3. Simplified answer, the same as nr.1

PS English is my third language (after Norwegian and Thai)
LA7SJA MScEE

--- In loopantennas@yahoogroups.com, "Neil" <fast.electrics@...> wrote:
>
> I have a few questions regarding the Faraday loop method of feeding a magnetic loop antenna.
>
> 1. I understand that the loop needs to be about 1/5 of the diameter of the main loop. What is the theory behind this?
>
> 2. What are the advantages of using a Faraday loop over a simple loop of wire?
>
> 3. Does the feed point of the Faraday loop need to be adjacent to the main loop? Does it make any difference if the feeder connection is towards the centre of the main loop?
>
> Neil
> G7AQK
>

8047. Re: [loopantennas] Re: Faraday Loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-03 20:50:34 UTC
From: Chris Trask
Topic: 8043 Message: 8047

>
> PS English is my third language (after Norwegian and Thai)
>

Now that is a combination of language competency that I would not anticipate. Norwegian and English yes, but how did you end up being competent in Thai?

Chris

LA7SJA MScEE

8048. copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 04:06:46 UTC
From: Steve Ellington
Topic: 8048 Message: 8048

Has anyone ever tried using a roll of copper flashing to make a loop? I've been thinking about using PVC pipe to make the loop then wrapping the flashing around it. I figure I could make a fairly large diameter conductor this way for transmitting but:
Would the PVC have any adverse effects?
Steve N4LQ

[Non-text portions of this message have been removed]

8049. Re: [loopantennas] copper flashing question / alternative !!!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 09:23:25 UTC
From: brian nsl
Topic: 8049 Message: 8049

Steve,
Before you commit expensive copper flashing to the loop project
try cooking foil (in the UK the Turkey grade is heavier).
I wrapped a 2 in dia PVC TUBE (white) as a 20m rotary dipole indoors
and it worked fine with my TS-130V, 5 watt rig.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Saturday, December 04, 2010 4:06 AM
Subject: [loopantennas] copper flashing question

[Non-text portions of this message have been removed]

8050. Copper flashing - alternative !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 10:32:40 UTC
From: brian nsl
Topic: 8050 Message: 8050

Steve,
I omitted to add that I have also replicated the foil antenna project
by rolling the foil lengthways and feeding it down the inside of the tube,
this would be much better for outdoor use of course.
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

8051. Re: copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 14:09:36 UTC
From: bm40g
Topic: 8048 Message: 8051

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> Has anyone ever tried using a roll of copper flashing to make a loop? I've been thinking about using PVC pipe to make the loop then wrapping the flashing around it. I figure I could make a fairly large diameter conductor this way for transmitting but:
> Would the PVC have any adverse effects?
> Steve N4LQ
>
>
> [Non-text portions of this message have been removed]
>

Hi Steve,

The conductivty of various metals can be much less than pure copper. It does not take much impurity to drop an alloy down to 50% of the conductivity of pure copper. Which is much worse than pure aluminum. I am not sure of the alloy of copper flashing. But, I think it is an alloy (either on purpose of through lack of refinement), as its quite stiff material, and pure copper is not as stiff.

GA Copper sells materials for grounding. They are quite expensive. I am wondering of they are selling the oxygen free electrolytically refined copper. Which is the standard on which IACS conductivity is based.

If you can get un-alloyed aluminum, and your antenna does not require any joints, this would be very good.

IE, you do not want to attach the foil to a capacitor, but make a capacitor out of overlaping extensions of the foil.

Also, there is no need to join the metal to make a complete tube of metal over the PVC. Just make an U shape cross section on the tube, with the bottom of the U towards the inside of the loop, and fasten the metal to the tube in a non-conductive fashion (glue, tape, and then paint over with TiO2 pigement paint - WHITE).

Covering PVC 45 joints could be a problem. I have seen some PVC formed into perfect bends, but usually not a complete circle. I imagine it can be done, but would be custom.

8052. Re: [loopantennas] copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 15:12:20 UTC
From: Steve Ellington
Topic: 8048 Message: 8052

Graham
Thanks for the information. I looked at his slug tape antenna and now I wonder if anyone has tried a helical loop. One could make the loop from PVC and wrap it with slug tape. This would increase the inductance of the loop and allow for a lower C tuning capacitor yet the wide width of the tape would keep resistance to a lower value compared to wire.
So far I've only seen slug tape available in 15 ft. rolls which is a little short and a joint would create unwanted resistance. Maybe it can be purchased in bulk somewhere.
73
N4LQ
Steve

----- Original Message -----
From: "Graham" <planophore@...>
To: <loopantennas@yahoogroups.com>
Cc: "Steve Ellington" <n4lq@...>
Sent: Saturday, December 04, 2010 9:24 AM
Subject: Re: [loopantennas] copper flashing question

> There is a copper foil with an adhesive backing available called "Slug
> Tape". Apparently slugs don't care for copper and you would put this
> around your garden plants you don't what the slugs to get at.
>
> I stumbled across a web site a couple of webs ago which made reference to
> this material and it's use in making an antenna:
>
> http://cqhq.wordpress.com/2010/11/20/m6akvs-variation-of-the-rybakov-antenna/
> with a reference link to another site with a bit more information.
>
> And further discussion here:
>
> http://forums.qrz.com/showthread.php?p=2098711
>
> Seems like a good idea, perhaps a bit fragile for a portable collapsible
> antenna but the idea may be suited for a more or less permanent
> installation. I have tucked the idea away for further exploration at a
> later date; I was in fact thinking of a loop antenna of some sort.
>
> cheers, Graham ve3gtc
>
> On 12/3/2010 23:06, Steve Ellington wrote:
>> Has anyone ever tried using a roll of copper flashing to make a loop?
>> I've been thinking about using PVC pipe to make the loop then wrapping
>> the flashing around it. I figure I could make a fairly large diameter

>> conductor this way for transmitting but:
>> Would the PVC have any adverse effects?
>> Steve N4LQ
>>
>

8053. Re: [loopantennas] copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 15:46:16 UTC
From: Steve Ellington
Topic: 8048 Message: 8053

Another source of copper tape:
https://www.bindingsource.com/Products/productView.asp?categoryID=2183&CategoryName=3M%99+1181+EMI+Copper+Foil+Shielding+Tape&productID=17325&productName=3M%99+1181+EMI+Copper+Foil+Shielding+Tape+%2D+3%2F4%22+x+18+yards

N4LQ
Steve

----- Original Message -----
From: "Graham" <planophore@...>
To: "Steve Ellington" <n4lq@...>
Cc: <loopantennas@yahoogroups.com>
Sent: Saturday, December 04, 2010 10:24 AM
Subject: Re: [loopantennas] copper flashing question

> Slug Tape was something new to me until I stumbled across the posting on
> the antenna.
>
> A quick search using Google and on eBay turned up a indicated that it can
> had in various widths and lengths and I left it there for the time being.
> You have a very valid point on the short lengths and having to make
> joints. It apparently solders well and as an alternative it could also be
> glued using a silver filled epoxy. Would one be better than the other or
> would there really be a detrimental effect of the multiple joints -
> comparitive tests would have to made as I simply know and often times
> guessing produces the wrong answer.
>
> One of my winter projects is build a loop for LF use and as I slowly work
> through other projects, collect bits and pieces of material for the loop
> and read what I can on the subject I will keep an eye and ear open for
> ideas like this which may prove to work very well.
>
> cheers, Graham ve3gtc
>
>
> On 12/4/2010 10:12, Steve Ellington wrote:
>> Graham
>> Thanks for the information. I looked at his slug tape antenna and now I
>> wonder if anyone has tried a helical loop. One could make the loop from
>> PVC and wrap it with slug tape. This would increase the inductance of the
>> loop and allow for a lower C tuning capacitor yet the wide width of the
>> tape would keep resistance to a lower value compared to wire.
>> So far I've only seen slug tape available in 15 ft. rolls which is a
>> little short and a joint would create unwanted resistance. Maybe it can
>> be purchased in bulk somewhere.
>> 73

>> N4LQ
>> Steve
>

8054. Re: [loopantennas] copper flashing question / alternative !!!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 11:13:18 UTC
From: John Seager
Topic: 8049 Message: 8054

Steve and Brian,
Cooking foil does have the disadvantage for a loop of having a higher electrical resistance. I have found copper tape of the sort sold here as slug tape (and also as shielding in electrical guitars) to be effective and physically light. It can be threaded double through white pvc pipe so it is maintained in a circular or rectangular shape, is less likely to tarnish and can withstand some light rain. My impression is that the pvc is no problem at QRP power levels at H.F. John G0UCP

From: brian nsl <brian.nsl@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, 4 December, 2010 9:23:25
Subject: Re: [loopantennas] copper flashing question / alternative !!!!!!

Steve,
Before you commit expensive copper flashing to the loop project
try cooking foil (in the UK the Turkey grade is heavier).
I wrapped a 2 in dia PVC TUBE (white) as a 20m rotary dipole indoors
and it worked fine with my TS-130V, 5 watt rig.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Saturday, December 04, 2010 4:06 AM
Subject: [loopantennas] copper flashing question

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8055. Re: [loopantennas] copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 14:24:55 UTC
From: Graham
Topic: 8048 Message: 8055

There is a copper foil with an adhesive backing available called "Slug Tape". Apparently slugs don't care for copper and you would put this around your garden plants you don't what the slugs to get at.

I stumbled across a web site a couple of webs ago which made reference to this material and it's use in making an antenna:

http://cqhq.wordpress.com/2010/11/20/m6akvs-variation-of-the-rybakov-antenna/ with a reference link to another site with a bit more information.

And further discussion here:

http://forums.qrz.com/showthread.php?p=2098711

Seems like a good idea, perhaps a bit fragile for a portable collapsible antenna but the idea may be suited for a more or less permanent installation. I have tucked the idea away for further exploration at a later date; I was in fact thinking of a loop antenna of some sort.

cheers, Graham ve3gtc

On 12/3/2010 23:06, Steve Ellington wrote:
> Has anyone ever tried using a roll of copper flashing to make a loop? I've been thinking about using PVC pipe to make the loop then wrapping the flashing around it. I figure I could make a fairly large diameter conductor this way for transmitting but:
> Would the PVC have any adverse effects?
> Steve N4LQ
>

8056. Re: [loopantennas] copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-04 15:24:09 UTC
From: Graham
Topic: 8048 Message: 8056

Slug Tape was something new to me until I stumbled across the posting on the antenna.

A quick search using Google and on eBay turned up a indicated that it can had in various widths and lengths and I left it there for the time being. You have a very valid point on the short lengths and having to make joints. It apparently solders well and as an alternative it could also be glued using a silver filled epoxy. Would one be better than the other or would there really be a detrimental effect of the multiple joints - comparitive tests would have to made as I simply know and often times guessing produces the wrong answer.

One of my winter projects is build a loop for LF use and as I slowly work through other projects, collect bits and pieces of material for the loop and read what I can on the subject I will keep an eye and ear open for ideas like this which may prove to work very well.

cheers, Graham ve3gtc

On 12/4/2010 10:12, Steve Ellington wrote:
> Graham
> Thanks for the information. I looked at his slug tape antenna and now
> I wonder if anyone has tried a helical loop. One could make the loop
> from PVC and wrap it with slug tape. This would increase the
> inductance of the loop and allow for a lower C tuning capacitor yet
> the wide width of the tape would keep resistance to a lower value
> compared to wire.
> So far I've only seen slug tape available in 15 ft. rolls which is a
> little short and a joint would create unwanted resistance. Maybe it
> can be purchased in bulk somewhere.
> 73
> N4LQ
> Steve

8057. Re: Faraday Loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-05 11:56:36 UTC
From: la7sja
Topic: 8043 Message: 8057

From working in Southeast Asia for many years, and a Thai wife and two sons, who all speak Thai at home.
73 de LA7SJA MScEE

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > PS English is my third language (after Norwegian and Thai)
> >
>
> Now that is a combination of language competency that I would not
> anticipate. Norwegian and English yes, but how did you end up being
> competent in Thai?
>
> Chris
>
> LA7SJA MScEE
>

8058. Quantum Phaser for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-05 21:09:53 UTC
From: neilbellgroups
Topic: 8058 Message: 8058

This is a mint condition Quantum Phaser, includes the AC power adapter, and a D-Cell battery power pack that allows operation in the field where no AC power is available. The Phaser sells for $135, The AC adapter sells for $10.00 and the battery pack is $15.00. Total cost was $160.

Best offer over 90.00 by Friday Dec 10th gets the whole package and I will pay shipping by Priority Mail to any USA address. Canadian offers will be entertained but shipping will be extra. Contact me by e-mail PLEASE, not on the group list! If no sale by Friday I will put it up on e-Bay.

see: http://dxtools.com/PRODUCTS.htm for additional info. The unit works perfectly and is in excellent cosmetic shape.

Check my e-Bay feedback - it is 100% positive - user name is "neilbell"

Neil Bell
KJ6FBA

8059. Re: [loopantennas] copper flashing question / alternative !!!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-06 08:56:00 UTC
From: brian nsl
Topic: 8049 Message: 8059

John,
Thank you for the comments.
From the various adverts for copper slug tape it says ' apply to a clean surface '
so I gather it to be self-adhesive ????
One brand has serrated edges (to snag the RF hi!) more surface area !!!!
72, Brian, G0NSL-QRP
G-QRP 5823.
----- Original Message -----
From: John Seager
To: loopantennas@yahoogroups.com
Sent: Saturday, December 04, 2010 11:13 AM
Subject: Re: [loopantennas] copper flashing question / alternative !!!!!!

[Non-text portions of this message have been removed]

8060. Re: [loopantennas] copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-06 12:53:33 UTC
From: John Seager
Topic: 8049 Message: 8060

From: brian nsl <brian.nsl@btinternet.com>
To: loopantennas@yahoogroups.com
Sent: Monday, 6 December, 2010 8:56:00
Subject: Re: [loopantennas] copper flashing question / alternative !!!!!!

Yes Brian it is self-adhesive, but when used inside PVC pipe it is easier to handle
if the shiny paper backing is left on. I described a way of using this, together with a

method of feeding the loop with a variable inductance coupler in the Sept/Oct issue

of 'QEX'. Recently I have used blue flexible 20mm 'polypipe' instead of white PVC.
Incidentally it is hard enough to guess the effect of skin and edge effect on these
 tapes. I would tend to avoid serrated edges! 73 John G0UCP
 From the various adverts for copper slug tape it says ' apply to a clean surface '
so I gather it to be self-adhesive ????
One brand has serrated edges (to snag the RF hi!) more surface area !!!!

[Non-text portions of this message have been removed]

8061. RE: [loopantennas] copper flashing question / alternative !!!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-06 13:05:35 UTC
From: Collins, Graham
Topic: 8049 Message: 8061

Slug tape with a serrated edge.

That is interesting. Perhaps an easy way to make the antenna more broadband?

I have just recently started to read a bit on the topic of fractal antennas and this sort of, kind of, sounds similar. So many interesting ideas, so little time to try them all.

Cheers, Graham ve3gtc

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
On Behalf Of brian nsl
Sent: December 6, 2010 03:56
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] copper flashing question / alternative
!!!!!!

John,
Thank you for the comments.
From the various adverts for copper slug tape it says ' apply to a clean surface '
so I gather it to be self-adhesive ????
One brand has serrated edges (to snag the RF hi!) more surface area !!!!
72, Brian, G0NSL-QRP
G-QRP 5823.

8062. Re: Band Pass filter for Medium Wave band

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-07 23:33:36 UTC
From: thinkdx
Topic: 8044 Message: 8062

Paul Cianciolo, W1VLF is a very useful resource when it comes to highpass, lowpass, and bandpass filters. He builds and sells very high quality units. If you need specific cut-off frequency values, Paul's the Man.
I was very pleased with the custom filters he built for me 3+ years ago when I was optimizing BCB image rejection in a Flex-Radio SDR-1000 receiver. I used three, switched lowpass filters in the SDR and I couldn't have built them myself with the quality and testing Paul did. He even provided spectrum analyzer photos showing the exact responses of the filters he supplied.
Here is Paul's web site:
http://www.rescueelectronics.com/RF_Filters.html
<http://www.rescueelectronics.com/RF_Filters.html>
You can see the filters he built for me in this photo of the highly modified SDR-1000 I constructed; look for the stacked trio of aluminum enclosures at the bottom with "W1VLF"
labels:http://picasaweb.google.com/atkinsguy/SDR1000HPSDRBoardsCustomEnc\
losure#5140360118286276498
<http://picasaweb.google.com/atkinsguy/SDR1000HPSDRBoardsCustomEnclosure\
#5140360118286276498>
73,
Guy AtkinsPuyallup, WA

--- In loopantennas@yahoogroups.com, "notareallyreal" <not_a_real@...>
wrote:
>
> Hello !
> Has anyone experience on band pass filters for Medium Wave band ?
> I think that some times very strong local transmitter can spoil your whole medium wave band, even if it was outside the MW band.
> To minimize strong noise/interference from outside of medium wave band I have thought to build a band pass filter. I think that it would help also for other kind of local noise source.
> Cut off frequencies could be about 530kHz and 1700 kHz.
> Some attenuation in MW band is not a problem nowadays because there is lot of amplifier solutions available.
> BR
>

[Non-text portions of this message have been removed]

8063. Active receive loop by Des, M0AYF

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-08 19:30:48 UTC
From: John McKee
Topic: 8063 Message: 8063

Hi everyone,

Just recently joined this group and was wondering if anyone has built the active receive loop by Des, M0AYF? I wanted a small low noise loop primarily for the lower end of the HF band and maybe a bit of MF listening. The amplifier part is complete and all I need is to finish wiring the bias tee. I used 2N2222As in a TO18 case with push on heat sinks in place of the BC337s. Not quite sure what to expect. I powered up the amp with a 12V supply and checked voltages and supply current. That part looks ok. Hope to get it up in the air this weekend.

Thanks,

John McKee

(WB4OFT)

[Non-text portions of this message have been removed]

8064. Re: [loopantennas] Active receive loop by Des, M0AYF

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-08 22:44:37 UTC
From: Chris Trask
Topic: 8063 Message: 8064

>
> Hi everyone,
>
> Just recently joined this group and was wondering if anyone has built
> the active receive loop by Des, M0AYF? I wanted a small low noise loop
> primarily for the lower end of the HF band and maybe a bit of MF
> listening. The amplifier part is complete and all I need is to finish
> wiring the bias tee. I used 2N2222As in a TO18 case with push on heat
> sinks in place of the BC337s. Not quite sure what to expect. I powered
> up the amp with a 12V supply and checked voltages and supply current.
> That part looks ok. Hope to get it up in the air this weekend.
>

Do you have a URL for information about this antenna?

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8065. Active Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-08 23:38:14 UTC
From: Graeme
Topic: 8065 Message: 8065

For Chris

http://www.pm.keirle.com/3_radio/hf_loop_ant/hf_loop_ant.htm

Graeme

8066. RE: [loopantennas] Active receive loop by Des, M0AYF

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-09 00:05:00 UTC
From: dx11
Topic: 8063 Message: 8066

>>Do you have a URL for information about this antenna?

Chris Trask<<

I have it under construction for quite some time now...

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

http://www.pm.keirle.com/3_radio/hf_loop_ant/hf_loop_ant.htm

9V1VV has (had?) a version on his weblog as well, but I cannot find the URL now.

Regards,

Cor Beijersbergen

8067. RE: [loopantennas] Active receive loop by Des, M0AYF

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-09 00:33:17 UTC
From: dx11
Topic: 8063 Message: 8067

I discovered that the first link is not working any longer. Some time ago I copied the webpages into a Word file. So if anyone wants to have it I can send it or put it the Files section.

Regards,

Cor Beijersbergen

>>I have it under construction for quite some time now...

http://www.qrss.thersgb.net/active-loop-receiving-antenna.html

http://www.pm.keirle.com/3_radio/hf_loop_ant/hf_loop_ant.htm

9V1VV has (had?) a version on his weblog as well, but I cannot find the URL now.<<

8068. Re: Active receive loop by Des, M0AYF

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-08 23:26:29 UTC
From: neilbanera
Topic: 8063 Message: 8068

Chris, I think these are the URL's:

http://www.pm.keirle.com/index.html

http://www.pm.keirle.com/3_radio/hf_loop_ant/hf_loop_ant.htm

Neil

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Hi everyone,
> >
> > Just recently joined this group and was wondering if anyone has built
> > the active receive loop by Des, M0AYF? I wanted a small low noise loop
> > primarily for the lower end of the HF band and maybe a bit of MF
> > listening. The amplifier part is complete and all I need is to finish
> > wiring the bias tee. I used 2N2222As in a TO18 case with push on heat
> > sinks in place of the BC337s. Not quite sure what to expect. I powered
> > up the amp with a 12V supply and checked voltages and supply current.
> > That part looks ok. Hope to get it up in the air this weekend.
> >
>
> Do you have a URL for information about this antenna?
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

8069. Re: [loopantennas] Re: Active receive loop by Des, M0AYF

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-09 01:33:31 UTC
From: Chris Trask
Topic: 8063 Message: 8069

>
> Chris, I think these are the URL's:
>
> http://www.pm.keirle.com/index.html
>
> http://www.pm.keirle.com/3_radio/hf_loop_ant/hf_loop_ant.htm
>

Yes, that's it. I've seen this design many times. Quite simple and fairly popular.

Chris

8070. Loop receive direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-09 12:36:30 UTC
From: Philip
Topic: 8070 Message: 8070

Hi
Which is the strongest reception direction of a circular loop...

Face on to the source or edge on to the source?

Thanks
Regards
Philip

8071. Re: [loopantennas] Loop receive direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-09 17:07:56 UTC
From: STEVE MCDONALD
Topic: 8070 Message: 8071

Philip - maximum pickup will be along the plane (edge) of the loop with minimum pickup broadside (facing) the loop.

Steve

> Hi
> Which is the strongest reception direction of a circular loop...
>
> Face on to the source or edge on to the source?
>
>
> Thanks
> Regards
> Philip
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it
> in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload
> JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF
> before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

8072. Re: Loop receive direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-10 10:35:07 UTC
From: Philip
Topic: 8070 Message: 8072

Thanks Steve

Never done much with loops so looking forward
to making an amplified non tuned one for my Softrock Ensemble RX set up...

Regards
Philip

--- In loopantennas@yahoogroups.com, STEVE MCDONALD <ve7sl@...> wrote:
>
>
>
> Philip - maximum pickup will be along the plane (edge) of the loop with minimum pickup broadside (facing) the loop.
>
> Steve
>
>
> > Hi
> > Which is the strongest reception direction of a circular loop...
> >
> > Face on to the source or edge on to the source?
> >
> >
> > Thanks
> > Regards
> > Philip
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it
> > in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload
> > JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF
> > before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >

> >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

8073. Re: [loopantennas] Loop receive direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-10 15:26:33 UTC
From: Andy
Topic: 8070 Message: 8073

> Which is the strongest reception direction of a circular loop...

That depends.

For a full size one-wavelength loop, maximum is perpendicular
(broadside) to the loop, with no signal in the plane of the loop.

For an electrically small loop (much less than a wavelength in
circumference), maximum is in the plane of the loop with no signal
broadside to the loop ... exactly the opposite.

For a loop that is much larger than one wavelength, maximum signal
tends to tilt over *towards* edgewise again, but never reaching it.
For practical large loops, the maximum tends to be somewhere in the
middle between edgewise and broadside.

And of course you have interaction with the ground and other objects nearby.

Andy

8074. Re: [loopantennas] Loop receive direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-10 16:30:53 UTC
From: Jack Smith
Topic: 8070 Message: 8074

And, that assumes ground wave, as the pattern may be different - at
least for small loops - when the arrival angle is well above the horizon.

Jack K8ZOA

On 12/10/2010 10:26 AM, Andy wrote:
>
> > Which is the strongest reception direction of a circular loop...
>
> That depends.
>
> For a full size one-wavelength loop, maximum is perpendicular
> (broadside) to the loop, with no signal in the plane of the loop.
>
> For an electrically small loop (much less than a wavelength in
> circumference), maximum is in the plane of the loop with no signal
> broadside to the loop ... exactly the opposite.
>
> For a loop that is much larger than one wavelength, maximum signal
> tends to tilt over *towards* edgewise again, but never reaching it.
> For practical large loops, the maximum tends to be somewhere in the
> middle between edgewise and broadside.
>
> And of course you have interaction with the ground and other objects
> nearby.
>
> Andy
>
>

[Non-text portions of this message have been removed]

8075. Re: Loop receive direction

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-10 19:33:43 UTC
From: Philip
Topic: 8070 Message: 8075

That's interesting...

My loop will be an untuned but amplified single turn loop
of about 2 meters diameter so it looks like edge on to the
source will be best then, given it will be used for HF bands?

--- In loopantennas@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> > Which is the strongest reception direction of a circular loop...
>
> That depends.
>
> For a full size one-wavelength loop, maximum is perpendicular
> (broadside) to the loop, with no signal in the plane of the loop.
>
> For an electrically small loop (much less than a wavelength in
> circumference), maximum is in the plane of the loop with no signal
> broadside to the loop ... exactly the opposite.
>
> For a loop that is much larger than one wavelength, maximum signal
> tends to tilt over *towards* edgewise again, but never reaching it.
> For practical large loops, the maximum tends to be somewhere in the
> middle between edgewise and broadside.
>
> And of course you have interaction with the ground and other objects nearby.
>
> Andy
>

8076. Re: Active receive loop by Des, M0AYF

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-11 19:26:06 UTC
From: d29602960
Topic: 8063 Message: 8076

Hi John and the group,

Firstly, my thanks for your interest in the active loop antenna and for bringing to my attention the fact that the M0AYF web pages had become lost in cyberspace. It seems that thersgb.net is having major problems of some kind. The Google cache shows the pages as still active on 23rd Nov 2010 03:41:13 GMT so the failure must have happened between then and now.

So for John and anyone else who is interested in the active loop antenna I have uploaded the pages to QSL.net and the URL is as follows...

http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html

The general "theme" of the web pages is dedicated to QRSS of which the loop antenna was a small part. The general URL for the entire web site is...

http://www.qsl.net/m0ayf/

Thankyou again for your interest and good luck with your active loop experiments.

73,s to all and best wishes for the Christmas season.

Des (M0AYF)

--- In loopantennas@yahoogroups.com, John McKee <jmckee@...> wrote:
>
>
>
> Hi everyone,
>
> Just recently joined this group and was wondering if anyone has built
> the active receive loop by Des, M0AYF? I wanted a small low noise loop
> primarily for the lower end of the HF band and maybe a bit of MF
> listening. The amplifier part is complete and all I need is to finish
> wiring the bias tee. I used 2N2222As in a TO18 case with push on heat
> sinks in place of the BC337s. Not quite sure what to expect. I powered
> up the amp with a 12V supply and checked voltages and supply current.
> That part looks ok. Hope to get it up in the air this weekend.
>
> Thanks,
>
> John McKee
>
> (WB4OFT)
>
>
>

> [Non-text portions of this message have been removed]
>

8077. Loop newbie

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-11 22:26:52 UTC
From: Don
Topic: 8077 Message: 8077

Building SDR Ensemble II RX, which covers 180 KHz - 3 Mhz. Want to build a loop, just fpr LF, that is 180 - 500 KHz. I live in Southern California, near LA. Want a low to medium complexity project, that will satisfy my curiosity of "whats down there". I have read somewhat about loops and the shielded type. I know this a loaded question. But what would you suggest to get started and be successful?

Thanks, Don

8078. Litz wire plus !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-12 11:34:48 UTC
From: brian nsl
Topic: 8078 Message: 8078

Hi,
A good selection of components , Litz wire etc here,
www.die-wuestens.de/eindex.htm .
72, Brian.

[Non-text portions of this message have been removed]

8079. Re: [loopantennas] copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-12 11:39:36 UTC
From: brian nsl
Topic: 8048 Message: 8079

John,
With our inclement weather workshop activity on antennas has been halted hi!
On this site there is an interesting item in flexible copper tape but with both sides insulated from each other.

www.die-wuestens.de/eindex.htm

It might be useful for a Mobius type loop ????
72, Brian, G0NSL-QRP.
----- Original Message -----
From: John Seager
To: loopantennas@yahoogroups.com
Sent: Monday, December 06, 2010 12:53 PM
Subject: Re: [loopantennas] copper flashing question

[Non-text portions of this message have been removed]

8080. 9:1 transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-12 14:47:01 UTC
From: Steve Ellington
Topic: 8080 Message: 8080

Why are people using 9:1 transformer on small loop antennas? The loop just posted by W1AEX is nice but we know the loops impedance on the BCB and 160m would be but a fraction of an ohm. The 9:1 ratio transformer would step this down even further and present an even poorer match to the 75 ohm coax! EZNEC computes an 85' loop's impedance at 1 mHz to be 0.0001839 + J 269.9 ohms. If anything, I would have reversed the transformer in an attempt to step up the loops impedance although that would be of little help since the Z is already a virtual short circuit.
Maybe I'm missing some secret formula here. Can someone shed some light on this?

Steve
N4LQ

[Non-text portions of this message have been removed]

8081. Re: [loopantennas] 9:1 transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-12 15:22:54 UTC
From: Chris Trask
Topic: 8080 Message: 8081

>
> Why are people using 9:1 transformer on small loop antennas? The
> loop just posted by W1AEX is nice but we know the loops impedance
> on the BCB and 160m would be but a fraction of an ohm. The 9:1
> ratio transformer would step this down even further and present
> an even poorer match to the 75 ohm coax! EZNEC computes an 85'
> loop's impedance at 1 mHz to be 0.0001839 + J 269.9 ohms. If
> anything, I would have reversed the transformer in an attempt to
> step up the loops impedance although that would be of little help
> since the Z is already a virtual short circuit.
> Maybe I'm missing some secret formula here. Can someone shed some
> light on this?
>

Turn the transformer around so that it's 1:9. It's generally understood that it is used this way.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8082. Re: [loopantennas] 9:1 transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-12 18:49:41 UTC
From: Andy Ikin
Topic: 8080 Message: 8082

Steve N4LQ Wrote on Dec. 12,

"Why are people using 9:1 transformer on small loop antennas? The loop just posted by W1AEX is nice but we know the loops impedance on the BCB and 160m would be but a fraction of an ohm. The 9:1 ratio transformer would step this down even further and present an even poorer match to the 75 ohm coax! EZNEC computes an 85' loop's impedance at 1 mHz to be 0.0001839 + J 269.9 ohms. If anything, I would have reversed the transformer in an attempt to step up the loops impedance although that would be of little help since the Z is already a virtual short circuit.
Maybe I'm missing some secret formula here. Can someone shed some light on this?"

Steve, the way I see it; 85 feet is a large loop with a relatively high impedance or reactance Z, only the Resistance is a virtual short. Therefore, it seems logical to use a step down transformer. I have done this in the past with modified K9AY antenna and it works quite well. A 9:1 ratio seems to be reasonable compromise for the intended Freq. range. For BCB use one could use say a 4:1 ratio.

73

Andrew

[Non-text portions of this message have been removed]

8083. Newbie Starting Out

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-12 19:54:02 UTC
From: Don
Topic: 8083 Message: 8083

Area of interest: 180 KHz - 500 Khz
What kind of loop should I build to get me interested to go further later in a better loop? Never listened in this area before. Building an Ensemble II RX with LF option. I live in the Los Angeles area.

Don...W6RWN

8084. Re: [loopantennas] Newbie Starting Out

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-12 22:16:59 UTC
From: Don
Topic: 8083 Message: 8084

Hi Don,

Well, if you are interested Dxing NDB/DGPS/Navtex there are lot's of them out there but they are going away. There were two active ham Lowfer's in the LA area but one moved to Louisiana and the other has been off the air for a few years it seems.

As you are just starting out and to keep it cheap and tweek your interest - I would recommend a vertical wire loop as big as you can make it (unamplified) - probably in a rectangle shape orientated E-W - and assumming you are putting it outdoors.

As you can see below I have several amplified antennas for LF - two of them are loops. The ALA-100 is a single wire loop fixed E-W 88ft circumference, LFL-1010 a 3ft dia loop on a rotator. I'm on a small lot and these work out terrific for me. I plan to put up another ALA-100 N-S soon. I've logged nearly 1000 NDB's from Japan to Australia to Brazil to Alaska to eastern Canada.

Anyway, NDB's in the LA area you should be able to easily pick up with just about any simple antenna (in AM mode or ~+1kHz in SSB/CW):

233 LG Long Beach Apt
253 UR Burbank Apt
337 NA John Wayne Apt
370 PAI Whiteman Apt
378 CPM Compton Apt
397 SB San Bernardino

At night there are lots more of course. Some easy nightly regulars:

205 COR Corcoran
209 HGT Hunter Liggett
282 GWF Lancaster
332 POA Hawaii Island
338 PBT Red Bluff
338 RYN Tucson
344 FCH Fresno
351 NO Reno/Tahoe
353 LLD Lanai Island
394 ENZ Nogales
404 MOG Montegue
408 MW Moses Lake
521 INE Missoula
526 RWE Camp Roberts

Another Don in the LA area,

Don
Upland, CA

34.10 -117.63 1250ft ASL
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
2x PA0RDT Mini-Whip @ 15ft
LFL1010 ALA100

On 12-Dec-10 11:54, Don wrote:
> Area of interest: 180 KHz - 500 Khz
> What kind of loop should I build to get me interested to go further later in a better loop? Never listened in this area before. Building an Ensemble II RX with LF option. I live in the Los Angeles area.
>
> Don...W6RWN
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

8085. RE: [loopantennas] 9:1 transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 00:19:36 UTC
From: Ray Phillips
Topic: 8080 Message: 8085

Steve,

To get the best results from a loop, the loop impedance and the feed line impedance should be as close as possible.

At RF frequencies, a loop is essentially a high impedance device. If a loop is heavily loaded by a low impedance feed line, its efficiency is reduced and loop performance is compromised.

The resistive portion of the impedance of your 85' loop at 1MHz is so low that we can ignore it.
If you were to present the loop with a feed line load of 75 ohms, this load is much less than the J 269.9 ohms and you would not get a good transfer of signal.
A 9:1 transformer will take the 75 ohms of the feed line and transform it to 675 ohms. A 4:1 would give 300 ohms which is a closer match to the J 269.9.

However, as in most things antenna, there needs to be a compromise.
To choose a transformer, you need to calculate the impedance of the loop at the low frequency end of frequencies of interest and at the high frequency end and select a transformer ratio which is the "best fit".

Another solution (for 50 ohm feed line) is to make a "pick up" loop one fifth the size of the main loop and place it close to one side of the main loop (bottom recommended). Connect this to the feed line.
Join the two ends of the main loop together. The length ratio between the main and pick up loops performs the transformer function. At first glance the ratio appears to be a high 25:1 but operational use suggests that one fifth is the way to go. For 75 ohm feed line, the ratio would be different. I don't use 75 ohm cable and cannot offer any experience but the maths suggests one quarter main loop size.

I recommend using a "Faraday" style pick up loop which uses coax in a special configuration.
http://combotec.com/projects/magloop-HF/magloop.html
http://homepage.ntlworld.com/g4kki.william/LOOP.PDF

All said, the main rule of thumb for antennas is "Experiment, experiment, experiment".

ray, vk5ugs

To: loopantennas@yahoogroups.com
From: andrew.ikin@...
Date: Sun, 12 Dec 2010 18:49:41 +0000
Subject: Re: [loopantennas] 9:1 transformer

Steve N4LQ Wrote on Dec. 12,

"Why are people using 9:1 transformer on small loop antennas? The loop just posted by W1AEX is nice but we know the loops impedance on the BCB and 160m would be but a fraction of an

ohm. The 9:1 ratio transformer would step this down even further and present an even poorer match to the 75 ohm coax! EZNEC computes an 85' loop's impedance at 1 mHz to be 0.0001839 + J 269.9 ohms. If anything, I would have reversed the transformer in an attempt to step up the loops impedance although that would be of little help since the Z is already a virtual short circuit.

Maybe I'm missing some secret formula here. Can someone shed some light on this?"

Steve, the way I see it; 85 feet is a large loop with a relatively high impedance or reactance Z, only the Resistance is a virtual short. Therefore, it seems logical to use a step down transformer. I have done this in the past with modified K9AY antenna and it works quite well. A 9:1 ratio seems to be reasonable compromise for the intended Freq. range. For BCB use one could use say a 4:1 ratio.

73

Andrew

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8086. Re: 9:1 transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 00:48:28 UTC
From: n4lq
Topic: 8080 Message: 8086

I am so accustomed to first canceling out the reactance then matching the antenna. It's a ham radio habit I suppose. If you cancel the 269 ohm reactance, you're left with an impedance of nearly zero. Matching this would require something a bit more than a 9:1 transformer.

A 1 wavelength loop for 160 meters is over 500 feet in circumference. Normally when hams refer to a loop shorter than 1 wavelength it's considered a short loop. A 1 wavelength loop has an impedance of about 100 ohms so a 2:1 ratio transformer would make a good match.

So these little 85 ft. loops are really short by these standards and considerable series capacitance is needed to cancel the reactance. As you stated, matching could be done by the 1/5 cir. loop or by a gamma match. Bandwidth would be very narrow and constant retuning required as frequency is changed.

Looking again at this 85 foot loop when used at 1 mHz.....Yes we are dealing with J269 or there about but what about that 9:1 transformer. Everyone is assuming the transformer somehow converts this reactive load into a 75 ohm resistive load to match the coax however I see no technical reason why it would work.

The designer of this antenna mentioned a 20db loss compared to a dipole. The huge mismatch is probably why. Noise seem lower simply because it is much weaker. I believe the (matching system) is actually acting as an attenuator, dropping the noise level below the receivers internal noise and giving the illusion of a "low noise antenna". Possibly the same thing could be done with some resistors in line with the dipole.

Anyway, I've seen many antenna articles using these magic magnetic 9:1 transformers and I believe much of it might qualify as urban legend.

Thanks all for your comments. 73

Steve N4LQ

--- In loopantennas@yahoogroups.com, Ray Phillips <uggliozzi@...> wrote:
>
>
>
> Steve,
>
> To get the best results from a loop, the loop impedance and the feed line impedance should be as close as possible.
>
> At RF frequencies, a loop is essentially a high impedance device. If a loop is heavily loaded by a low impedance feed line, its efficiency is reduced and loop performance is compromised.
>
> The resistive portion of the impedance of your 85' loop at 1MHz is so low that we can ignore it.

> If you were to present the loop with a feed line load of 75 ohms, this load is much less than the J 269.9 ohms and you would not get a good transfer of signal.
> A 9:1 transformer will take the 75 ohms of the feed line and transform it to 675 ohms. A 4:1 would give 300 ohms which is a closer match to the J 269.9.
>
> However, as in most things antenna, there needs to be a compromise.
> To choose a transformer, you need to calculate the impedance of the loop at the low frequency end of frequencies of interest and at the high frequency end and select a transformer ratio which is the "best fit".
>
>
> Another solution (for 50 ohm feed line) is to make a "pick up" loop one fifth the size of the main loop and place it close to one side of the main loop (bottom recommended). Connect this to the feed line.
> Join the two ends of the main loop together. The length ratio between the main and pick up loops performs the transformer function. At first glance the ratio appears to be a high 25:1 but operational use suggests that one fifth is the way to go. For 75 ohm feed line, the ratio would be different. I don't use 75 ohm cable and cannot offer any experience but the maths suggests one quarter main loop size.
>
> I recommend using a "Faraday" style pick up loop which uses coax in a special configuration.
> http://combotec.com/projects/magloop-HF/magloop.html
> http://homepage.ntlworld.com/g4kki.william/LOOP.PDF
>
>
>
> All said, the main rule of thumb for antennas is "Experiment, experiment, experiment".
>
> ray, vk5ugs
>
>
>
> To: loopantennas@yahoogroups.com
> From: andrew.ikin@...
> Date: Sun, 12 Dec 2010 18:49:41 +0000
> Subject: Re: [loopantennas] 9:1 transformer
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Steve N4LQ Wrote on Dec. 12,
>
>
>
> "Why are people using 9:1 transformer on small loop antennas? The loop just posted by W1AEX is nice but we know the loops impedance on the BCB and 160m would be but a fraction of an ohm. The 9:1 ratio transformer would step this down even further and present an even poorer match to the 75 ohm coax! EZNEC computes an 85' loop's impedance at 1 mHz to be 0.0001839 + J 269.9 ohms. If anything, I would have reversed the transformer in an attempt to step up the loops impedance although that would be of little help since the Z is already a virtual short circuit.
>
> Maybe I'm missing some secret formula here. Can someone shed some light on this?"
>
>
>
> Steve, the way I see it; 85 feet is a large loop with a relatively high impedance or reactance Z, only the Resistance is a virtual short. Therefore, it seems logical to use a step down transformer. I have done this in the past with modified K9AY antenna and it works quite well. A 9:1 ratio seems to be reasonable compromise for the intended Freq. range. For BCB use one could use say a 4:1 ratio.
>
>
>
> 73
>
>
>
> Andrew
>
>
>
> [Non-text portions of this message have been removed]
>
>

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8087. Re: [loopantennas] copper flashing question

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 11:29:21 UTC
From: John Seager
Topic: 8048 Message: 8087

The good Moebius has been quoted a lot in connection with loop
antennas. I have yet be convinced that his theory has anything to
do with antenna performance. But thanks for the reference. John G0UCP

From: brian nsl <brian.nsl@...>
To: loopantennas@yahoogroups.com
Sent: Sunday, 12 December, 2010 11:39:36
Subject: Re: [loopantennas] copper flashing question

John,
With our inclement weather workshop activity on antennas has been halted hi!
On this site there is an interesting item in flexible copper tape but with both
sides insulated from each other.

www.die-wuestens.de/eindex.htm

It might be useful for a Mobius type loop ????
72, Brian, G0NSL-QRP.
----- Original Message -----
From: John Seager
To: loopantennas@yahoogroups.com
Sent: Monday, December 06, 2010 12:53 PM
Subject: Re: [loopantennas] copper flashing question

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8088. Mobius !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 11:42:56 UTC
From: brian nsl
Topic: 8088 Message: 8088

John,
Thank you for the comments.
The Mobius guy certainly has an impressive background, in NASA activity at least hi!
I consider it mainly a space saving idea i.e. two turns in the space of one.
When the weather improves for workshop activity I want to try a multi turn Mobius,
say 4 core cable in an 8mm copper tube loop, in theory a 5 turn loop in the space
of one say 2ft diameter !!!!!
Indoors I am playing with making an antenna for a Denon DAB hi fi unit I bought
last week, there is no way I can nail the dipole supplied to the lounge wall hi!
Regards,
72, Brian.
----- Original Message -----
From: John Seager
To: loopantennas@yahoogroups.com
Sent: Monday, December 13, 2010 11:29 AM
Subject: Re: [loopantennas] copper flashing question

[Non-text portions of this message have been removed]

8089. Re: [loopantennas] Mobius !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 13:48:52 UTC
From: Chris Trask
Topic: 8088 Message: 8089

>
> Thank you for the comments.
> The Mobius guy certainly has an impressive background, in NASA activity at least hi!
> I consider it mainly a space saving idea i.e. two turns in the space of one.
> When the weather improves for workshop activity I want to try a multi turn Mobius,
> say 4 core cable in an 8mm copper tube loop, in theory a 5 turn loop in the space
> of one say 2ft diameter !!!!!
>

That won't result in a Moebius loop. The shield/conductor interconnections get a little bizarre after two turns. The 2-turn Moebius loop is described in the tutorial I added to the files section about a year ago, "Shielded Loop Aerials Rev 0.pdf".

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8090. Re: [loopantennas] Mobius !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 15:08:08 UTC
From: brian nsl
Topic: 8088 Message: 8090

Chris,
Yes, I have your excellent article on the subject to hand for reference.
In my idea there would be no ' interconnections ' it would in effect be just a length of wire within the copper tubing.
Though I did say ' 4 core cable ' I could achieve the same result with one long length of wire fed thought X times, the two ends connected to the tubing at the top and the loop feed taken off the bottom tube ends.
There are lots of ' ideas ' in my scrap bin hi!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Chris Trask
To: loopantennas@yahoogroups.com
Sent: Monday, December 13, 2010 1:48 PM
Subject: Re: [loopantennas] Mobius !!!!!

[Non-text portions of this message have been removed]

8091. Re: [loopantennas] Mobius !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 15:34:41 UTC
From: Chris Trask
Topic: 8088 Message: 8091

>
> Yes, I have your excellent article on the subject to hand for
reference.
> In my idea there would be no ' interconnections ' it would in effect be
just a
> length of wire within the copper tubing.
> Though I did say ' 4 core cable ' I could achieve the same result with one
> long length of wire fed thought X times, the two ends connected to the
tubing
> at the top and the loop feed taken off the bottom tube ends.
> There are lots of ' ideas ' in my scrap bin hi!
>

Not sure what your arrangement would result in. If I've mapped it correctly, you would have Vs(X+1) times the voltage at the terminals, and I think the terminal current will be Is/(1+X), where Vs and Is are the shield outer surface voltage and current. That would result in a terminal impedance of Rs(1+X)*(1+X) where Rs would be the terminal impedance of a non-shielded loop.

It will be interesting to see the results of what you have proposed. I've liked the idea of the simple Moebius loop (ie - X=1) as if uses no more material than a "regular" shielded loop and results in a 4:1 impedance transformer, which eliminates the first transformer in my series matching networks, hence slightly better performance and less cost.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8092. Re: [loopantennas] Mobius !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 16:20:22 UTC
From: brian nsl
Topic: 8088 Message: 8092

Chris,
Whatever the outcome there will be no maths, definitely not my forte hi!
I shall pass along my findings (if any) in due course.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Chris Trask
To: loopantennas@yahoogroups.com
Sent: Monday, December 13, 2010 3:34 PM
Subject: Re: [loopantennas] Mobius !!!!!

[Non-text portions of this message have been removed]

8093. Magnetic loop for 40-6m kit

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-13 23:29:18 UTC
From: slombardy
Topic: 8093 Message: 8093

I am a new Ham and would like to find out how to build a magnetic loop antenna which is tuneable and would cover 40m-6m. Does anyone know of a kit that might be available? Also, I live in a condo so the best I can do is place it next to a window, at least till the weather gets better outside.

Thanks
Steve, KC2ZNU 73

8094. Re: 9:1 transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-14 18:01:14 UTC
From: Stephan Grossklass
Topic: 8080 Message: 8094

--- In loopantennas@yahoogroups.com, "n4lq" <n4lq@...> wrote:
>
> I am so accustomed to first canceling out the reactance then
> matching the antenna. It's a ham radio habit I suppose.

And an understandable one, too - otherwise radiation efficiency would be extremely lousy, and hams want to be heard. It's not a bad idea for reception purposes either, though the requirements are a lot more relaxed due to all the atmospheric, galactic and man-nade noise picked up by the antenna plus usually good receiver sensitivity. My big loop with AR7030 won't hear any more on 160m than my ICF-SW7600G (forced to use the ferrite rod) with the little 9" Tecsun AN-200.

> If you cancel the 269 ohm reactance, you're left with an
> impedance of nearly zero.

Depends on how you do it. A series capacitor would do as you say, a parallel one would yield a very high impedance (of (wL)^2/R). But in any case,

> Matching this would require something a bit more than a 9:1
> transformer.

I use a pickup winding with a 27 cm base length (total length ~70 cm) on a 4-turn 93 x 93 cm box loop, which seems to give a decent match to 50 ohms on 80m up and still is OK for 160 and upper MW. It is important to run the pickup wire in parallel to the wires with the highest current (and as close as possible), usually opposite the varicap. Those with the least detuning when touching them are correct.

Speaking of pickup loops, they are entirely non-critical electrically. Their resistance only has to be small vs. transformed impedance (~= receiver input impedance), which is dead easy. Main loop loss resistance should be small vs. radiation resistance, with the latter only being a fraction of an ohm on most reasonably-sized loops.
Therefore, you can pretty much use whatever seems most practical for the pickup loop, as long as it's reasonably conductive. A piece of wire may be more useful on a wire loop, while a piece of coax shield might give better coupling with a tubing loop.

> So these little 85 ft. loops are really short by these
> standards and considerable series capacitance is needed
> to cancel the reactance. As you stated, matching could be

> done by the 1/5 cir. loop or by a gamma match. Bandwidth
> would be very narrow and constant retuning required as
> frequency is changed.

That's the price to pay for a physically small antenna if
any kind of radiation efficiency is desired. The sharper the
peaking, the higher the maximum signal level.

> The designer of this antenna mentioned a 20db loss compared to
> a dipole. The huge mismatch is probably why.

20 dB isn't even *that* bad. For my big loop, RJELOOP3 [1]
calculates about 38 dB below 1/4-wave vertical at 1540 kHz
to 21 dB at 4800 kHz. Obviously you wouldn't want to use
that one for transmitting, but it'll easily hear into the
noise. On 160m, the AR7030 shows S5 of noise with 10 dB
preamp on, 80 expectedly is quieter. I rarely get anything
more than S9+10 on ham stations even when others attest 20
to 30 over, so 20 to 30 dB below fullsize is realistic.

In order to achieve any kind of radiation efficiency on
160 with a physically small loop, you really need to jump
through some hoops (pun not intended). About 20 m of 4"
copper tubing and a 500 pF / 10 kV varicap could come in
handy. It all gets a lot more relaxed if you only need 20
and higher.

Stephan

[1] I had to use DOSBox (the emulator) or it wouldn't run.

8095. Re: [loopantennas] Re: 9:1 transformer

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-14 19:25:54 UTC
From: Rick Karlquist
Topic: 8080 Message: 8095

> --- In loopantennas@yahoogroups.com, "n4lq" <n4lq@...> wrote:
>>
>> I am so accustomed to first canceling out the reactance then
>> matching the antenna. It's a ham radio habit I suppose.
>

You can either series resonate or parallel resonate the reactance.
You either end up with below 1 ohm or up in the 1000's of ohms.
As I showed in my National Contest Journal article (available from
ARRL or my web site www.n6rk.com), it is entirely practical to
match 5000 ohms to 50 ohms using a 10:1 turns ratio. Attempting
to match milliohms to 50 ohms would likely run into leakage
inductance limitations and in any event would not be amenable
to varactor tuning (too much capacitance is needed). The effective
series resistance of the loop is almost entirely the copper loss
of the conductor, since the radiation resistance is so small.

Rick N6RK

8096. Backing up Yahoo Groups

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-17 14:07:26 UTC
From: tenorman1952
Topic: 8096 Message: 8096

I am a moderator on a number of Yahoo Groups. I received this note from one of the site owners:

Paul - thinking we should have backups of the Yahoo Group. Yahoo Corporate just pulled the plug on their Delicious Bookmarking and there is some rumble that any other services not paying their way are being looked at.

I found http://www.pgoffline.com/index.htm for $25 to do it - wondering if there are other ones out there.

I don't have full access to any of the groups I moderate. Can anyone tell me how to go about this?

Paul C.

8097. Re: [loopantennas] Backing up Yahoo Groups

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-17 14:22:03 UTC
From: Myamiphil
Topic: 8096 Message: 8097

My Delicious bookmarks are still working.. backed them up just in case.... I have over 1000 bookmarks on there!
I use it daily.. Are there any other bookmarks group like that?

Best Regards

Phil
Lat: 40.8367633
Long: -74.1768412

http://del.icio.us/myamiphil

From: tenorman1952 <tenorman1952@...>
To: loopantennas@yahoogroups.com
Sent: Fri, December 17, 2010 9:07:26 AM
Subject: [loopantennas] Backing up Yahoo Groups

I am a moderator on a number of Yahoo Groups. I received this note from one of the site owners:

Paul - thinking we should have backups of the Yahoo Group. Yahoo Corporate just pulled the plug on their Delicious Bookmarking and there is some rumble that any other services not paying their way are being looked at.

I found http://www.pgoffline.com/index.htm for $25 to do it - wondering if there are other ones out there.

I don't have full access to any of the groups I moderate. Can anyone tell me how to go about this?

Paul C.

[Non-text portions of this message have been removed]

8098. Re: [loopantennas] Backing up Yahoo Groups

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-17 15:04:42 UTC
From: Andy
Topic: 8096 Message: 8098

I'm confused. Is there any indication that Yahoo was planning on dropping Yahoogroups? I'm not sure what Delicious Bookmarking is, but isn't it something separate and distinct from Yahoogroups?

This almost sounds like a scam.

But then again I'm not sure what it is that Yahoo is said to have dropped or is considering dropping, or dropping support of.

Did you want to back up a Yahoogroup? Or a bunch of bookmarks?

Andy

8099. Re: [loopantennas] Backing up Yahoo Groups

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-17 19:50:25 UTC
From: Myamiphil
Topic: 8096 Message: 8099

Yahoo is having some cutbacks and layoffs. Ive seen some mention of maybe cleaning out unused groups (inactive). I didn't realize Delicious was part of Yahoo till I revisited the site and the Yahoo name is part of the Delicious banner. I don't know of any other online bookmarking website. It would be a shame to delete it. This is the first I've heard of it.

Adweek article

Best Regards

Phil

From: Andy <ai.egrps@...>
To: loopantennas@yahoogroups.com
Sent: Fri, December 17, 2010 10:04:42 AM
Subject: Re: [loopantennas] Backing up Yahoo Groups

I'm confused. Is there any indication that Yahoo was planning on dropping Yahoogroups? I'm not sure what Delicious Bookmarking is, but isn't it something separate and distinct from Yahoogroups?

This almost sounds like a scam.

But then again I'm not sure what it is that Yahoo is said to have dropped or is considering dropping, or dropping support of.

Did you want to back up a Yahoogroup? Or a bunch of bookmarks?

Andy

[Non-text portions of this message have been removed]

8100. Re: Backing up Yahoo Groups

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-20 13:51:04 UTC
From: Bruce Carter
Topic: 8096 Message: 8100

I let Grouply make automatic backups of my groups. Unfortunately they do not back up the files, links, or database sections. But they do back up the message archive, photo, and calendar. There is a lot of controversy about Grouply - and you have to be extremely careful in what you click or they will spam all of your member list with Grouply invitations.

Still - with all the problems - their business model is to vigorously mirror groups on Yahoo and Google, which is to the advantage of anybody concerned that an entire group with its irreplaceable message archive disappear the way Geocities did.

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> I am a moderator on a number of Yahoo Groups. I received this note from one of the site owners:
> ----
> Paul - thinking we should have backups of the Yahoo Group. Yahoo Corporate just pulled the plug on their Delicious Bookmarking and there is some rumble that any other services not paying their way are being looked at.
>
> I found http://www.pgoffline.com/index.htm for $25 to do it - wondering if there are other ones out there.
> ----
>
> I don't have full access to any of the groups I moderate. Can anyone tell me how to go about this?
>
> Paul C.
>

8101. Loop Spam

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-22 15:22:00 UTC
From: Bill
Topic: 8101 Message: 8101

Someone claiming to be "Jim Hansen" has claimed to be a member and has sent me an invitation to join him in "Grouply."
I thought this (Grouply)was banned?

I object to the invitation, and hope that Jim is not really a member.
Bill--W4BSG

8102. Greetings !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-23 16:39:16 UTC
From: brian nsl
Topic: 6125 Message: 8102

Seasonal Greetings and a Peaceful 2011
to all members of the group.
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

8103. SUPER LOOP ANTENNA QUESTION

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-25 06:37:47 UTC
From: uvucpnite@ymail.com
Topic: 8103 Message: 8103

Hello: I recently installed what is called a "Super Loop" 80-10 meter (inverted triangle) vertical delta loop antenna with the apex (feedpoint) pointed down. The upper two ends of the loop are 60 feet high and the lower feed point (apex) comes down at an angle to about 20 feet high. Would it be be best to let the apex hang down vertically from the horizontal part of the loop to maintain it's vertical integrity? It seems to work well as is on stateside contacts and it doesn't do too bad on DX either. The articles I have read on this antenna are not clear (at least to me) on the exact position of the apex (feedpoint). Thanks!

8104. Re: Loop Spam

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-26 02:11:13 UTC
From: AlienRelics
Topic: 8101 Message: 8104

I can't ban what people do off-list.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "Bill" <billaycock@...> wrote:
>
> Someone claiming to be "Jim Hansen" has claimed to be a member and has sent me an invitation to join him in "Grouply."
> I thought this (Grouply)was banned?
>
> I object to the invitation, and hope that Jim is not really a member.
> Bill--W4BSG
>

8105. Re: [loopantennas] SUPER LOOP ANTENNA QUESTION

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-26 02:45:05 UTC
From: Steve Ellington
Topic: 8103 Message: 8105

You have it installed correctly. It is a vertical loop....Not horizontal.

Steve
N4LQ
----- Original Message -----
From: uvucpnite@...
To: loopantennas@yahoogroups.com
Sent: Saturday, December 25, 2010 1:37 AM
Subject: [loopantennas] SUPER LOOP ANTENNA QUESTION

Hello: I recently installed what is called a "Super Loop" 80-10 meter (inverted triangle) vertical delta loop antenna with the apex (feedpoint) pointed down. The upper two ends of the loop are 60 feet high and the lower feed point (apex) comes down at an angle to about 20 feet high. Would it be be best to let the apex hang down vertically from the horizontal part of the loop to maintain it's vertical integrity? It seems to work well as is on stateside contacts and it doesn't do too bad on DX either. The articles I have read on this antenna are not clear (at least to me) on the exact position of the apex (feedpoint). Thanks!

[Non-text portions of this message have been removed]

8106. Re: [loopantennas] SUPER LOOP ANTENNA QUESTION

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-26 11:31:25 UTC
From: M HOLDEN
Topic: 8103 Message: 8106

You are fine with your wire loop set at vertical, horizontal, or somewhere in between. For 80m Dx vertical is best. To bend S meter needles over a 300 mile radius, horizontal is more likely the way to set up. You will soon find out about your antenna's performance as it is set up now. If you use it horizontally, although performance on 80m will be great over a 300 mile radius, it will throw out very low angle lobes on 20-17-15-12 and 10m for Dx performance. After dark, the f1 and f2 layers converge at useful height above earth to work 1000 miles plus with ease on 80m.
I hope this quick thumb-nail sketch is a helpful indication of what to expect. Good luck.
Mike Holden, G4HOL

--- On Sat, 25/12/10, uvucpnite@... <uvucpnite@...> wrote:

From: uvucpnite@... <uvucpnite@...>
Subject: [loopantennas] SUPER LOOP ANTENNA QUESTION
To: loopantennas@yahoogroups.com
Date: Saturday, 25 December, 2010, 6:37

Hello: I recently installed what is called a "Super Loop" 80-10 meter (inverted triangle) vertical delta loop antenna with the apex (feedpoint) pointed down. The upper two ends of the loop are 60 feet high and the lower feed point (apex) comes down at an angle to about 20 feet high. Would it be be best to let the apex hang down vertically from the horizontal part of the loop to maintain it's vertical integrity? It seems to work well as is on stateside contacts and it doesn't do too bad on DX either. The articles I have read on this antenna are not clear (at least to me) on the exact position of the apex (feedpoint). Thanks!

[Non-text portions of this message have been removed]

8107. Re: [loopantennas] SUPER LOOP ANTENNA QUESTION

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-26 11:46:47 UTC
From: brian nsl
Topic: 8103 Message: 8107

Hi,
My 40m loop has in the main always been horizontal but there is a school of thought in the higher echelons of the loop world that 45 degrees is the optimum angle.
If yours is apex down a cord and a tent peg will give you endless variations or even answers hi!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: M HOLDEN
To: loopantennas@yahoogroups.com
Sent: Sunday, December 26, 2010 11:31 AM
Subject: Re: [loopantennas] SUPER LOOP ANTENNA QUESTION

[Non-text portions of this message have been removed]

8108. new here

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-26 07:22:20 UTC
From: PAUL W
Topic: 8108 Message: 8108

hi i new to the loop so i just tell you why am here looking at making a loop for my solar powered radio it just a am/fm / shortwave i live on a little hill out in the sticks ,just like to get a better signal from my radio . it will do ever thing i need once i can pull in a better signal
1/ so can a build a 1 loop that am/fm and shortwave [thinking may be not]
2/ can i build 1 loop that dos say am/fm then put a 2nd loop cross-ways to the 1st loop to do shortwave [has this been done before?]

i am going to look at the files you have here see what you have
but any help be great building a loop look mostly simple as long as you get the sizes right
thank you for all yr help
paul
ps please keep everthing in english ahhahahhahahha i not a techie

8109. Re: [loopantennas] new here

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-26 15:39:54 UTC
From: Steve Ellington
Topic: 8108 Message: 8109

You need 3 antennas. One for the AM broadcast band. One for Short Wave and one for FM.

Where do you live and what are you trying to receive?

It sounds like you are using a really crummy radio to begin with.

For AM you can buy a small loop that sets next to your radio. It will greatly help with distant reception. Here's one. All you do is set it next to your radio and tune the one knob for maximum signal.
http://tech.pronto.com/mpm/compare/kaito-an200-tunable-am-passive-10306411476

For FM and short wave your radio needs to have an external antenna input. Does it?

Short wave reception can be improved by simply hooking a wire to the radio's antenna jack (if it has one). The wire can run around the room, out the window or whatever.

FM is more demanding. You really need a beam type antenna. I would guess your radio doesn't have an antenna jack.
Steve
N4LQ
----- Original Message -----
From: PAUL W
To: loopantennas@yahoogroups.com
Sent: Sunday, December 26, 2010 2:22 AM
Subject: [loopantennas] new here

hi i new to the loop so i just tell you why am here looking at making a loop for my solar powered radio it just a am/fm / shortwave i live on a little hill out in the sticks ,just like to get a better signal from my radio . it will do ever thing i need once i can pull in a better signal
1/ so can a build a 1 loop that am/fm and shortwave [thinking may be not]
2/ can i build 1 loop that dos say am/fm then put a 2nd loop cross-ways to the 1st loop to do shortwave [has this been done before?]

i am going to look at the files you have here see what you have
but any help be great building a loop look mostly simple as long as you get the sizes right
thank you for all yr help
paul
ps please keep everthing in english ahhahahhahahha i not a techie

[Non-text portions of this message have been removed]

8110. Re: [loopantennas] SUPER LOOP ANTENNA QUESTION

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-26 15:21:59 UTC
From: Steve Ellington
Topic: 8103 Message: 8110

The "Super Loop" is a product of Radio Works. Is this what you have? If so, it was designed to be installed vertically.

I'm seeing answers that are all over the map here. Super Loop is a brand name. If you just made a loop of your own with no phasing line across the middle the the rules change.

Steve
N4LQ
----- Original Message -----
From: uvucpnite@...
To: loopantennas@yahoogroups.com
Sent: Saturday, December 25, 2010 1:37 AM
Subject: [loopantennas] SUPER LOOP ANTENNA QUESTION

Hello: I recently installed what is called a "Super Loop" 80-10 meter (inverted triangle) vertical delta loop antenna with the apex (feedpoint) pointed down. The upper two ends of the loop are 60 feet high and the lower feed point (apex) comes down at an angle to about 20 feet high. Would it be be best to let the apex hang down vertically from the horizontal part of the loop to maintain it's vertical integrity? It seems to work well as is on stateside contacts and it doesn't do too bad on DX either. The articles I have read on this antenna are not clear (at least to me) on the exact position of the apex (feedpoint). Thanks!

[Non-text portions of this message have been removed]

8111. Re: new here

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-27 09:36:20 UTC
From: PAUL W
Topic: 8108 Message: 8111

yes steve it a crummy radio but it a xmass from my better 1/2 so i am going to make do with what i got .l have see on youtube how much diffrent a loop can make so that why i am here .i live about 2 hour drive west of bribane in qld australia live up the hills and i live in a shed i live a very quite life it just that i like to hear some classical music and a little world news sometimes ,so most staions are not close ,i build most things if i can ,and building loop looking like a great next project leaning a little about radios at the same time. buy something to me is a little bit hard as i am on a pensioner ,but i have the time and thank God for the web [and i do thank God] most info and help is at hand on the web
hope it fill in the hole why i am here
i start looking for the bit this week for the am loop
thank you for yr help
i am shore i be post more silly question as i building my antennas
Paul

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> You need 3 antennas. One for the AM broadcast band. One for Short Wave and one for FM.
>
> Where do you live and what are you trying to receive?
>
> It sounds like you are using a really crummy radio to begin with.
>
> For AM you can buy a small loop that sets next to your radio. It will greatly help with distant reception. Here's one. All you do is set it next to your radio and tune the one knob for maximum signal.
http://tech.pronto.com/mpm/compare/kaito-an200-tunable-am-passive-10306411476
>
> For FM and short wave your radio needs to have an external antenna input. Does it?
>
> Short wave reception can be improved by simply hooking a wire to the radio's antenna jack (if it has one). The wire can run around the room, out the window or whatever.
>
> FM is more demanding. You really need a beam type antenna. I would guess your radio doesn't have an antenna jack.
> Steve
> N4LQ
> ----- Original Message -----
> From: PAUL W
> To: loopantennas@yahoogroups.com
> Sent: Sunday, December 26, 2010 2:22 AM
> Subject: [loopantennas] new here
>
>
>

> hi i new to the loop so i just tell you why am here looking at making a loop for my solar powered radio it just a am/fm / shortwave i live on a little hill out in the sticks ,just like to get a better signal from my radio . it will do ever thing i need once i can pull in a better signal
> 1/ so can a build a 1 loop that am/fm and shortwave [thinking may be not]
> 2/ can i build 1 loop that dos say am/fm then put a 2nd loop cross-ways to the 1st loop to do shortwave [has this been done before?]
>
> i am going to look at the files you have here see what you have
> but any help be great building a loop look mostly simple as long as you get the sizes right
> thank you for all yr help
> paul
> ps please keep everthing in english ahhahahhahahha i not a techie
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8112. Re: [loopantennas] Re: new here

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-27 09:51:28 UTC
From: Pollock,Raphael E
Topic: 8108 Message: 8112

Look at "ferrite rod antenna" on Youtube video for an interesting alternative to the air core loop designs.

From: PAUL W [mailto:littlebuddha4@...]
Sent: Monday, December 27, 2010 03:36 AM
To: loopantennas@yahoogroups.com <loopantennas@yahoogroups.com>
Subject: [loopantennas] Re: new here

yes steve it a crummy radio but it a xmass from my better 1/2 so i am going to make do with what i got .l have see on youtube how much diffrent a loop can make so that why i am here .i live about 2 hour drive west of bribane in qld australia live up the hills and i live in a shed i live a very quite life it just that i like to hear some classical music and a little world news sometimes ,so most staions are not close ,i build most things if i can ,and building loop looking like a great next project leaning a little about radios at the same time. buy something to me is a little bit hard as i am on a pensioner ,but i have the time and thank God for the web [and i do thank God] most info and help is at hand on the web
hope it fill in the hole why i am here
i start looking for the bit this week for the am loop
thank you for yr help
i am shore i be post more silly question as i building my antennas
Paul

--- In loopantennas@yahoogroups.com<mailto:loopantennas%40yahoogroups.com>, "Steve Ellington" <n4lq@...> wrote:
>
> You need 3 antennas. One for the AM broadcast band. One for Short Wave and one for FM.
>
> Where do you live and what are you trying to receive?
>
> It sounds like you are using a really crummy radio to begin with.
>
> For AM you can buy a small loop that sets next to your radio. It will greatly help with distant reception. Here's one. All you do is set it next to your radio and tune the one knob for maximum signal.
http://tech.pronto.com/mpm/compare/kaito-an200-tunable-am-passive-10306411476
>
> For FM and short wave your radio needs to have an external antenna input. Does it?
>
> Short wave reception can be improved by simply hooking a wire to the radio's antenna jack (if it has one). The wire can run around the room, out the window or whatever.
>
> FM is more demanding. You really need a beam type antenna. I would guess your radio doesn't have an antenna jack.
> Steve
> N4LQ

> ----- Original Message -----
> From: PAUL W
> To: loopantennas@yahoogroups.com<mailto:loopantennas%40yahoogroups.com>
> Sent: Sunday, December 26, 2010 2:22 AM
> Subject: [loopantennas] new here
>
>
>
> hi i new to the loop so i just tell you why am here looking at making a loop for my solar powered radio it just a am/fm / shortwave i live on a little hill out in the sticks ,just like to get a better signal from my radio . it will do ever thing i need once i can pull in a better signal
> 1/ so can a build a 1 loop that am/fm and shortwave [thinking may be not]
> 2/ can i build 1 loop that dos say am/fm then put a 2nd loop cross-ways to the 1st loop to do shortwave [has this been done before?]
>
> i am going to look at the files you have here see what you have
> but any help be great building a loop look mostly simple as long as you get the sizes right
> thank you for all yr help
> paul
> ps please keep everthing in english ahhahahhahahha i not a techie
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

8113. Re: new here

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-27 14:28:44 UTC
From: a6t70
Topic: 8108 Message: 8113

Hi Paul W,
Make sure you tell the loved one who bought this device, that it is not just "crummy", but REALLY crummy.

Steve is correct, that in a more prefect world, 3 antennas would be useful. But a more detailed explanation (what radio is it, does it have provisions for multiple antennas, what stations do you listen to, are there any adjacent channel stations that cause interference, etc.) would allow members to better help with a solution(s).

Even inexpensive radios can be improved with the right antenna. But a single "do all" antenna is a difficult solution depending on your detailed situation.

Enjoy your radio, for it is much better than have no radio at all. The magic of radio is never lost on me.

Bob V

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> You need 3 antennas. One for the AM broadcast band. One for Short Wave and one for FM.
>
> Where do you live and what are you trying to receive?
>
> It sounds like you are using a really crummy radio to begin with.
>
> For AM you can buy a small loop that sets next to your radio. It will greatly help with distant reception. Here's one. All you do is set it next to your radio and tune the one knob for maximum signal.
http://tech.pronto.com/mpm/compare/kaito-an200-tunable-am-passive-10306411476
>
> For FM and short wave your radio needs to have an external antenna input. Does it?
>
> Short wave reception can be improved by simply hooking a wire to the radio's antenna jack (if it has one). The wire can run around the room, out the window or whatever.
>
> FM is more demanding. You really need a beam type antenna. I would guess your radio doesn't have an antenna jack.

>

8114. Re: SUPER LOOP ANTENNA QUESTION

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-27 19:12:17 UTC
From: uvucpnite@ymail.com
Topic: 8103 Message: 8114

Steve N4LQ

Thank you for the information on the Super Loop antenna. It is "home made" but identical in every respect to the one sold by Radio Works. I'm certain you have given me the correct information. Thanks.

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> The "Super Loop" is a product of Radio Works. Is this what you have? If so, it was designed to be installed vertically.
>
> I'm seeing answers that are all over the map here. Super Loop is a brand name. If you just made a loop of your own with no phasing line across the middle the the rules change.
>
> Steve
> N4LQ
> ----- Original Message -----
> From: uvucpnite@...
> To: loopantennas@yahoogroups.com
> Sent: Saturday, December 25, 2010 1:37 AM
> Subject: [loopantennas] SUPER LOOP ANTENNA QUESTION
>
>
>
>
> Hello: I recently installed what is called a "Super Loop" 80-10 meter (inverted triangle) vertical delta loop antenna with the apex (feedpoint) pointed down. The upper two ends of the loop are 60 feet high and the lower feed point (apex) comes down at an angle to about 20 feet high. Would it be be best to let the apex hang down vertically from the horizontal part of the loop to maintain it's vertical integrity? It seems to work well as is on stateside contacts and it doesn't do too bad on DX either. The articles I have read on this antenna are not clear (at least to me) on the exact position of the apex (feedpoint). Thanks!
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8115. Re: SUPER LOOP ANTENNA QUESTION

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-27 19:29:33 UTC
From: uvucpnite@ymail.com
Topic: 8103 Message: 8115

M Holden: Very good information on my vertical loop. I've now tried it vertically and a few places in between vertical and horizontal. It seems to work about the same either way on transmit, however it does appear to capture more 80 meter dx on receive vertically. Thanks.

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> You are fine with your wire loop set at vertical, horizontal, or somewhere in between. For 80m Dx vertical is best. To bend S meter needles over a 300 mile radius, horizontal is more likely the way to set up. You will soon find out about your antenna's performance as it is set up now. If you use it horizontally, although performance on 80m will be great over a 300 mile radius, it will throw out very low angle lobes on 20-17-15-12 and 10m for Dx performance. After dark, the f1 and f2 layers converge at useful height above earth to work 1000 miles plus with ease on 80m.
> I hope this quick thumb-nail sketch is a helpful indication of what to expect. Good luck. Mike Holden, G4HOL
>
> --- On Sat, 25/12/10, uvucpnite@... <uvucpnite@...> wrote:
>
> From: uvucpnite@... <uvucpnite@...>
> Subject: [loopantennas] SUPER LOOP ANTENNA QUESTION
> To: loopantennas@yahoogroups.com
> Date: Saturday, 25 December, 2010, 6:37
>
>
>
>
>
>
>
> Â
>
>
>
>
>
>
>
>
>
>
>
> Hello: I recently installed what is called a "Super Loop" 80-10 meter (inverted triangle) vertical delta loop antenna with the apex (feedpoint) pointed down. The upper two ends of the loop are 60 feet high and the lower feed point (apex) comes down at an angle to about 20 feet high. Would it be be best to let the apex hang down vertically from the horizontal

part of the loop to maintain it's vertical integrity? It seems to work well as is on stateside contacts and it doesn't do too bad on DX either. The articles I have read on this antenna are not clear (at least to me) on the exact position of the apex (feedpoint). Thanks!
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8116. Re: SUPER LOOP ANTENNA QUESTION

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-27 19:32:19 UTC
From: uvucpnite@ymail.com
Topic: 8103 Message: 8116

brian nsl. Thank you for the information on my loop antenna. It was very helpful.

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Hi,
> My 40m loop has in the main always been horizontal but there is a school of thought
> in the higher echelons of the loop world that 45 degrees is the optimum angle.
> If yours is apex down a cord and a tent peg will give you endless variations or
> even answers hi!
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: M HOLDEN
> To: loopantennas@yahoogroups.com
> Sent: Sunday, December 26, 2010 11:31 AM
> Subject: Re: [loopantennas] SUPER LOOP ANTENNA QUESTION
>
>
>
> [Non-text portions of this message have been removed]
>

8117. Re: [loopantennas] new here

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-27 22:30:20 UTC
From: Timothy-Allen Albertson
Topic: 8108 Message: 8117

use a coil from a CRT for AM attach a long wire if wanted and move the
coil around until one hits the sweet spot matching the best inductance (?)
from the
ferrite coil antenna

On Sun, Dec 26, 2010 at 9:39 AM, Steve Ellington <n4lq@...>wrote:

>
>
> You need 3 antennas. One for the AM broadcast band. One for Short Wave and
> one for FM.
>
> Where do you live and what are you trying to receive?
>
> It sounds like you are using a really crummy radio to begin with.
>
> For AM you can buy a small loop that sets next to your radio. It will
> greatly help with distant reception. Here's one. All you do is set it next
> to your radio and tune the one knob for maximum signal.
> http://tech.pronto.com/mpm/compare/kaito-an200-tunable-am-passive-10306411476
>
> For FM and short wave your radio needs to have an external antenna input.
> Does it?
>
> Short wave reception can be improved by simply hooking a wire to the
> radio's antenna jack (if it has one). The wire can run around the room, out
> the window or whatever.
>
> FM is more demanding. You really need a beam type antenna. I would guess
> your radio doesn't have an antenna jack.
> Steve
> N4LQ
>
> ----- Original Message -----
> From: PAUL W
> To: loopantennas@yahoogroups.com <loopantennas%40yahoogroups.com>
> Sent: Sunday, December 26, 2010 2:22 AM
> Subject: [loopantennas] new here
>
> hi i new to the loop so i just tell you why am here looking at making a
> loop for my solar powered radio it just a am/fm / shortwave i live on a
> little hill out in the sticks ,just like to get a better signal from my
> radio . it will do ever thing i need once i can pull in a better signal
> 1/ so can a build a 1 loop that am/fm and shortwave [thinking may be not]
> 2/ can i build 1 loop that dos say am/fm then put a 2nd loop cross-ways to

> the 1st loop to do shortwave [has this been done before?]
>
> i am going to look at the files you have here see what you have
> but any help be great building a loop look mostly simple as long as you get
> the sizes right
> thank you for all yr help
> paul
> ps please keep everthing in english ahhahahhahahha i not a techie
>
> [Non-text portions of this message have been removed]
>
>
>

--
Timothy-Allen Albertson
Member, The Church of Jesus Christ of
Latter-day Saints
Facebook: http://www.facebook.com/home.php?ref=home
Registered Linux User No. 482284
Registered Ubuntu User No. 25839
Amateur Radio Station KG6IRH/0
Technician Class License
Since 06 November 2001
Member, American Radio Relay League (ARRL)
Member, Mercury Amateur Radio Association-
MidWest (MARA-MW)
Member, Fremont Amateur Radio Transmitter
Society (FARTS) (Club Station WI6QW)
Member, SouthWest Iowa Amateur Radio Club
(SWIARC) (Repeater Callsign K0SWI)
Echolink Node No. 48255
Citizens Band Radio Station KTAA51501
(CB Rule 17(b)(2), 47 C.F.R. 915.417(b)(2))
Latitude: 41.254887 (41? 15' 17'' N)
Longitude: -95.852753 (95? 51' 9'' W)
Grid Square: EN21bg
12 ...In memory of our God, our religion, and freedom, and our peace, our
wives, and our children... Book of Mormon--Alma 46:12
8 Let his days be few; and let another take his office.
Pslams 109, Verse 8.

[Non-text portions of this message have been removed]

8118. Thanks

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-30 02:18:44 UTC
From: santini
Topic: 8118 Message: 8118

Gentlemen, thanks very much for the greetings. I look forward to reading
and sharing
loop information here.
73 Jim Wilkie WY4R
Norfolk, va
santini@...

8119. Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-30 17:47:09 UTC
From: Joey
Topic: 8119 Message: 8119

what has anyone experienced using a reflector under the loop they operate on? Is there a real increase in gain?

8120. Re: [loopantennas] Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-30 19:14:38 UTC
From: brian nsl
Topic: 8119 Message: 8120

Hi,
For a number of years I ran a reflector loop under my 40m full wave horizontal one.
The driven element was at 35ft and the reflector loop 17ft below it, appx 0.125 wavelength.
Operating consistently with 5 watts SSB it did appear to benefit operation.
From regular contacts a consistent comment was that my signals were not affected by
QSB as much, though I never quite figured that one out hi!
Why did I remove the reflector, house painting one summer and just never put it back !!!!!
Discussing the subject with the late L B Cebik, his conclusion was it was hardly worth the
hassle of erecting it.
72, Brian, G0NSL-QRP.

----- Original Message -----
From: Joey
To: loopantennas@yahoogroups.com
Sent: Thursday, December 30, 2010 5:47 PM
Subject: [loopantennas] Loop reflector

[Non-text portions of this message have been removed]

8121. Re: [loopantennas] Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-30 19:43:51 UTC
From: Dale Parfitt
Topic: 8119 Message: 8121

Modeling with EZNEC fails to show any real improvement- perhaps fractional DB straight up in the air.

Dale W4OP

Hi,
For a number of years I ran a reflector loop under my 40m full wave horizontal one.
The driven element was at 35ft and the reflector loop 17ft below it, appx 0.125 wavelength.
Operating consistently with 5 watts SSB it did appear to benefit operation.
From regular contacts a consistent comment was that my signals were not affected by QSB as much, though I never quite figured that one out hi!
Why did I remove the reflector, house painting one summer and just never put it back !!!!!
Discussing the subject with the late L B Cebik, his conclusion was it was hardly worth the hassle of erecting it.
72, Brian, G0NSL-QRP.

----- Original Message -----
From: Joey
To: loopantennas@yahoogroups.com
Sent: Thursday, December 30, 2010 5:47 PM
Subject: [loopantennas] Loop reflector

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3348 - Release Date: 12/30/10 02:34:00

[Non-text portions of this message have been removed]

8122. Re: [loopantennas] Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2010-12-31 08:17:22 UTC
From: M HOLDEN
Topic: 8119 Message: 8122

Yes, there is a noticeable gain, but only on the fundamental design frequency, not on the harmonically related ones. It is a 2 ele quad shooting upwards. Mike G4HOL

--- On Thu, 30/12/10, Joey <joeyh1951@...> wrote:

From: Joey <joeyh1951@...>
Subject: [loopantennas] Loop reflector
To: loopantennas@yahoogroups.com
Date: Thursday, 30 December, 2010, 17:47

what has anyone experienced using a reflector under the loop they operate on? Is there a real increase in gain?

[Non-text portions of this message have been removed]

8123. Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-03 07:01:14 UTC
From: longjohn119
Topic: 8119 Message: 8123

I think that would actually be considered a ground plane rather than a reflector. It may be of some assistance for a loop mounted high off the ground or on 'real' ground that is lossy due to factors you can't control (location specific and rare). If you have the loop up high, I'd try setting it up temporarily on real ground and see if it seems to help the performance and/or noise. If it does then making an artificial ground plane for your usual mount position up high should benefit. If you don't see a difference I wouldn't waste my time.

JR

--- In loopantennas@yahoogroups.com, "Joey" <joeyh1951@...> wrote:
>
> what has anyone experienced using a reflector under the loop they operate on? Is there a real increase in gain?
>

8124. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-03 17:46:48 UTC
From: Andy
Topic: 8119 Message: 8124

> I think that would actually be considered a ground plane rather than a reflector.

Just curious ... why do you say that? In your eye, what is the
difference between a ground plane and a reflector?

Me, I'd call it a reflector if it is a wire loop under the radiating
loop. If it is a solid sheet of metal, or a wire mesh that extends
well beyond the circumference of the loop, then I'd call it a ground
plane.

Many people who do NVIS find a marked improvement when they lay a
reflector wire or two underneath their dipole, either on or a few
inches above the ground. It might not help everywhere, but enough
people have said that it helps, that I think there must be something
to it. At least one person put a knife switch in the middle of his
reflector wire, so he could see just how much improvement it makes.

Your results may vary depending on frequency, on dimensions (size and
spacing), on distance from ground, and on your particular soil
conditions. The latter might not model very accurately in EZNEC.

Andy

8125. Re: [loopantennas] Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-03 19:13:15 UTC
From: Steve Ellington
Topic: 8119 Message: 8125

Joey: I hope you are talking about a horizontal loop. Everyone seems to think you are but you might be talking about a little magnetic loop or something. Who knows.

I had a 160 meter, full wave, loop up 60 feet and I put a reflector under it. The reflector was about 6 feet off the ground. Basically I had a cubical quad aimed straight up. I tried making the reflector 5% longer than the driven element.
I could tell no difference on 160 meters but really....The only way to measure gain would be to fly above the antenna in a helicopter and use a very sensitive field strength meter. For a number of reasons, the reflector would not function on harmonics but especially since the loop no longer acted as an NVIS antenna.
Bottom line: The reflector was a waste of time.

Steve
N4LQ
----- Original Message -----
From: Joey
To: loopantennas@yahoogroups.com
Sent: Thursday, December 30, 2010 12:47 PM
Subject: [loopantennas] Loop reflector

what has anyone experienced using a reflector under the loop they operate on? Is there a real increase in gain?

[Non-text portions of this message have been removed]

8126. Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-04 05:05:42 UTC
From: longjohn119
Topic: 8119 Message: 8126

If it's horizontal then it's omnidirectional so it definitely wouldn't qualify as a reflector which implies a directional antenna. Well maybe directional straight up but I'm not sure what good that would do a guy

JR

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> Joey: I hope you are talking about a horizontal loop. Everyone seems to think you are but you might be talking about a little magnetic loop or something. Who knows.
>
> I had a 160 meter, full wave, loop up 60 feet and I put a reflector under it. The reflector was about 6 feet off the ground. Basically I had a cubical quad aimed straight up. I tried making the reflector 5% longer than the driven element.
> I could tell no difference on 160 meters but really....The only way to measure gain would be to fly above the antenna in a helicopter and use a very sensitive field strength meter.
> For a number of reasons, the reflector would not function on harmonics but especially since the loop no longer acted as an NVIS antenna.
> Bottom line: The reflector was a waste of time.
>
> Steve
> N4LQ
> ----- Original Message -----
> From: Joey
> To: loopantennas@yahoogroups.com
> Sent: Thursday, December 30, 2010 12:47 PM
> Subject: [loopantennas] Loop reflector
>
>
>
> what has anyone experienced using a reflector under the loop they operate on? Is there a real increase in gain?
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8127. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-04 05:27:21 UTC
From: Dale Parfitt
Topic: 8119 Message: 8127

A horizontal 1 wavelength loop, if up sufficently high, has a radiation pattern almost identical to a half wave dipole- that is a figure 8 pattern.

Dale W4OP

If it's horizontal then it's omnidirectional so it definitely wouldn't qualify as a reflector which implies a directional antenna. Well maybe directional straight up but I'm not sure what good that would do a guy

JR

8128. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-04 05:29:56 UTC
From: Steve Ellington
Topic: 8119 Message: 8128

Yep....Straight up is exactly what I meant. A reflector under a horizontal loop does the same thing as the earth but with slightly less loss. The ultimate reflector would be solid copper under the loop.

I remember reading an article in a British publication concerning a cubicle quad antenna. Seems that a storm had bent the mast and the quad became horizontal. The author reported that many signals were stronger and surmised that many signals, even on 20 meters, arrive at very high angles.

Steve
N4LQ
----- Original Message -----
From: longjohn119
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 04, 2011 12:05 AM
Subject: [loopantennas] Re: Loop reflector

If it's horizontal then it's omnidirectional so it definitely wouldn't qualify as a reflector which implies a directional antenna. Well maybe directional straight up but I'm not sure what good that would do a guy

JR

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> Joey: I hope you are talking about a horizontal loop. Everyone seems to think you are but you might be talking about a little magnetic loop or something. Who knows.
>
> I had a 160 meter, full wave, loop up 60 feet and I put a reflector under it. The reflector was about 6 feet off the ground. Basically I had a cubical quad aimed straight up. I tried making the reflector 5% longer than the driven element.
> I could tell no difference on 160 meters but really....The only way to measure gain would be to fly above the antenna in a helicopter and use a very sensitive field strength meter.
> For a number of reasons, the reflector would not function on harmonics but especially since the loop no longer acted as an NVIS antenna.
> Bottom line: The reflector was a waste of time.
>
> Steve
> N4LQ
> ----- Original Message -----
> From: Joey
> To: loopantennas@yahoogroups.com
> Sent: Thursday, December 30, 2010 12:47 PM
> Subject: [loopantennas] Loop reflector
>
>

>
> what has anyone experienced using a reflector under the loop they operate on? Is there a real increase in gain?
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

8129. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-04 14:36:55 UTC
From: Andy
Topic: 8119 Message: 8129

Non-directional in 2 dimensions does not mean non-directional in 3 dimensions. A cubical quad is a directional antenna no matter how you orient it, as long as you are looking at it in 3D.

Horizontal full-wave loops are quite useful, for NVIS and high angle communications, which many hams use without realizing it. Yes, cloud-burners are actually important, on the lower HF frequencies, for regional coverage. Generally not so much for DX. (Which is not to say that horizontal loops can't also work for DX, on higher freqs.)

Andy

8130. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-05 22:37:28 UTC
From: Andy
Topic: 8119 Message: 8130

> A horizontal 1 wavelength loop, if up sufficently high, has a radiation
> pattern almost identical to a half wave dipole- that is a figure 8 pattern.

Where did you hear that?

A full wavelength loop, in free space, has a pattern that looks like a dumbbell: two major lobes in opposite directions (perpendicular to the loop), and a null going a full 360 degrees around it in the plane of the loop.

A half wave dipole has a pattern like a donut, which is almost exactly the opposite.

So I'm trying to figure out what orientations of the loop and of the dipole you are envisioning.

Most half wave wire dipoles are horizontal, and tend to have maximum signal broadside to the wire, and nulls off the ends (except for interaction with the earth or ionospheric reflections). A full wave loop at any height is essentially nondirectional with respect to its axis. Its primary radiation is straight up and straight down, so it makes a good antenna for high angle signals; though if you mount it a half wave above earth, it may get a null going straight up due to cancellation with its reflection.

Andy

8131. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-05 23:02:46 UTC
From: Dale Parfitt
Topic: 8119 Message: 8131

I didn't hear it, I modeled it with EZNEC. Think of a 1 wavelength horizontal loop as two half wave dipoles spaced 1/4 wavelength apart- it is obvious this is not omni and will have classic construction and destruction azimuth pattern.

Dale W4OP

> A horizontal 1 wavelength loop, if up sufficently high, has a radiation
> pattern almost identical to a half wave dipole- that is a figure 8
> pattern.

Where did you hear that?

A full wavelength loop, in free space, has a pattern that looks like a dumbbell: two major lobes in opposite directions (perpendicular to the loop), and a null going a full 360 degrees around it in the plane of the loop.

A half wave dipole has a pattern like a donut, which is almost exactly the opposite.

So I'm trying to figure out what orientations of the loop and of the dipole you are envisioning.

Most half wave wire dipoles are horizontal, and tend to have maximum signal broadside to the wire, and nulls off the ends (except for interaction with the earth or ionospheric reflections). A full wave loop at any height is essentially nondirectional with respect to its axis. Its primary radiation is straight up and straight down, so it makes a good antenna for high angle signals; though if you mount it a half wave above earth, it may get a null going straight up due to cancellation with its reflection.

Andy

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3361 - Release Date: 01/05/11 07:00:00

8132. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-05 23:23:50 UTC
From: Andy
Topic: 8119 Message: 8132

> ... Think of a 1 wavelength
> horizontal loop as two half wave dipoles spaced 1/4 wavelength apart- it is
> obvious this is not omni and will have classic construction and destruction
> azimuth pattern.

OK ... but now think of it as four shortened (quarter wave) dipoles in a square.

Now it's not so obvious that it might have classic dipole radiation
characteristics.

Thinking that a loop is like two dipoles in parallel, is a real stretch.

And in fact a good 1 wavelength loop radiates nothing like a dipole!

Bend a circular loop into a square or triangle, and it's not quite so
omni anymore; but it's still close enough for government work.

Andy

8133. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-06 00:19:02 UTC
From: Dale Parfitt
Topic: 8119 Message: 8133

You cannot think of it as 4 1/4 wave dipoles as there are only 2 current loops.
Model the antenna with any of the popular software ad we can end this disagreement.
The models converge very nicely and do not disobey any of the miniNEC limitations.
Dale W4OP

----- Original Message -----
From: Andy
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 05, 2011 6:23 PM
Subject: Re: [loopantennas] Re: Loop reflector

> ... Think of a 1 wavelength
> horizontal loop as two half wave dipoles spaced 1/4 wavelength apart- it is
> obvious this is not omni and will have classic construction and destruction
> azimuth pattern.

OK ... but now think of it as four shortened (quarter wave) dipoles in a square.

Now it's not so obvious that it might have classic dipole radiation
characteristics.

Thinking that a loop is like two dipoles in parallel, is a real stretch.

And in fact a good 1 wavelength loop radiates nothing like a dipole!

Bend a circular loop into a square or triangle, and it's not quite so
omni anymore; but it's still close enough for government work.

Andy

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3361 - Release Date: 01/05/11 07:00:00

[Non-text portions of this message have been removed]

8134. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-06 05:18:42 UTC
From: Steve Ellington
Topic: 8119 Message: 8134

Andy;
I'm glad you spoke up.
Here is a link to an Eznec model of an 80m horizontal loop. I've never heard anyone claim a loop had the same pattern as a dipole until now.
At typical heights, this loop has a circular pattern and vertical radiation is straight up. At greater, 1/2 wavelength, heights the pattern will show a bit of a bulge opposite the feedpoint and a lower angle. Of course the pattern changes for the harmonics but never the same as a dipole. It's a great multiband antenna and very common.
73
http://www.iw5edi.com/ham-radio/files/k0ze-loop.pdf

Steve
N4LQ
----- Original Message -----
From: Andy
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 05, 2011 6:23 PM
Subject: Re: [loopantennas] Re: Loop reflector

> ... Think of a 1 wavelength
> horizontal loop as two half wave dipoles spaced 1/4 wavelength apart- it is
> obvious this is not omni and will have classic construction and destruction
> azimuth pattern.

OK ... but now think of it as four shortened (quarter wave) dipoles in a square.

Now it's not so obvious that it might have classic dipole radiation characteristics.

Thinking that a loop is like two dipoles in parallel, is a real stretch.

And in fact a good 1 wavelength loop radiates nothing like a dipole!

Bend a circular loop into a square or triangle, and it's not quite so omni anymore; but it's still close enough for government work.

Andy

[Non-text portions of this message have been removed]

8135. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-06 06:08:17 UTC
From: Dale Parfitt
Topic: 8119 Message: 8135

Hi Steve,
That loop is virtually on the ground at 1/8 wavelength- any horizontal antenna that low is going to be an omni. Also look at the elevation slice angle -90 degrees.

My statement said "of sufficient height".
Do you want me to send you the EZNEC wirelist of a full wave loop in free space vs a dipole in free space- the patterns are almost identical.

Dale W4OP

Andy;
I'm glad you spoke up.
Here is a link to an Eznec model of an 80m horizontal loop. I've never heard anyone claim a loop had the same pattern as a dipole until now.
At typical heights, this loop has a circular pattern and vertical radiation is straight up. At greater, 1/2 wavelength, heights the pattern will show a bit of a bulge opposite the feedpoint and a lower angle. Of course the pattern changes for the harmonics but never the same as a dipole. It's a great multiband antenna and very common.
73
http://www.iw5edi.com/ham-radio/files/k0ze-loop.pdf

Steve
N4LQ
----- Original Message -----

Steve,

This loop is virtually on the ground- 35'. Also look at the elevation slice for the azimuth plot- 90 degrees.

Model the antenna at 1 wavelength above ground at look at the low angle pattern.

.

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3361 - Release Date: 01/05/11 07:00:00

[Non-text portions of this message have been removed]

8136. 1 WAVELENGTH LOOP PATTERN

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-07 19:11:10 UTC
From: Dale
Topic: 8136 Message: 8136

If anyone else is interested in the EZNEC file showing the pattern of a 1 wavelength loop to be a figure 8 pattern, just send me your E-Mail and I will provide the EZNEC file.

73,
Dale W4OP

8137. Re: [loopantennas] 1 WAVELENGTH LOOP PATTERN

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-07 20:06:16 UTC
From: Chris Trask
Topic: 8136 Message: 8137

Yes, I'd like that to compare with the file(s) I have.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Dale" <parinc1@...>
To: <loopantennas@yahoogroups.com>
Sent: Friday, January 07, 2011 12:11 PM
Subject: [loopantennas] 1 WAVELENGTH LOOP PATTERN

If anyone else is interested in the EZNEC file showing the pattern of a 1 wavelength loop to be a figure 8 pattern, just send me your E-Mail and I will provide the EZNEC file.

73,
Dale W4OP

8138. RE: [loopantennas] 1 WAVELENGTH LOOP PATTERN

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-07 21:02:13 UTC
From: Kjell W. Strom
Topic: 8136 Message: 8138

W4RNL (SK) wrote a comprehensive article on this subject, see
http://www.cebik.com/content/fdim/atl1.html
Registration is free.

Kjell, PB3SM - SM6CPI

From: loopantennas@yahoogroups.com
[mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: 07 January 2011 21:06
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] 1 WAVELENGTH LOOP PATTERN

Yes, I'd like that to compare with the file(s) I have.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
<mailto:christrask%40earthlink.net>
| | | | \ '. http://www.home.earthlink.net/~christrask
c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Dale" <parinc1@...
<mailto:parinc1%40frontier.com> >
To: <loopantennas@yahoogroups.com
<mailto:loopantennas%40yahoogroups.com> >
Sent: Friday, January 07, 2011 12:11 PM
Subject: [loopantennas] 1 WAVELENGTH LOOP PATTERN

If anyone else is interested in the EZNEC file showing the
pattern of a 1
wavelength loop to be a figure 8 pattern, just send me your

E-Mail and I
will provide the EZNEC file.

73,
Dale W4OP

[Non-text portions of this message have been removed]

8139. Re: [loopantennas] 1 WAVELENGTH LOOP PATTERN

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-07 21:28:30 UTC
From: Dale Parfitt
Topic: 8136 Message: 8139

I have seen the article before- but LB does not address the high loop- only NVIS applications at the loop's fundamental frequency..

Some years back I was presenting a paper at a regional VHF/UHF conference. LB was there and we had lunch together on the first day of the conference.As we ate, I was glancing through the Proceedings and noticed a paper on 1 wavelength "omni" horizontal loops for VHF and UHF. I mentioned this to LB and my doubts that these were omni at all.
LB glanced up at the ceiling and after a minute of silence pronounced that indeed these antennas would not be an omni at all. I think he called that "mental modelling"- but it has been years now.
Anyway, later we saw the author in the hallway and mentioned to him that the antenna he would be discussing would not ba an omni. The paper never was presented.

Dale W4OP

W4RNL (SK) wrote a comprehensive article on this subject, see
http://www.cebik.com/content/fdim/atl1.html
Registration is free.

Kjell, PB3SM - SM6CPI

From: loopantennas@yahoogroups.com
[mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: 07 January 2011 21:06
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] 1 WAVELENGTH LOOP PATTERN

Yes, I'd like that to compare with the file(s) I have.

Chris

,----------------------. High Performance Mixers and
/ What's all this \ Amplifiers for RF Communications
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ Sonoran Radio Research
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ IEEE Senior Member #40274515
. ( ) \
'-|)__| :. \ Email: christrask@...
<mailto:christrask%40earthlink.net>
| | | | \ '. http://www.home.earthlink.net/~christrask

c__; c__; '-..'>.__

Graphics by Loek Frederiks

----- Original Message -----
From: "Dale" <parinc1@...
<mailto:parinc1%40frontier.com> >
To: <loopantennas@yahoogroups.com
<mailto:loopantennas%40yahoogroups.com> >
Sent: Friday, January 07, 2011 12:11 PM
Subject: [loopantennas] 1 WAVELENGTH LOOP PATTERN

If anyone else is interested in the EZNEC file showing the
pattern of a 1
wavelength loop to be a figure 8 pattern, just send me your
E-Mail and I
will provide the EZNEC file.

73,
Dale W4OP

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3365 - Release Date: 01/07/11 02:34:00

[Non-text portions of this message have been removed]

8140. icon r8500

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-12 06:39:14 UTC
From: picard
Topic: 8140 Message: 8140

Any opinions on its performance and complications.
stan

8141. icon r8500

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-12 07:06:22 UTC
From: picard
Topic: 8140 Message: 8141

Sorry if this is repeated. Any feedback as to the recievers performance and complications?

8142. Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-12 17:42:25 UTC
From: longjohn119
Topic: 8119 Message: 8142

All adding a reflector underneath will do is act like lowering the antenna closer to the ground I bet .... Could you simulate something like that in EZNEC?

It would also alter the take off angle I would think

JR

--- In loopantennas@yahoogroups.com, "Dale Parfitt" <parinc1@...> wrote:
>
> Hi Steve,
> That loop is virtually on the ground at 1/8 wavelength- any horizontal antenna that low is going to be an omni. Also look at the elevation slice angle -90 degrees.
>
> My statement said "of sufficient height".
> Do you want me to send you the EZNEC wirelist of a full wave loop in free space vs a dipole in free space- the patterns are almost identical.
>
> Dale W4OP
>
>

8143. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-12 18:29:59 UTC
From: M HOLDEN
Topic: 8119 Message: 8143

Think about a 2 ele quad. They beam sideways. Now flip it through 90deg........Simples !.................Mike G4HOL

--- On Wed, 12/1/11, longjohn119 <some_oil_with_your_teaparty@...> wrote:

From: longjohn119 <some_oil_with_your_teaparty@...>
Subject: [loopantennas] Re: Loop reflector
To: loopantennas@yahoogroups.com
Date: Wednesday, 12 January, 2011, 17:42

All adding a reflector underneath will do is act like lowering the antenna closer to the ground I bet .... Could you simulate something like that in EZNEC?

It would also alter the take off angle I would think

JR

--- In loopantennas@...m, "Dale Parfitt" <parinc1@...> wrote:

>

> Hi Steve,

> That loop is virtually on the ground at 1/8 wavelength- any horizontal antenna that low is going to be an omni. Also look at the elevation slice angle -90 degrees.

>

> My statement said "of sufficient height".

> Do you want me to send you the EZNEC wirelist of a full wave loop in free space vs a dipole in free space- the patterns are almost identical.

>

> Dale W4OP

>

>

[Non-text portions of this message have been removed]

8144. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-13 05:31:10 UTC
From: Andy
Topic: 8119 Message: 8144

> All adding a reflector underneath will do is act like lowering the antenna closer to the ground I bet ....

The idea behind adding a reflector wire under a dipole used for NVIS, is the same as a reflector loop under a horizontal loop. They both are meant to improve the reflection (and the high angle signal), by removing most of the loss of the earth from the system.

If you live in an area with a very good (conductive) ground, it might not help much; but if you have more typical or poor ground conditions, where much of your signal penetrating the earth gets absorbed instead of reflecting, coherently, then a reflector wire or loop may indeed help.

> Could you simulate something like that in EZNEC?

Sure you can simulate it, but you may need to question how accurate it is, given the difficulty modeling earth near an antenna.

Actual observations with reflector wires under a dipole, have shown that it can make a significant improvement, but others reported no apparent difference. (I'm paraphrasing from personal experiences I've read elsewhere.)

Andy

8145. Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-17 15:37:32 UTC
From: longjohn119
Topic: 8119 Message: 8145

I will not work like a quabic quad for a couple of reasons

1. Main element only 1/8 wavelength from ground causing distortion of pattern

2. Reflector is therefore much less than 1/8 from main element causing distortion of pattern

3. Reflector is considerably less than 1/8 wavelength from ground causing even more distortion of the pattern and it's probably not going to work like a reflector at all even in the slightest being more or less cancelled out by the effects of ground

You can't ignore the effects of ground on both elements, nor the fact the spacing between elements themselves and elements and ground is way off and to make a model work correctly you have to take into account the ground effects and the highly 'squashed' spacing between elements

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> Think about a 2 ele quad. They beam sideways. Now flip it through 90deg........Simples !.................Mike G4HOL
>
> --- On Wed, 12/1/11, longjohn119 <some_oil_with_your_teaparty@...> wrote:
>
> From: longjohn119 <some_oil_with_your_teaparty@...>
> Subject: [loopantennas] Re: Loop reflector
> To: loopantennas@yahoogroups.com
> Date: Wednesday, 12 January, 2011, 17:42
>
>
>
>
>
>
>
> Â
>
>
>
>
>
>
>
>
>
> All adding a reflector underneath will do is act like lowering the antenna closer to the ground I bet .... Could you simulate something like that in EZNEC?

>
>
>
> It would also alter the take off angle I would think
>
>
>
> JR
>
>
>
> --- In loopantennas@yahoogroups.com, "Dale Parfitt" <parinc1@> wrote:
>
> >
>
> > Hi Steve,
>
> > That loop is virtually on the ground at 1/8 wavelength- any horizontal antenna that low is going to be an omni. Also look at the elevation slice angle -90 degrees.
>
> >
>
> > My statement said "of sufficient height".
>
> > Do you want me to send you the EZNEC wirelist of a full wave loop in free space vs a dipole in free space- the patterns are almost identical.
>
> >
>
> > Dale W4OP
>
> >
>
> >
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8146. mosley TA33M

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-17 15:56:38 UTC
From: CE3FZL
Topic: 8146 Message: 8146

HELLO FOR ALL;

Very good afternoon to all friends of loop antennas, see if alguine by courtesy has photos and comments about the use of TA33M Mosley, is likely to buy a second hand but in good condition, I would like to know if is good or has limitations.

thank you very much everyone, excellent forum,

Hector Frias J.
CE3FZL
http://www.qrz.com/db/ce3fzl

[Non-text portions of this message have been removed]

8147. MFJ 1788X versus mother nature

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-16 08:12:56 UTC
From: stephen_qrp@yahoo.com
Topic: 8147 Message: 8147

Hello

I have just bought a MFJ 1788X HI-Q loop for my small backyard.
I am concerned by the flimsy mounting and lack of water proofing. I live in a windy location and in winter a very windy location with a lot of snow and ice.

The Wellbrook 1010 I also have has had to be strengthened across the top and bottom of the loop to withstand the wind and the preamp really waterproofed.

I obviously cannot put a pole across the MFJ 1788X so I am thinking wood, weatherproofing is however a very different dilemma as it stands I cannot believe water, snow and ice is not going to cause a short circuit or cause the motor that drives the variable air spaced capacitor to fail or indeed the capacitor to ice up.

Does anyone have any experience of this antenna and protection from the elements ? any advice very gratefully received.

regards to all.

8148. Re: [loopantennas] mosley TA33M

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-17 17:00:24 UTC
From: van wd8aam
Topic: 8146 Message: 8148

The TA33M is very good beam antenna, is easy to use and repair,
and Mosley still sells parts for it.

http://www.mosley-electronics.com/page%20files/home.htm

wd8aam
van

At 15:56 1/17/2011, you wrote:
>HELLO FOR ALL;
>
>Very good afternoon to all friends of loop antennas, see if alguine
>by courtesy has photos and comments about the use of TA33M Mosley,
>is likely to buy a second hand but in good condition, I would like
>to know if is good or has limitations.
>
>thank you very much everyone, excellent forum,
>
>
>Hector Frias J.
>CE3FZL
>http://www.qrz.com/db/ce3fzl
>
>
>
>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links

>
>
>

8149. Re: MFJ 1788X versus mother nature

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-17 18:20:14 UTC
From: Peter
Topic: 8147 Message: 8149

Hi, Stephen! I have the same model, horizontally mounted on a rooftop mast with no modifications. I've had it since about 1998, and did have to replace one or two of the chokes inside the antenna housing about 6 years ago. That aside, it's a great antenna and not as flimsy as it might appear to you. If you mount it according to the manual, the apparent lack of waterproofing won't be a problem because it's designed so any water that does get into it drains right out. In fact, the manual says NOT to try to seal the housing.

The MFJ is the only small loop I've owned, and it's the best antenna I've ever had! No problem working DX on any band, including Australia and New Zealand with a 5-Watt transciever.

By the way, I wouldn't call northeast Indiana particularly windy but we do get our share of snow and ice, and the usual thunderstorms in the spring and summer.

73,
Pete Goodmann, PE, MSEE, NI9N
www.garage-shoppe.com
www.lazydogengineering.com
www.sindrielectronics.com
Inconveniently located 110 km. from Radioville, Indiana

--- In loopantennas@yahoogroups.com, stephen_qrp@... wrote:
>
> Hello
>
> I have just bought a MFJ 1788X HI-Q loop for my small backyard.
> I am concerned by the flimsy mounting and lack of water proofing. I live in a windy location and in winter a very windy location with a lot of snow and ice.
>
> The Wellbrook 1010 I also have has had to be strengthened across the top and bottom of the loop to withstand the wind and the preamp really waterproofed.
>
> I obviously cannot put a pole across the MFJ 1788X so I am thinking wood, weatherproofing is however a very different dilemma as it stands I cannot believe water, snow and ice is not going to cause a short circuit or cause the motor that drives the variable air spaced capacitor to fail or indeed the capacitor to ice up.
>
> Does anyone have any experience of this antenna and protection from the elements ? any advice very gratefully received.
>
> regards to all.
>

8150. Re: [loopantennas] Re: MFJ 1788X versus mother nature

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-17 19:51:51 UTC
From: Srh Srh
Topic: 8147 Message: 8150

Helo Pete, that is very encouraging. I have been wondering about horizontal v
vertical and for the moment will go vertical on a small rotator
and test it out. If all goes well might then try horizontal above the house and
without the rotator but the wind loading on the antenna does concern me.

73 Stephen

_____
From: Peter <pete@lazydogengineering.com>
To: loopantennas@yahoogroups.com
Sent: Mon, 17 January, 2011 18:20:14
Subject: [loopantennas] Re: MFJ 1788X versus mother nature

Hi, Stephen! I have the same model, horizontally mounted on a rooftop mast with
no modifications. I've had it since about 1998, and did have to replace one or
two of the chokes inside the antenna housing about 6 years ago. That aside,
it's a great antenna and not as flimsy as it might appear to you. If you mount
it according to the manual, the apparent lack of waterproofing won't be a
problem because it's designed so any water that does get into it drains right
out. In fact, the manual says NOT to try to seal the housing.

The MFJ is the only small loop I've owned, and it's the best antenna I've ever
had! No problem working DX on any band, including Australia and New Zealand
with a 5-Watt transciever.

By the way, I wouldn't call northeast Indiana particularly windy but we do get
our share of snow and ice, and the usual thunderstorms in the spring and summer.

73,
Pete Goodmann, PE, MSEE, NI9N
www.garage-shoppe.com
www.lazydogengineering.com
www.sindrielectronics.com
Inconveniently located 110 km. from Radioville, Indiana

--- In loopantennas@yahoogroups.com, stephen_qrp@... wrote:
>
> Hello
>
> I have just bought a MFJ 1788X HI-Q loop for my small backyard.
> I am concerned by the flimsy mounting and lack of water proofing. I live in a
>windy location and in winter a very windy location with a lot of snow and ice.
>
> The Wellbrook 1010 I also have has had to be strengthened across the top and
>bottom of the loop to withstand the wind and the preamp really waterproofed.
>
> I obviously cannot put a pole across the MFJ 1788X so I am thinking wood,

>weatherproofing is however a very different dilemma as it stands I cannot
>believe water, snow and ice is not going to cause a short circuit or cause the
>motor that drives the variable air spaced capacitor to fail or indeed the
>capacitor to ice up.
>
> Does anyone have any experience of this antenna and protection from the
>elements ? any advice very gratefully received.
>
> regards to all.
>

[Non-text portions of this message have been removed]

8151. WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-18 04:45:51 UTC
From: skyspeed77
Topic: 8151 Message: 8151

Has anyone reverse engineered the Wellbrook Loop and setup a similar
DIY formula for building your own, perhaps of copper tubing ?

Also a schematic for an amp to match that performance quality, or a
commercially available one ?

Later I have some questions about wire loops with variable caps, which I've been studying seriously and gathering components.

I'm an SWL with a current interest in the AM band, but will likely go back to shortwave soon.
My listening location is poor but I haver access to a second story roof. Poor means a building twice the height to the West and main street with lots of visable transformers on the power poles, first floor location, about 100 feet back from the power poles. I'm in L.A.
and also have some interest in DXing the Tropic Bands.

8152. Re: [loopantennas] WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-18 13:48:01 UTC
From: Dale Parfitt
Topic: 8151 Message: 8152

Sure,
No magic there. Check out Steve VE7SL page at:
http://members.shaw.ca/ve7sl/index.html

I think I still may have 2 or 3 double sided preamp boards here that I made up many years back if anyone is interested along with lots of pix. The only difficult part is winding the differential input transformer.
Dale W4OP.

Has anyone reverse engineered the Wellbrook Loop and setup a similar
DIY formula for building your own, perhaps of copper tubing ?

Also a schematic for an amp to match that performance quality, or a
commercially available one ?

Later I have some questions about wire loops with variable caps, which I've been studying seriously and gathering components.

I'm an SWL with a current interest in the AM band, but will likely go back to shortwave soon.
My listening location is poor but I haver access to a second story roof. Poor means a building twice the height to the West and main street with lots of visable transformers on the power poles, first floor location, about 100 feet back from the power poles. I'm in L.A.
and also have some interest in DXing the Tropic Bands.

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3386 - Release Date: 01/17/11 02:34:00

[Non-text portions of this message have been removed]

8153. Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-18 14:02:08 UTC
From: iv3zbl
Topic: 8151 Message: 8153

>
> Also a schematic for an amp to match that performance quality, or a
> commercially available one ?
>

Try Google "wl1030" and let us know how your project goes on.

73 Andy IV3ZBL

8154. RE: [loopantennas] Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-18 15:11:33 UTC
From: dx11
Topic: 8151 Message: 8154

See also: "Wideband Loop Antenna Amplifier RevA.pdf " in the files section of this group.

Regards,

Cor Beijersbergen

8155. RE: [loopantennas] Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-18 15:13:08 UTC
From: dx11
Topic: 8151 Message: 8155

And:
http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm

Regards,

Cor Beijersbergen

8156. RE: [loopantennas] Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-18 15:29:16 UTC
From: dx11
Topic: 8151 Message: 8156

And another one:

http://www.pm.keirle.com/3_radio/hf_loop_ant/hf_loop_ant.htm

Cor Beijersbergen

8157. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-18 17:26:26 UTC
From: Andy
Topic: 8119 Message: 8157

> I(t) will not work like a quabic quad for a couple of reasons
>
> 1. Main element only 1/8 wavelength from ground causing distortion
> of pattern
>
> 2. Reflector is therefore much less than 1/8 from main element
> causing distortion of pattern
>
> 3. Reflector is considerably less than 1/8 wavelength from ground
> causing even more distortion of the pattern and it's probably not going
> to work like a reflector at all even in the slightest being more or less
> cancelled out by the effects of ground

You are right that its pattern won't be exactly the same as a
free-space quagi tipped on its side.

But yagi antennas (as a general class of antennas with a radiator and
one or more passive parasitic elements) can be made with all kinds of
inter-element spacings. There are the NIST spacings, or you can
optimize for bandwidth, or you can optimize for maximum gain/length,
etc. There is no one yagi design. And there are perfectly good
compact yagis with far less than 1/8 wavelength spacing ... and they
do work. Yes, the pattern will be different than a longer yagi, and
the bandwidth may not be the same, but they too are quite acceptable
antennas.

There indeed is some interaction between the reflector loop and the
earth beneath it, just as there is between every antenna and earth,
and that is somewhat of an unknown (due in part to the variability of
soil types). It's not right to say that one cancels out the other.

The fact that people have been making "cloud burners" for decades,
some adding low reflector wires under their antennas, and many finding
that it helps, can't be discarded either. I think it is definitely
wrong to say that it "won't work like a reflector at all even in the
slightest".

Regards,
Andy

8158. Re: [loopantennas] Re: Loop reflector

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-18 17:45:25 UTC
From: Dale Parfitt
Topic: 8119 Message: 8158

K6STI (author of AO, a very nice MiniNEC engine based modeling tool) had an article in QST or QEX some years back illustrating how even HF Yagis can be tuned for best VSWR near the ground by aiming them straight up. Obviously the reflector needs to be off the ground somewhat. The results appear very much as though the antenna is in "free space". This assumes that the antenna has a good F/B ratio.
You can model this for yourself. I have used the technique for HF Moxons with perfect results. Tune them aimed into space and put them on the tower and nothing changes.

73,
Dale W4OP

[Non-text portions of this message have been removed]

8159. Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-19 20:16:02 UTC
From: skyspeed77
Topic: 8151 Message: 8159

--- In loopantennas@yahoogroups.com, "iv3zbl" <iv3zbl@...> wrote:
>
> >
> > Also a schematic for an amp to match that performance quality, or a
> > commercially available one ?
> >
>
> Try Google "wl1030" and let us know how your project goes on.
>
> 73 Andy IV3ZBL
>

Thank you Andy and the others who responded to my request regarding the Wellbrook Loop. I've learned some key elements from those links.

Truthfully I'm good with mechanics, BUT my confidence to scratch build an antenna amp is missing.
Are their any amps available for purchase to match the performance of the
Wellbrook one, from MFJ or another company ?
In kit form would work.

Changing the subject a bit, I have a 23-inch embroidery hoop to build a wire loop with. Is Litz wire the best to use for this or will stranded or solid work almost as well ?
I bought a 381-pf variable cap; will that cover the whole 520-1700 khz range,
or do I need to have an added switched-in additional fixed or variable cap ?

Is it OK to use a soft copper 1/2" pipe for the coupling coil of a multi-turn wire
loop ?

Corky

8160. Re: [loopantennas] Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-19 22:46:46 UTC
From: Schick, David
Topic: 8151 Message: 8160

The key performance parameter of all of these wideband loops, in my opinion,
is the nonlinearity performance.

Does anyone have a simple way to test the nonlinearity performance of a
wideband receiving loop? The challenge arises from the fact that the
antenna really must be in the circuit in order to match the amplifier's
input impedance across many frequencies.

One thing that occurs to me is to have a measuring receiver and antenna
which would dynamically measure the field strength of shortwave AM carriers
and then use that information to measure the second and third order
intermodulation products on the test device?

Dave

On Wed, Jan 19, 2011 at 15:16, skyspeed77 <skyspeed77@...> wrote:

>
> --- In loopantennas@yahoogroups.com, "iv3zbl" <iv3zbl@...> wrote:
> >
> > >
> > > Also a schematic for an amp to match that performance quality, or a
> > > commercially available one ?
> > >
> >
> > Try Google "wl1030" and let us know how your project goes on.
> >
> > 73 Andy IV3ZBL
> >
>
> Thank you Andy and the others who responded to my request regarding the
> Wellbrook Loop. I've learned some key elements from those links.
>
> Truthfully I'm good with mechanics, BUT my confidence to scratch build
> an antenna amp is missing.
> Are their any amps available for purchase to match the performance of
> the
> Wellbrook one, from MFJ or another company ?
> In kit form would work.
>
> Changing the subject a bit, I have a 23-inch embroidery hoop to build a
> wire loop with. Is Litz wire the best to use for this or will stranded
> or solid work almost as well ?
> I bought a 381-pf variable cap; will that cover the whole 520-1700 khz
> range,
> or do I need to have an added switched-in additional fixed or variable

> cap ?
>
> Is it OK to use a soft copper 1/2" pipe for the coupling coil of a
> multi-turn wire
> loop ?
>
> Corky
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

8161. RE: [loopantennas] Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 00:50:05 UTC
From: Ray Phillips
Topic: 8151 Message: 8161

Corky,

To tune across the whole extended AM band you need a tuning capacitor with a minimum to maximum ratio of nearly 1:11.
This means that your 381pF capacitor needs to have a minimum of 34pF or less. This presumes that your loop has the perfect inductance of 246uH.
As your loop will be wound in complete turns, a perfect inductance is unlikely and so you would need a lower minimum capacitor value so you have a bit of leeway, if you want a single capacitor.

Experiment with the number of turns until the loop tunes OK at the 1700kHz end of the band with the capacitor completely open (plates unmeshed). Use complete turns for coarse adjustment and then manipulate the turn spacing for the fine adjustment. Moving turns apart will raise the frequency and vice-versa. When the upper end is lined up, close the capacitor and check the frequency. If it is not 520kHZ or less, you will need to switch in an additional capacitor when tuning the low end of the band. Bear in mind that any conductor in the near field of the loop will affect its frequency and so you need to have your pick up winding(s) in place before winding on the tuning loop itself and that any capacitor switching arrangement will introduce stray capacitance and stray inductance that will also affect loop tuning.

If I was building it, I wouldn't try to make a perfect loop. I would build one loop that catches one end of the band to at least the middle of the band and a second loop that catches the other end to the middle. So there's a bit of unwanted tuning range - not the end of the world. Use a changeover switch or banana plugs to connect them.

In a small, multi-turn loop, the "Q" or efficiency (for want of a better term) is not at the pinnacle of loop Q's. This means that you don't have to be too fussy about the pick up loop. The half inch copper pipe should work fine but is overkill and is a pain to bend to shape. Just use the same wire as the loop. Make the length of the pickup loop about one tenth to one fifth of the tuning loop length. If you have to wind more than one turn then so be it.

I once made an AM loop that was more art than technology. Stood about three feet high. The loop was shaped like the sails of a polynesian boat with the base shaped like a stylised polynesian multi-hull proa (I said it was art). It had 11 turns for the tuning loop and one for the pickup loop. I started out with a guess of 13 turns and removed them one at a time until I was happy with the inductance. None of this copper wire business either; I used fine galvanised iron wire. In the middle of the day it would take an unreadable 2KW station 150 miles away and tune so that the station audio was nearly perfect and almost completely noise free - quite acceptable listening quality. Of course its performance could have been improved but it did its job well enough and was arty-farty enough to not incur the wrath of "her indoors".

Nicely working small loops are easy-peasy - it's perfecting them that makes things hard. Make your first loop with confidence but with the knowledge that it may not be exactly what

you want and that you will learn a lot that will enable you to build a better loop next time. But, be warned, trying to improve your loop can become addictive.

All the best,
Ray vk5ugs

To: loopantennas@yahoogroups.com
From: skyspeed77@yahoo.com
Date: Wed, 19 Jan 2011 20:16:02 +0000
Subject: [loopantennas] Re: WELLBROOK DIY

--- In loopantennas@yahoogroups.com, "iv3zbl" <iv3zbl@...> wrote:

>

> >

> > Also a schematic for an amp to match that performance quality, or a

> > commercially available one ?

> >

>

> Try Google "wl1030" and let us know how your project goes on.

>

> 73 Andy IV3ZBL

>

Thank you Andy and the others who responded to my request regarding the

Wellbrook Loop. I've learned some key elements from those links.

Truthfully I'm good with mechanics, BUT my confidence to scratch build

an antenna amp is missing.

Are their any amps available for purchase to match the performance of

the

Wellbrook one, from MFJ or another company ?

In kit form would work.

Changing the subject a bit, I have a 23-inch embroidery hoop to build a

wire loop with. Is Litz wire the best to use for this or will stranded

or solid work almost as well ?

I bought a 381-pf variable cap; will that cover the whole 520-1700 khz

range,

or do I need to have an added switched-in additional fixed or variable

cap ?

Is it OK to use a soft copper 1/2" pipe for the coupling coil of a

multi-turn wire

loop ?

Corky

[Non-text portions of this message have been removed]

8162. Re: [loopantennas] Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 03:06:10 UTC
From: Steve Ellington
Topic: 8151 Message: 8162

Ray:
Your use of the idiom arty-farty drove me to Google. Now that I know the meaning, I'm am seriously considering some form of ornamental loop for the front yard.
This photo of some loops in Raleigh, NC. make me feel secure about this form of "art" on my property.
http://www.flickr.com/photos/bernard-pics/4732970897/

Steve
N4LQ
----- Original Message -----
From: "Ray Phillips" <uggliozzi@...>
To: <loopantennas@yahoogroups.com>
Sent: Wednesday, January 19, 2011 7:50 PM
Subject: RE: [loopantennas] Re: WELLBROOK DIY

>
> Corky,
>
> To tune across the whole extended AM band you need a tuning capacitor with
> a minimum to maximum ratio of nearly 1:11.
> This means that your 381pF capacitor needs to have a minimum of 34pF or
> less. This presumes that your loop has the perfect inductance of 246uH.
> As your loop will be wound in complete turns, a perfect inductance is
> unlikely and so you would need a lower minimum capacitor value so you have
> a bit of leeway, if you want a single capacitor.
>
> Experiment with the number of turns until the loop tunes OK at the 1700kHz
> end of the band with the capacitor completely open (plates unmeshed). Use
> complete turns for coarse adjustment and then manipulate the turn spacing
> for the fine adjustment. Moving turns apart will raise the frequency and
> vice-versa. When the upper end is lined up, close the capacitor and check
> the frequency. If it is not 520kHZ or less, you will need to switch in an
> additional capacitor when tuning the low end of the band. Bear in mind
> that any conductor in the near field of the loop will affect its frequency
> and so you need to have your pick up winding(s) in place before winding on
> the tuning loop itself and that any capacitor switching arrangement will
> introduce stray capacitance and stray inductance that will also affect
> loop tuning.
>
> If I was building it, I wouldn't try to make a perfect loop. I would
> build one loop that catches one end of the band to at least the middle of
> the band and a second loop that catches the other end to the middle. So
> there's a bit of unwanted tuning range - not the end of the world. Use a
> changeover switch or banana plugs to connect them.

>
> In a small, multi-turn loop, the "Q" or efficiency (for want of a better
> term) is not at the pinnacle of loop Q's. This means that you don't have
> to be too fussy about the pick up loop. The half inch copper pipe should
> work fine but is overkill and is a pain to bend to shape. Just use the
> same wire as the loop. Make the length of the pickup loop about one tenth
> to one fifth of the tuning loop length. If you have to wind more than one
> turn then so be it.
>
> I once made an AM loop that was more art than technology. Stood about
> three feet high. The loop was shaped like the sails of a polynesian boat
> with the base shaped like a stylised polynesian multi-hull proa (I said it
> was art). It had 11 turns for the tuning loop and one for the pickup
> loop. I started out with a guess of 13 turns and removed them one at a
> time until I was happy with the inductance. None of this copper wire
> business either; I used fine galvanised iron wire. In the middle of the
> day it would take an unreadable 2KW station 150 miles away and tune so
> that the station audio was nearly perfect and almost completely noise
> free - quite acceptable listening quality. Of course its performance
> could have been improved but it did its job well enough and was arty-farty
> enough to not incur the wrath of "her indoors".
>
> Nicely working small loops are easy-peasy - it's perfecting them that
> makes things hard. Make your first loop with confidence but with the
> knowledge that it may not be exactly what you want and that you will learn
> a lot that will enable you to build a better loop next time. But, be
> warned, trying to improve your loop can become addictive.
>
>
> All the best,
> Ray vk5ugs
>
>
> To: loopantennas@yahoogroups.com
> From: skyspeed77@...
> Date: Wed, 19 Jan 2011 20:16:02 +0000
> Subject: [loopantennas] Re: WELLBROOK DIY
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> --- In loopantennas@yahoogroups.com, "iv3zbl" <iv3zbl@...> wrote:
>
>>
>
>> >
>
>> > Also a schematic for an amp to match that performance quality, or a
>
>> > commercially available one ?
>
>> >
>
>>
>
>> Try Google "wl1030" and let us know how your project goes on.
>
>>
>
>> 73 Andy IV3ZBL
>
>>
>
>
>
> Thank you Andy and the others who responded to my request regarding the
>
> Wellbrook Loop. I've learned some key elements from those links.
>
>
>
> Truthfully I'm good with mechanics, BUT my confidence to scratch build
>
> an antenna amp is missing.

>
> Are their any amps available for purchase to match the performance of
>
> the
>
> Wellbrook one, from MFJ or another company ?
>
> In kit form would work.
>
>
>
> Changing the subject a bit, I have a 23-inch embroidery hoop to build a
>
> wire loop with. Is Litz wire the best to use for this or will stranded
>
> or solid work almost as well ?
>
> I bought a 381-pf variable cap; will that cover the whole 520-1700 khz
>
> range,
>
> or do I need to have an added switched-in additional fixed or variable
>
> cap ?
>
>
>
> Is it OK to use a soft copper 1/2" pipe for the coupling coil of a
>
> multi-turn wire
>
> loop ?
>
>
>
> Corky
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

8163. Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 04:58:24 UTC
From: longjohn119
Topic: 8151 Message: 8163

Chris Trask has a couple of tuned and untuned loop designs. Don't discount the active short verticals either, unless you have a specific noise source you need to null they are just as quiet as an active loop if you get them out in the open.

http://home.earthlink.net/~christrask/

Down at the bottom of the page but don't overlook the other stuff he has there, especially his work on augmented amps and mixers, and the stuff on transistor evaluations.

JR

--- In loopantennas@yahoogroups.com, "skyspeed77" <skyspeed77@...> wrote:
>
> Has anyone reverse engineered the Wellbrook Loop and setup a similar
> DIY formula for building your own, perhaps of copper tubing ?
>
> Also a schematic for an amp to match that performance quality, or a
> commercially available one ?
>
> Later I have some questions about wire loops with variable caps, which I've been studying seriously and gathering components.
>
> I'm an SWL with a current interest in the AM band, but will likely go back to shortwave soon.
> My listening location is poor but I haver access to a second story roof. Poor means a building twice the height to the West and main street with lots of visable transformers on the power poles, first floor location, about 100 feet back from the power poles. I'm in L.A.
> and also have some interest in DXing the Tropic Bands.
>

8164. Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 05:21:03 UTC
From: longjohn119
Topic: 8151 Message: 8164

Chris has a newer design too he posted in the file section of the Group that looks promising but I haven't tried it myself yet (Waiting until I need other parts to justify ordering the MPS6521 transistors) He uses his patented (literally) augmentation technique on the 4 main transistors.

http://groups.yahoo.com/group/loopantennas/files/

Last file in the list

JR

--- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@...> wrote:
>
> Chris Trask has a couple of tuned and untuned loop designs. Don't discount the active short verticals either, unless you have a specific noise source you need to null they are just as quiet as an active loop if you get them out in the open.
>
> http://home.earthlink.net/~christrask/
>
> Down at the bottom of the page but don't overlook the other stuff he has there, especially his work on augmented amps and mixers, and the stuff on transistor evaluations.
>
> JR
>
> --- In loopantennas@yahoogroups.com, "skyspeed77" <skyspeed77@> wrote:
> >
> > Has anyone reverse engineered the Wellbrook Loop and setup a similar
> > DIY formula for building your own, perhaps of copper tubing ?
> >
> > Also a schematic for an amp to match that performance quality, or a
> > commercially available one ?
> >
> > Later I have some questions about wire loops with variable caps, which I've been studying seriously and gathering components.
> >
> > I'm an SWL with a current interest in the AM band, but will likely go back to shortwave soon.
> > My listening location is poor but I haver access to a second story roof. Poor means a building twice the height to the West and main street with lots of visable transformers on the power poles, first floor location, about 100 feet back from the power poles. I'm in L.A.
> > and also have some interest in DXing the Tropic Bands.
> >
>

8165. Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 05:42:19 UTC
From: longjohn119
Topic: 8151 Message: 8165

I had problems with stability with that design but I was driving it with a 3/4" OD copper loop. Op Amps simply don't work very well with ultra low impedance input. It may be OK with the recommended wire but I wanted a larger capture area and (slightly) lower noise of the large diameter element.

A couple of tweaks though and it's a killer dual amplifier on my IQ Pro VFO to get the level up to drive a pair of +7 DBM's. Very linear and stable in that application since the input source impedance is a much more reasonable 50 ohms rather than just a couple

JR

--- In loopantennas@yahoogroups.com, "iv3zbl" <iv3zbl@...> wrote:
>
> >
> > Also a schematic for an amp to match that performance quality, or a
> > commercially available one ?
> >
>
> Try Google "wl1030" and let us know how your project goes on.
>
> 73 Andy IV3ZBL
>

8166. Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 10:09:54 UTC
From: Notareal Too
Topic: 8151 Message: 8166

Hi !
One simple(and cheap) pre-amp is here:

http://www.kitsandparts.com/rfamp1.1.php

BR

> To: loopantennas@yahoogroups.com
> From: skyspeed77@...
> Date: Wed, 19 Jan 2011 20:16:02 +0000
> Subject: [loopantennas] Re: WELLBROOK DIY
>
>
> --- In loopantennas@yahoogroups.com, "iv3zbl" <iv3zbl@...> wrote:
> >
> > >
> > > Also a schematic for an amp to match that performance quality, or a
> > > commercially available one ?
> > >
> >
> > Try Google "wl1030" and let us know how your project goes on.
> >
> > 73 Andy IV3ZBL
> >
>
> Thank you Andy and the others who responded to my request regarding the
> Wellbrook Loop. I've learned some key elements from those links.
>
> Truthfully I'm good with mechanics, BUT my confidence to scratch build
> an antenna amp is missing.
> Are their any amps available for purchase to match the performance of
> the
> Wellbrook one, from MFJ or another company ?
> In kit form would work.
>
> Changing the subject a bit, I have a 23-inch embroidery hoop to build a
> wire loop with. Is Litz wire the best to use for this or will stranded
> or solid work almost as well ?
> I bought a 381-pf variable cap; will that cover the whole 520-1700 khz
> range,
> or do I need to have an added switched-in additional fixed or variable
> cap ?
>
> Is it OK to use a soft copper 1/2" pipe for the coupling coil of a
> multi-turn wire
> loop ?

>
> Corky
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

8167. Worth a look !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 19:29:01 UTC
From: brian nsl
Topic: 8167 Message: 8167

Hi,
See the adverts of yesteryear at http://library.duke.edu/digitalcollections/adaccess/
Some of the radio ones are gems like the ' Wonder Wand Antenna , Cleartune for your aerial
'
etc, priceless stuff hi!
72, Brian.

[Non-text portions of this message have been removed]

8168. Re: [loopantennas] Worth a look !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 19:51:24 UTC
From: Chris Trask
Topic: 8167 Message: 8168

> Hi,
> See the adverts of yesteryear at
http://library.duke.edu/digitalcollections/adaccess/
> Some of the radio ones are gems like the ' Wonder Wand Antenna , Cleartune
for your aerial '
> etc, priceless stuff hi!
>

Wow! A 16" Admiral TV sold for $499.99 ($200 off retail) in 1950.
Imagine what that is in today's $$.

Chris

8169. External Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 20:30:50 UTC
From: Richard Burrows
Topic: 8169 Message: 8169

I am using an Eton G3 rx to monitor the Navtex transmissions on 519 Khz, can anyone recommend an antenna bearing in mind the G3 antenna input closes below 2 Mhz so I can only use the internal ferrite antenna and as the set is still under warranty I do not want to go inside just yet. Thanks Richard

8170. RE: [loopantennas] Worth a look !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 21:09:25 UTC
From: Wild, Larry
Topic: 8167 Message: 8170

According to the US government (CPI) $ 500 in 1950 is = to $ 4,524 in 2010
Larry Wild
Aberdeen, SD

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Chris Trask
Sent: Thursday, January 20, 2011 1:51 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Worth a look !!!!

> Hi,
> See the adverts of yesteryear at http://library.duke.edu/digitalcollections/adaccess/
> Some of the radio ones are gems like the ' Wonder Wand Antenna , Cleartune
for your aerial '
> etc, priceless stuff hi!
>

Wow! A 16" Admiral TV sold for $499.99 ($200 off retail) in 1950. Imagine what that is in today's $$.

Chris

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

8171. Re: [loopantennas] Worth a look !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 21:14:21 UTC
From: Chris Trask
Topic: 8167 Message: 8171

```
>
> >
> > > See the adverts of yesteryear at
> > > http://library.duke.edu/digitalcollections/adaccess/
> > > Some of the radio ones are gems like the ' Wonder Wand Antenna ,
> > > Cleartune for your aerial ' etc, priceless stuff hi!
> >
> >
> > Wow! A 16" Admiral TV sold for $499.99 ($200 off retail) in 1950.
> > Imagine what that is in today's $$.
>
> According to the US government (CPI) $ 500 in 1950 is = to $ 4,524 in
> 2010
>

And that was probably a good chunk of your average middle-class income
back then.

Chris
```

8172. Re: [loopantennas] External Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 21:28:19 UTC
From: M HOLDEN
Topic: 8169 Message: 8172

Use a long wire antenna, connected to ground, but wrap about 10 to 12 turns of it around the receiver, close to the earthy end, so that the turns wrap around the length of the ferrite former inside.i.e. not at right angles to the ferrite core. You will get coupling to enhance the performance. Mike G4HOL

From: Richard Burrows <richard.burrows1947@...>
To: loopantennas@yahoogroups.com
Cc:
Sent: Thursday, 20 January 2011, 20:30:50
Subject: [loopantennas] External Antenna

I am using an Eton G3 rx to monitor the Navtex transmissions on 519 Khz, can anyone recommend an antenna bearing in mind the G3 antenna input closes below 2 Mhz so I can only use the internal ferrite antenna and as the set is still under warranty I do not want to go inside just yet. Thanks Richard

[Non-text portions of this message have been removed]

8173. Re: External Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-20 21:46:49 UTC
From: Richard Burrows
Topic: 8169 Message: 8173

Many thanks Mike will give it a try.Richard

8174. Re: [loopantennas] External Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-21 00:34:37 UTC
From: Jay Heyl
Topic: 8169 Message: 8174

On Thu, Jan 20, 2011 at 12:30, Richard Burrows <
richard.burrows1947@...> wrote:

> I am using an Eton G3 rx to monitor the Navtex transmissions on 519 Khz,
> can anyone recommend an antenna bearing in mind the G3 antenna input closes
> below 2 Mhz so I can only use the internal ferrite antenna and as the set is
> still under warranty I do not want to go inside just yet. Thanks Richard

You might want to check out the Q-Stick
Plus+<http://www.dxtools.com/QStick.htm>from Radio Plus+. It will
inductively couple to the internal ferrite
antenna in the G3, so no modifications required. Just set it on (or Velcro
it to) the G3 in the right position and peak the tuning for 519kHz. On
smaller radios the large, high quality, tuned ferrite in the Q-Stick can
provide a surprising boost to MW and LW reception.

If you feel a bit more adventurous, you could try building a bigger loop
antenna. You could also inductively couple it to the radio.

Are you targeting specific Navtex stations or drift netting for whatever
happens by? If targeting, a directional antenna like the Q-Stick or a large
air-core loop can be very advantageous, nulling or reducing unwanted signals
that might interfere with your intended target.

-- Jay

[Non-text portions of this message have been removed]

8175. Re: Worth a look !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-21 08:28:46 UTC
From: longjohn119
Topic: 8167 Message: 8175

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:

> >
>
> Wow! A 16" Admiral TV sold for $499.99 ($200 off retail) in 1950.
> Imagine what that is in today's $$.
>
> Chris
>

When I was a kid my Dad was the shop foreman at a small town weekly newspaper in Aledo, IL and a hand crank start small plane took off by itself from the local airstrip and flew around for about half an hour, they had to evacuate the schools and such. Dad got the pictures of it in the air and after it crashed into a cornfield. It was a big enough deal that Life magazine bought the pictures and my Dad bought the 1st color TV in town ... We sure were popular when the Wizard of Oz came on and packed'em in for Saturday morning cartoons ... Everybody was really nice to me in school for a couple of years .....

JR

8176. Re: [loopantennas] Re: Worth a look !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-21 09:06:50 UTC
From: brian nsl
Topic: 8167 Message: 8176

JR,
You did not mention the date of your popular event but we had a similar
one with 30 people in the house to watch the 1953 Coronation proceedings on our
new 9 inch screen black & white TV (later updated to 12 inch via a magnifier !!!!).
Great days hi!
72, Brian.
----- Original Message -----
From: longjohn119
To: loopantennas@yahoogroups.com
Sent: Friday, January 21, 2011 8:28 AM
Subject: [loopantennas] Re: Worth a look !!!!

[Non-text portions of this message have been removed]

8177. Wire and Tubular Loopstick Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-21 23:21:51 UTC
From: skyspeed77
Topic: 8177 Message: 8177

I'm almost ready to build my three loop antennas.
A few more questions first.

I ordered the amp kit from W8DIZ.
It does not seem as sophisticated or likely as effective
as the Wellbrook design, but I'll give it a try.
Frankly, the latter has parts that I do not even understand
and not being a licensed amateur, would doubt my ability to
put a working model together.

My metal loop will be a one meter diameter 1/2 inch outside diameter copper one.
I'll use it on shortwave.

I went to Apex Electrical Surplus in Southern California and someone had bought them out of Litz wire, likely the guy selling it on Ebay.
Instead for the wire Loop on a 21" x 50" wood frame I bought 13 gauge Magnet wire, which will work I assume. I also have a large spool of 20-gauge stranded.
Any opinions on the wire are welcome.

Incidentally I'm making the large frame out of almost square two chair sides from a well built Danish-style one I found for $9 at Goodwill.

I only paid $8 for the amp kit, so am still looking for something better that might give the Wellbrook a run for its money.

Last question: Do you have to match a 50-ohm design to 72-75 ohm cable ?

Thank you for all of the friendly suggestions you all have made here.

8178. RE: [loopantennas] Wire and Tubular Loopstick Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-22 00:58:01 UTC
From: Ray Phillips
Topic: 8177 Message: 8178

Your 1metre dia copper loop antenna will be most efficient from about 13MHz to about 23MHz and will need a tuning capacitor that ranges from (about) 26pF to 82pF. It may not tune much higher than 23MHz due to its self-resonance but would tune lower with decreasing efficiency.

I took a look at the W8DIZ wideband amp circuit - I don't think using 75 Ohm cable will be a problem. But this circuit is really for frequencies above the AM band. To use it for the AM band I would suggest increasing the size of the three 47nF capacitors to about 200nF (or 220nF or thereabouts). Note: I have not tested these changes.

Here's an idea I read about. Wind a rectangular AM loop on the back of a hinged (not sliding) wardrobe door. It gives a larger capture area (and more signal) than a tabletop loop and does not take up any useful space in the room. When using the loop, it can be steered by moving the door. When not in use, it disappears behind the closed door.

All the best,
Ray vk5ugs

To: loopantennas@yahoogroups.com
From: skyspeed77@...
Date: Fri, 21 Jan 2011 23:21:51 +0000
Subject: [loopantennas] Wire and Tubular Loopstick Questions

I'm almost ready to build my three loop antennas.

A few more questions first.

I ordered the amp kit from W8DIZ.

It does not seem as sophisticated or likely as effective

as the Wellbrook design, but I'll give it a try.

Frankly, the latter has parts that I do not even understand

and not being a licensed amateur, would doubt my ability to

put a working model together.

My metal loop will be a one meter diameter 1/2 inch outside diameter copper one.

I'll use it on shortwave.

I went to Apex Electrical Surplus in Southern California and someone had bought them out of Litz wire, likely the guy selling it on Ebay.

Instead for the wire Loop on a 21" x 50" wood frame I bought 13 gauge Magnet wire, which will work I assume. I also have a large spool of 20-gauge stranded.

Any opinions on the wire are welcome.

Incidentally I'm making the large frame out of almost square two chair sides from a well built Danish-style one I found for $9 at Goodwill.

I only paid $8 for the amp kit, so am still looking for something better that might give the Wellbrook a run for its money.

Last question: Do you have to match a 50-ohm design to 72-75 ohm cable ?

Thank you for all of the friendly suggestions you all have made here.

[Non-text portions of this message have been removed]

8179. Re: Worth a look !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-22 03:47:57 UTC
From: longjohn119
Topic: 8167 Message: 8179

Must have been sometime in 1966 because I was in 2nd grade. Color had been around for a while but still too expensive for the average Joe living in a Middle American farm town, especially considering they were high maintenance and not very reliable. I can remember a lot of trips to the Radio Shack 25 miles away to use the tube tester and buy new tubes, and a couple of House Calls from the area TV Repairman over the years. All those tubes and point to point wiring I'm still amazed they worked as well as they did.

JR

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> JR,
> You did not mention the date of your popular event but we had a similar
> one with 30 people in the house to watch the 1953 Coronation proceedings on our
> new 9 inch screen black & white TV (later updated to 12 inch via a magnifier !!!!).
> Great days hi!
> 72, Brian.
> ----- Original Message -----
>

8180. Re: Wire and Tubular Loopstick Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-22 06:24:17 UTC
From: skyspeed77
Topic: 8177 Message: 8180

Thank you for the steer on the loop and amp Ray.
I will heed your advice.

I read about the closet door idea somewhere recently and that is where the double chair frame will go, across the room using about
20 feet of coax to get to the radio.

Ray, any other wideband amps I should consider with or without additional preselectors or whatever ?

Good on you for your help. (Is my slang OK ?)

--- In loopantennas@yahoogroups.com, Ray Phillips <uggliozzi@...> wrote:
>
>
> Your 1metre dia copper loop antenna will be most efficient from about 13MHz to about 23MHz and will need a tuning capacitor that ranges from (about) 26pF to 82pF. It may not tune much higher than 23MHz due to its self-resonance but would tune lower with decreasing efficiency.
>
> I took a look at the W8DIZ wideband amp circuit - I don't think using 75 Ohm cable will be a problem. But this circuit is really for frequencies above the AM band. To use it for the AM band I would suggest increasing the size of the three 47nF capacitors to about 200nF (or 220nF or thereabouts). Note: I have not tested these changes.
>
> Here's an idea I read about. Wind a rectangular AM loop on the back of a hinged (not sliding) wardrobe door. It gives a larger capture area (and more signal) than a tabletop loop and does not take up any useful space in the room. When using the loop, it can be steered by moving the door. When not in use, it disappears behind the closed door.
>
>
>
> All the best,
> Ray vk5ugs
>
>
>
>
> To: loopantennas@yahoogroups.com
> From: skyspeed77@...
> Date: Fri, 21 Jan 2011 23:21:51 +0000
> Subject: [loopantennas] Wire and Tubular Loopstick Questions
>
>
>
>

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> I'm almost ready to build my three loop antennas.
>
> A few more questions first.
>
>
>
> I ordered the amp kit from W8DIZ.
>
> It does not seem as sophisticated or likely as effective
>
> as the Wellbrook design, but I'll give it a try.
>
> Frankly, the latter has parts that I do not even understand
>
> and not being a licensed amateur, would doubt my ability to
>
> put a working model together.
>
>
>
> My metal loop will be a one meter diameter 1/2 inch outside diameter copper one.
>
> I'll use it on shortwave.
>
>
>

> I went to Apex Electrical Surplus in Southern California and someone had bought them out of Litz wire, likely the guy selling it on Ebay.
>
> Instead for the wire Loop on a 21" x 50" wood frame I bought 13 gauge Magnet wire, which will work I assume. I also have a large spool of 20-gauge stranded.
>
> Any opinions on the wire are welcome.
>
>
>
> Incidentally I'm making the large frame out of almost square two chair sides from a well built Danish-style one I found for $9 at Goodwill.
>
>
>
> I only paid $8 for the amp kit, so am still looking for something better that might give the Wellbrook a run for its money.
>
>
>
> Last question: Do you have to match a 50-ohm design to 72-75 ohm cable ?
>
>
>
> Thank you for all of the friendly suggestions you all have made here.
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8181. Re: [loopantennas] Re: Worth a look !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-22 15:44:10 UTC
From: M HOLDEN
Topic: 8167 Message: 8181

We had one in a polished wooden cabinet, also 9" CRT. The set was almost a perfect cube, but then PYE are squared. Mike G4HOL

From: brian nsl <brian.nsl@...>
To: loopantennas@yahoogroups.com
Cc:
Sent: Friday, 21 January 2011, 9:06:50
Subject: Re: [loopantennas] Re: Worth a look !!!!

JR,
You did not mention the date of your popular event but we had a similar
one with 30 people in the house to watch the 1953 Coronation proceedings on our
new 9 inch screen black & white TV (later updated to 12 inch via a magnifier !!!!).
Great days hi!
72, Brian.
----- Original Message -----
From: longjohn119
To: loopantennas@yahoogroups.com
Sent: Friday, January 21, 2011 8:28 AM
Subject: [loopantennas] Re: Worth a look !!!!

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8182. RE: [loopantennas] Re: Wire and Tubular Loopstick Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-23 01:06:36 UTC
From: Ray Phillips
Topic: 8177 Message: 8182

Stick with the current amp. There are other simple amps out there but I doubt that any simple amp would have significantly better performance. Your amp comes with a nice printed circuit board and seller support - just get it all working for now and save the hard yards for your next loop.

Build your loop first and use it without the amp. This will remove one level of complexity and make any problem correction much simpler. When you are familiar with the loop on its own, install the amp. This way you will know that any problems are with only one item and can undertake problem solving without first having to identify what item is giving the grief. (crawl, walk, run is the most successful learning method)

Once you've got some experience in building a loop and an amp, you might like to scour the net for info on balanced loops and lo-noise, balanced-loop amplifiers. I've never built one but I think that a balanced loop should have superior performance over an unbalanced loop of the same size.

Your slang is correct but if you want to pronounce it like a skippy, open your mouth about one quarter of an inch and, without moving your lips, say gudonya. The reason why Aussies don't open their mouths wide to speak is to keep the flies out - good protein but they taste terrible.

All the best,
Ray vk5ugs
To: loopantennas@yahoogroups.com
From: skyspeed77@...
Date: Sat, 22 Jan 2011 06:24:17 +0000
Subject: [loopantennas] Re: Wire and Tubular Loopstick Questions

Thank you for the steer on the loop and amp Ray.

I will heed your advice.

I read about the closet door idea somewhere recently and that is where the double chair frame will go, across the room using about

20 feet of coax to get to the radio.

Ray, any other wideband amps I should consider with or without additional preselectors or whatever ?

Good on you for your help. (Is my slang OK ?)

--- In loopantennas@yahoogroups.com, Ray Phillips <uggliozzi@...> wrote:

>

>

> Your 1metre dia copper loop antenna will be most efficient from about 13MHz to about 23MHz and will need a tuning capacitor that ranges from (about) 26pF to 82pF. It may not tune much higher than 23MHz due to its self-resonance but would tune lower with decreasing efficiency.

>

> I took a look at the W8DIZ wideband amp circuit - I don't think using 75 Ohm cable will be a problem. But this circuit is really for frequencies above the AM band. To use it for the AM band I would suggest increasing the size of the three 47nF capacitors to about 200nF (or 220nF or thereabouts). Note: I have not tested these changes.

>

> Here's an idea I read about. Wind a rectangular AM loop on the back of a hinged (not sliding) wardrobe door. It gives a larger capture area (and more signal) than a tabletop loop and does not take up any useful space in the room. When using the loop, it can be steered by moving the door. When not in use, it disappears behind the closed door.

>

>

>

> All the best,

> Ray vk5ugs

>

>

>

>

> To: loopantennas@yahoogroups.com

> From: skyspeed77@...

> Date: Fri, 21 Jan 2011 23:21:51 +0000

> Subject: [loopantennas] Wire and Tubular Loopstick Questions

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

> I'm almost ready to build my three loop antennas.

>

> A few more questions first.

>

>

>

> I ordered the amp kit from W8DIZ.

>

> It does not seem as sophisticated or likely as effective

>

> as the Wellbrook design, but I'll give it a try.

>

> Frankly, the latter has parts that I do not even understand

>

> and not being a licensed amateur, would doubt my ability to

>

> put a working model together.

>

>

>

> My metal loop will be a one meter diameter 1/2 inch outside diameter copper one.

>

> I'll use it on shortwave.

>

>

>

> I went to Apex Electrical Surplus in Southern California and someone had bought them out of Litz wire, likely the guy selling it on Ebay.

>

> Instead for the wire Loop on a 21" x 50" wood frame I bought 13 gauge Magnet wire, which will work I assume. I also have a large spool of 20-gauge stranded.

>

> Any opinions on the wire are welcome.

>

>

>

> Incidentally I'm making the large frame out of almost square two chair sides from a well built Danish-style one I found for $9 at Goodwill.

>

>

>

> I only paid $8 for the amp kit, so am still looking for something better that might give the Wellbrook a run for its money.

>

>

>

> Last question: Do you have to match a 50-ohm design to 72-75 ohm cable ?

>

>

>

> Thank you for all of the friendly suggestions you all have made here.

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

> [Non-text portions of this message have been removed]

>

[Non-text portions of this message have been removed]

8183. Re: [loopantennas] Wire and Tubular Loopstick Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-23 02:25:42 UTC
From: Steve Ellington
Topic: 8177 Message: 8183

I see the W8DIZ wideband amplifier has been discontinued so maybe you got the last one?
http://www.kitsandparts.com/rfamp.php

Steve
N4LQ
----- Original Message -----
From: skyspeed77
To: loopantennas@yahoogroups.com
Sent: Friday, January 21, 2011 6:21 PM
Subject: [loopantennas] Wire and Tubular Loopstick Questions

I'm almost ready to build my three loop antennas.
A few more questions first.

I ordered the amp kit from W8DIZ.
It does not seem as sophisticated or likely as effective
as the Wellbrook design, but I'll give it a try.
Frankly, the latter has parts that I do not even understand
and not being a licensed amateur, would doubt my ability to
put a working model together.

My metal loop will be a one meter diameter 1/2 inch outside diameter copper one.
I'll use it on shortwave.

I went to Apex Electrical Surplus in Southern California and someone had bought them out of Litz wire, likely the guy selling it on Ebay.
Instead for the wire Loop on a 21" x 50" wood frame I bought 13 gauge Magnet wire, which will work I assume. I also have a large spool of 20-gauge stranded.
Any opinions on the wire are welcome.

Incidentally I'm making the large frame out of almost square two chair sides from a well built Danish-style one I found for $9 at Goodwill.

I only paid $8 for the amp kit, so am still looking for something better that might give the Wellbrook a run for its money.

Last question: Do you have to match a 50-ohm design to 72-75 ohm cable ?

Thank you for all of the friendly suggestions you all have made here.

[Non-text portions of this message have been removed]

8184. Re: Wire and Tubular Loopstick Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-23 14:54:06 UTC
From: Bruce Carter
Topic: 8177 Message: 8184

> I only paid $8 for the amp kit, so am still looking for something better that might give the Wellbrook a run for its money.

I use a THS4304 evaluation board from TI. Because of the bandwidth of the amplifier, I can make it have plenty of gain even up into the high shortwave bands. Non-inverting gain circuit is preferable because it won't load the loop. 40 dB or more of gain is easy.

A THS3202 evaluation board can have even more gain, because you can cascade two amplifiers together. Just remember to change the input resistor to adjust gain, NOT the feedback resistor. Personally, I don't think even the cascaded configuration is as good as the THS4304.

8185. Twin Lead J-Pole at 10 meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-23 15:43:28 UTC
From: Timothy-Allen Albertson
Topic: 8185 Message: 8185

Anybody have any ideas on a twin-lead J-Pole at 10 Meters?

tnx 73 de kg6irh/0

[Non-text portions of this message have been removed]

8186. Re: Twin Lead J-Pole at 10 meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-23 22:58:03 UTC
From: pappy_hiram
Topic: 8185 Message: 8186

Here's a calculator for determining the dimensions:

http://www.hamuniverse.com/jpole.html

tape the twinlead to a pvc pole, cut and tune to desired frequency, when it's all working right, put it inside the pvc pipe (hang it from the top), seal it against weather and mount it on your roof, hang it from at tree, etc...

Pappy Hiram

--- In loopantennas@yahoogroups.com, Timothy-Allen Albertson <camotim@...> wrote:
>
> Anybody have any ideas on a twin-lead J-Pole at 10 Meters?
>
> tnx 73 de kg6irh/0
>
>
> [Non-text portions of this message have been removed]
>

8187. Tubular Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-23 23:11:36 UTC
From: skyspeed77
Topic: 8187 Message: 8187

Thanks for the suggestion Bruce.

Steve, maybe I got the last; he said he was taking off for a few days,
so probably shipped just before that, as he acknowledged the order.
The circuit is simple enough that I imagine you could DIY without the
proprietary board.

Ray, your advice is good and I intend to follow it.
I also found a copper tube loop that appeals to me for shortwave. I'll try it with a variable cap tuner first before building the amp.
I found a 3-gang capacitor in a junk shortwave from about 1950 (Magnavox) where each section has 15 rotating plates and the radio tuned 5-18 Mhz plus MW AM. I also have a new 381 pF variable cap.

http://www.kr1st.com/swlloop.htm

So, my first three will be the above shortwave loop, a 21 x 50 inch
10-turn loop for inside of a closet door, and the embroidery hoop loop
that rotates and gimbals (see site below), the last from Litz wire and the closet door one from 13-gauge magnet wire.

Any advice on how to use the 3-gang capacitor would be welcome. Their are 3 coils connected into the variable cap. Should I utilize them somehow ?

http://kr1s.kearman.com/html/hooploop.html

Want to trade countries, Ray ?

8188. Re: ***SPAM*** [loopantennas] Tubular Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-24 08:41:46 UTC
From: Eduardo
Topic: 8188 Message: 8188

Hi,

This is my construction, make to listen, look!

http://www.radiodx.qsl.br/nb-9gx.htm

Respectfully,

Eduardo
----- Original Message -----
From: skyspeed77
To: loopantennas@yahoogroups.com
Sent: Sunday, January 23, 2011 9:11 PM
Subject: ***SPAM*** [loopantennas] Tubular Loop

Thanks for the suggestion Bruce.

Steve, maybe I got the last; he said he was taking off for a few days,
so probably shipped just before that, as he acknowledged the order.
The circuit is simple enough that I imagine you could DIY without the
proprietary board.

Ray, your advice is good and I intend to follow it.
I also found a copper tube loop that appeals to me for shortwave. I'll try it with a
variable cap tuner first before building the amp.
I found a 3-gang capacitor in a junk shortwave from about 1950 (Magnavox) where each
section has 15 rotating plates and the radio tuned 5-18 Mhz plus MW AM. I also have a new
381 pF variable cap.

http://www.kr1st.com/swlloop.htm

So, my first three will be the above shortwave loop, a 21 x 50 inch
10-turn loop for inside of a closet door, and the embroidery hoop loop
that rotates and gimbals (see site below), the last from Litz wire and the closet door one
from 13-gauge magnet wire.

Any advice on how to use the 3-gang capacitor would be welcome. Their are 3 coils connected
into the variable cap. Should I utilize them somehow ?

http://kr1s.kearman.com/html/hooploop.html

Want to trade countries, Ray ?

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Nenhum vírus encontrado nessa mensagem.
Verificado por AVG - www.avgbrasil.com.br
Versão: 10.0.1191 / Banco de dados de vírus: 1435/3398 - Data de Lançamento: 01/23/11

[Non-text portions of this message have been removed]

8189. Re: [loopantennas] Tubular Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-24 09:22:55 UTC
From: Sébastien MEDARD
Topic: 8188 Message: 8189

Hello,

Le 24/01/2011 09:41, Eduardo a ?crit :
> Hi,
>
> This is my construction, make to listen, look!
>
> http://www.radiodx.qsl.br/nb-9gx.htm

Interesting, good music on the video :)

The idea to put a jack to make the connection between the loop and the box is interesting.

How big is the loop ?

What kind of circuit did you use for amplification ?

Did you see a real improvement between this shielded loop and a coupling loop type?

I ask for these questions because I am about to build another loop (I already have a 2 m square loop with a coupling loop, it is oriented east-west, and I cannot turn it in my room). I was wondering if the signal/noise ratio would be better on a shielded one so that it could be possible to add an amplification circuit...

Many thanks.

Sebastien.

8190. Re: Re: [loopantennas] Tubular Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-24 14:10:00 UTC
From: Eduardo
Topic: 8187 Message: 8190

Hello Mr. Sebastien.

Thanks for the compliments!

The music is to complement the demonstration of the antenna.

This project took approximately six months for me to develop it.

The hardest parts is interacting mechanisms available to the type of antenna you want, but now is ready and works very well.

The shielded loop allows elimiar various types of noise and noise that are created by the electrical network, such as cell phone chargers, fluorescent lamps, electric fences of the residences, etc..

The circuit I use is an adaptation of a stage of MFJ enhanced by other modifications that have developed, and the result is I have an amplifier with more than 40 db of gain, a spectacle, a show, and it all while not increasing the noise.

The loop of my antenna measures 1.50, and ranges from 3400 kHz to 18.000 kHz.

It was very practical that it is spinning 360 degrees, it helps when listening and also to get rid of the interference.

Good luck with your project.

Respectfully,

Eduardo
www.radiodx.qsl.br
Mairiporã, SP, Brazil

----- Original Message -----
From: Sébastien MEDARD
To: loopantennas@yahoogroups.com
Sent: Monday, January 24, 2011 7:22 AM
Subject: ***SPAM*** Re: [loopantennas] Tubular Loop

Hello,

Le 24/01/2011 09:41, Eduardo a écrit :
> Hi,
>
> This is my construction, make to listen, look!
>
> http://www.radiodx.qsl.br/nb-9gx.htm

Interesting, good music on the video :)

The idea to put a jack to make the connection between the loop and the box is interesting.

How big is the loop ?

What kind of circuit did you use for amplification ?

Did you see a real improvement between this shielded loop and a coupling loop type?

I ask for these questions because I am about to build another loop (I already have a 2 m square loop with a coupling loop, it is oriented east-west, and I cannot turn it in my room). I was wondering if the signal/noise ratio would be better on a shielded one so that it could be possible to add an amplification circuit...

Many thanks.

Sebastien.

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Nenhum vírus encontrado nessa mensagem.
Verificado por AVG - www.avgbrasil.com.br
Versão: 10.0.1191 / Banco de dados de vírus: 1435/3399 - Data de Lançamento: 01/23/11

[Non-text portions of this message have been removed]

8191. Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-24 20:08:21 UTC
From: skyspeed77
Topic: 8151 Message: 8191

I saw that onem and did order the kit for it. Thanks.
Corky

--- In loopantennas@yahoogroups.com, Notareal Too <not_a_real@...> wrote:
>
>
> Hi !
> One simple(and cheap) pre-amp is here:
>
> http://www.kitsandparts.com/rfamp1.1.php
>
> BR
>
>
> > To: loopantennas@yahoogroups.com
> > From: skyspeed77@...
> > Date: Wed, 19 Jan 2011 20:16:02 +0000
> > Subject: [loopantennas] Re: WELLBROOK DIY
> > >
> > >
> > > --- In loopantennas@yahoogroups.com, "iv3zbl" <iv3zbl@> wrote:
> > > >
> > > > >
> > > > > Also a schematic for an amp to match that performance quality, or a
> > > > > commercially available one ?
> > > > >
> > > >
> > > > Try Google "wl1030" and let us know how your project goes on.
> > > >
> > > > 73 Andy IV3ZBL
> > > >
> > >
> > > Thank you Andy and the others who responded to my request regarding the
> > > Wellbrook Loop. I've learned some key elements from those links.
> > >
> > > Truthfully I'm good with mechanics, BUT my confidence to scratch build
> > > an antenna amp is missing.
> > > Are their any amps available for purchase to match the performance of
> > > the
> > > Wellbrook one, from MFJ or another company ?
> > > In kit form would work.
> > >
> > > Changing the subject a bit, I have a 23-inch embroidery hoop to build a
> > > wire loop with. Is Litz wire the best to use for this or will stranded
> > > or solid work almost as well ?

> > I bought a 381-pf variable cap; will that cover the whole 520-1700 khz
> > range,
> > or do I need to have an added switched-in additional fixed or variable
> > cap ?
> >
> > Is it OK to use a soft copper 1/2" pipe for the coupling coil of a
> > multi-turn wire
> > loop ?
> >
> > Corky
> >
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather
than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

8192. Re: WELLBROOK DIY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-24 20:13:36 UTC
From: skyspeed77
Topic: 8151 Message: 8192

I do have a very noisy local with conjested apartments and 6 transformers within site of the front of the building.
However, I'm free to use the building anyway I want for antennas.
Corky

--- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@...> wrote:
>
> Chris has a newer design too he posted in the file section of the Group that looks promising but I haven't tried it myself yet (Waiting until I need other parts to justify ordering the MPS6521 transistors) He uses his patented (literally) augmentation technique on the 4 main transistors.
>
> http://groups.yahoo.com/group/loopantennas/files/
>
> Last file in the list
>
> JR
>
> --- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@> wrote:
> >
> > Chris Trask has a couple of tuned and untuned loop designs. Don't discount the active short verticals either, unless you have a specific noise source you need to null they are just as quiet as an active loop if you get them out in the open.
> >
> > http://home.earthlink.net/~christrask/
> >
> > Down at the bottom of the page but don't overlook the other stuff he has there, especially his work on augmented amps and mixers, and the stuff on transistor evaluations.
> >
> > JR
> >
> > --- In loopantennas@yahoogroups.com, "skyspeed77" <skyspeed77@> wrote:
> > >
> > > Has anyone reverse engineered the Wellbrook Loop and setup a similar
> > > DIY formula for building your own, perhaps of copper tubing ?
> > >
> > > Also a schematic for an amp to match that performance quality, or a
> > > commercially available one ?
> > >
> > > Later I have some questions about wire loops with variable caps, which I've been studying seriously and gathering components.
> > >
> > > I'm an SWL with a current interest in the AM band, but will likely go back to shortwave soon.

> > > My listening location is poor but I haver access to a second story roof. Poor means a building twice the height to the West and main street with lots of visable transformers on the power poles, first floor location, about 100 feet back from the power poles. I'm in L.A.
> > > and also have some interest in DXing the Tropic Bands.
> > >
> >
>

8193. Re: ***SPAM*** [loopantennas] Tubular Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-25 21:57:51 UTC
From: skyspeed77
Topic: 8188 Message: 8193

Eduardo, you did one beautiful job on that loop !

Is the rotation motorized ?

Which MFJ circuit did you use for modification ?

Are you willing to share the schematic ?

Thank you for sharing your work. I've seen the video twice.

Corky

--- In loopantennas@yahoogroups.com, "Eduardo" <adcas@...> wrote:
>
> Hi,
>
> This is my construction, make to listen, look!
>
> http://www.radiodx.qsl.br/nb-9gx.htm
>
> Respectfully,
>
>
> Eduardo
> ----- Original Message -----
> From: skyspeed77
> To: loopantennas@yahoogroups.com
> Sent: Sunday, January 23, 2011 9:11 PM
> Subject: ***SPAM*** [loopantennas] Tubular Loop
>
>
> Thanks for the suggestion Bruce.
>
> Steve, maybe I got the last; he said he was taking off for a few days,
> so probably shipped just before that, as he acknowledged the order.
> The circuit is simple enough that I imagine you could DIY without the
> proprietary board.
>
> Ray, your advice is good and I intend to follow it.
> I also found a copper tube loop that appeals to me for shortwave. I'll try it with a variable cap tuner first before building the amp.
> I found a 3-gang capacitor in a junk shortwave from about 1950 (Magnavox) where each section has 15 rotating plates and the radio tuned 5-18 Mhz plus MW AM. I also have a new 381 pF variable cap.
>
> http://www.kr1st.com/swlloop.htm

>
> So, my first three will be the above shortwave loop, a 21 x 50 inch
> 10-turn loop for inside of a closet door, and the embroidery hoop loop
> that rotates and gimbals (see site below), the last from Litz wire and the closet door one from 13-gauge magnet wire.
>
> Any advice on how to use the 3-gang capacitor would be welcome. Their are 3 coils connected into the variable cap. Should I utilize them somehow ?
>
> http://kr1s.kearman.com/html/hooploop.html
>
> Want to trade countries, Ray ?
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>
> -----
> Nenhum vírus encontrado nessa mensagem.
> Verificado por AVG - www.avgbrasil.com.br
> Versão: 10.0.1191 / Banco de dados de vírus: 1435/3398 - Data de Lançamento: 01/23/11
>
>
> [Non-text portions of this message have been removed]
>

8194. Re: Re: [loopantennas] Tubular Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-25 23:37:34 UTC
From: Eduardo
Topic: 8187 Message: 8194

Hello Corky.

Thanks for the compliments. This system is manual, no motor, but is light and turn smoothly, allowing you to have a good positioning of the Loop over the radio signal.
The amp I used for my mirror circuit is the MFJ-959, part of the circuit used with minor modifications and adjustments that ultimately will function perfectly.
I have other videos on youtube on my antennas, and also on the amplifiers.

Hugs

Respectfully,

Eduardo
----- Original Message -----
From: skyspeed77
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 25, 2011 7:57 PM
Subject: ***SPAM*** Re: ***SPAM*** [loopantennas] Tubular Loop

Eduardo, you did one beautiful job on that loop !

Is the rotation motorized ?

Which MFJ circuit did you use for modification ?

Are you willing to share the schematic ?

Thank you for sharing your work. I've seen the video twice.

Corky

--- In loopantennas@yahoogroups.com, "Eduardo" <adcas@...> wrote:
>
> Hi,
>
> This is my construction, make to listen, look!
>
> http://www.radiodx.qsl.br/nb-9gx.htm
>
> Respectfully,
>
>
> Eduardo
> ----- Original Message -----
> From: skyspeed77
> To: loopantennas@yahoogroups.com
> Sent: Sunday, January 23, 2011 9:11 PM
> Subject: ***SPAM*** [loopantennas] Tubular Loop

>
>
> Thanks for the suggestion Bruce.
>
> Steve, maybe I got the last; he said he was taking off for a few days,
> so probably shipped just before that, as he acknowledged the order.
> The circuit is simple enough that I imagine you could DIY without the
> proprietary board.
>
> Ray, your advice is good and I intend to follow it.
> I also found a copper tube loop that appeals to me for shortwave. I'll try it with a variable cap tuner first before building the amp.
> I found a 3-gang capacitor in a junk shortwave from about 1950 (Magnavox) where each section has 15 rotating plates and the radio tuned 5-18 Mhz plus MW AM. I also have a new 381 pF variable cap.
>
> http://www.kr1st.com/swlloop.htm
>
> So, my first three will be the above shortwave loop, a 21 x 50 inch
> 10-turn loop for inside of a closet door, and the embroidery hoop loop
> that rotates and gimbals (see site below), the last from Litz wire and the closet door one from 13-gauge magnet wire.
>
> Any advice on how to use the 3-gang capacitor would be welcome. Their are 3 coils connected into the variable cap. Should I utilize them somehow ?
>
> http://kr1s.kearman.com/html/hooploop.html
>
> Want to trade countries, Ray ?
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

>
> -----
> Nenhum vírus encontrado nessa mensagem.
> Verificado por AVG - www.avgbrasil.com.br
> Versão: 10.0.1191 / Banco de dados de vírus: 1435/3398 - Data de Lançamento: 01/23/11
>
>
> [Non-text portions of this message have been removed]
>

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Nenhum vírus encontrado nessa mensagem.
Verificado por AVG - www.avgbrasil.com.br
Versão: 10.0.1191 / Banco de dados de vírus: 1435/3402 - Data de Lançamento: 01/25/11

[Non-text portions of this message have been removed]

8195. Re: [loopantennas] Tubular Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-26 18:03:07 UTC
From: skyspeed77
Topic: 8187 Message: 8195

Hi Eduardo,
Thank you. I'll check out your YouTube videos.
Corky

--- In loopantennas@yahoogroups.com, "Eduardo" <adcas@...> wrote:
>
> Hello Corky.
>
> Thanks for the compliments. This system is manual, no motor, but is light and turn smoothly, allowing you to have a good positioning of the Loop over the radio signal.
> The amp I used for my mirror circuit is the MFJ-959, part of the circuit used with minor modifications and adjustments that ultimately will function perfectly.
> I have other videos on youtube on my antennas, and also on the amplifiers.
>
> Hugs
>
>
> Respectfully,
>
>
> Eduardo
> ----- Original Message -----
> From: skyspeed77
> To: loopantennas@yahoogroups.com
> Sent: Tuesday, January 25, 2011 7:57 PM
> Subject: ***SPAM*** Re: ***SPAM*** [loopantennas] Tubular Loop
>
>
> Eduardo, you did one beautiful job on that loop !
>
> Is the rotation motorized ?
>
> Which MFJ circuit did you use for modification ?
>
> Are you willing to share the schematic ?
>
> Thank you for sharing your work. I've seen the video twice.
>
> Corky
>
> --- In loopantennas@yahoogroups.com, "Eduardo" <adcas@> wrote:
> >
> > Hi,
> >
> > This is my construction, make to listen, look!

> >
> > http://www.radiodx.qsl.br/nb-9gx.htm
> >
> > Respectfully,
> >
> >
> > Eduardo
> > ----- Original Message -----
> > From: skyspeed77
> > To: loopantennas@yahoogroups.com
> > Sent: Sunday, January 23, 2011 9:11 PM
> > Subject: ***SPAM*** [loopantennas] Tubular Loop
> >
> >
> > Thanks for the suggestion Bruce.
> >
> > Steve, maybe I got the last; he said he was taking off for a few days,
> > so probably shipped just before that, as he acknowledged the order.
> > The circuit is simple enough that I imagine you could DIY without the
> > proprietary board.
> >
> > Ray, your advice is good and I intend to follow it.
> > I also found a copper tube loop that appeals to me for shortwave. I'll try it with a variable cap tuner first before building the amp.
> > I found a 3-gang capacitor in a junk shortwave from about 1950 (Magnavox) where each section has 15 rotating plates and the radio tuned 5-18 Mhz plus MW AM. I also have a new 381 pF variable cap.
> >
> > http://www.kr1st.com/swlloop.htm
> >
> > So, my first three will be the above shortwave loop, a 21 x 50 inch
> > 10-turn loop for inside of a closet door, and the embroidery hoop loop
> > that rotates and gimbals (see site below), the last from Litz wire and the closet door one from 13-gauge magnet wire.
> >
> > Any advice on how to use the 3-gang capacitor would be welcome. Their are 3 coils connected into the variable cap. Should I utilize them somehow ?
> >
> > http://kr1s.kearman.com/html/hooploop.html
> >
> > Want to trade countries, Ray ?
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather

than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> > -----
> > Nenhum vírus encontrado nessa mensagem.
> > Verificado por AVG - www.avgbrasil.com.br
> > Versão: 10.0.1191 / Banco de dados de vírus: 1435/3398 - Data de Lançamento: 01/23/11
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> Nenhum vírus encontrado nessa mensagem.
> Verificado por AVG - www.avgbrasil.com.br
> Versão: 10.0.1191 / Banco de dados de vírus: 1435/3402 - Data de Lançamento: 01/25/11
>
>
>

> [Non-text portions of this message have been removed]
>

8196. Magnetic Loop Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-27 04:31:32 UTC
From: Irv F
Topic: 8196 Message: 8196

A very simple way to tune your loop with a minimum of
construction is to look at the tuner at the link below.It uses commonly available old broadcast radio caps
and the circuitry is exceptionally simple. The
only change I would make would be to put a small variable
across the tuning cap for fine tuning.

Bear in mind that I am a QRP man (Yaesu FT-817, but using
this tuner at 5 watts and less has not presented any
problems. Using a 6 ft diameter 1/2 inch copper tubing
loop it will tune 80m nicely.

If the link gives you problems Google G3WME and look for
his loop tuner.

Irv VE6BP

http://www.rsars.org.uk/ELIBRARY/ANTENNAS%20DOCS/HF%20LOOP%20ANTENNA%20TUNER%20-G3WME-2002%20iss%201.2.pdf

8197. Re: Magnetic Loop Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-27 19:46:23 UTC
From: skyspeed77
Topic: 8196 Message: 8197

Thanks Irv.
However I tried it I couldn't get to the G3WME info.

I do like your idea to put in the smaller variable cap in parallel
to the larger cap. Is there a ratio or value that would be suitable
for the 25-90 meter range of bands ?

--- In loopantennas@yahoogroups.com, "Irv F" <finkirv@...> wrote:
>
> A very simple way to tune your loop with a minimum of
> construction is to look at the tuner at the link below.It uses commonly available old broadcast radio caps
> and the circuitry is exceptionally simple. The
> only change I would make would be to put a small variable
> across the tuning cap for fine tuning.
>
> Bear in mind that I am a QRP man (Yaesu FT-817, but using
> this tuner at 5 watts and less has not presented any
> problems. Using a 6 ft diameter 1/2 inch copper tubing
> loop it will tune 80m nicely.
>
> If the link gives you problems Google G3WME and look for
> his loop tuner.
>
> Irv VE6BP
>
>
> http://www.rsars.org.uk/ELIBRARY/ANTENNAS%20DOCS/HF%20LOOP%20ANTENNA%20TUNER%20-G3WME-2002%20iss%201.2.pdf
>

8198. Corky - Re: Magnetic Loop Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-27 22:45:26 UTC
From: Irv F
Topic: 8196 Message: 8198

Hi Corky

I'm sorry you couldn't reach the site -- I just checked the
links a few minutes ago and it is still there -- and has been
for quite a while.

The small fine tuning capacitor can have any range -- all it
does is makes it easier to home in on the tuned frequency once you
have roughly approached it using the large coarser tuning capacitor.

Give the site another try -- either way -- by clicking the link or
by going to Google and using G3WME as the search term. Once you hit the page, you will have
to scroll down as he includes a few items
on the page.

Hope this helps -- it's a great link

Irv - VE6BP

--- In loopantennas@yahoogroups.com, "skyspeed77" <skyspeed77@...> wrote:
>
> Thanks Irv.
> However I tried it I couldn't get to the G3WME info.
>
> I do like your idea to put in the smaller variable cap in parallel
> to the larger cap. Is there a ratio or value that would be suitable
> for the 25-90 meter range of bands ?
>
> --- In loopantennas@yahoogroups.com, "Irv F" <finkirv@> wrote:
> >
> > A very simple way to tune your loop with a minimum of
> > construction is to look at the tuner at the link below.It uses commonly available old
broadcast radio caps
> > and the circuitry is exceptionally simple. The
> > only change I would make would be to put a small variable
> > across the tuning cap for fine tuning.
> >
> > Bear in mind that I am a QRP man (Yaesu FT-817, but using
> > this tuner at 5 watts and less has not presented any
> > problems. Using a 6 ft diameter 1/2 inch copper tubing
> > loop it will tune 80m nicely.
> >
> > If the link gives you problems Google G3WME and look for
> > his loop tuner.
> >
> > Irv VE6BP

> >
> >
> > http://www.rsars.org.uk/ELIBRARY/ANTENNAS%20DOCS/HF%20LOOP%20ANTENNA%20TUNER%20-G3WME-2002%20iss%201.2.pdf
> >
>

8199. Re: [loopantennas] Magnetic Loop Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-27 23:36:27 UTC
From: Steve Ellington
Topic: 8196 Message: 8199

I wonder why he cut the tubing and then spliced it at the top? Seems like it would be better if it were all one piece.

Steve
N4LQ
----- Original Message -----
From: Irv F
To: loopantennas@yahoogroups.com
Sent: Wednesday, January 26, 2011 11:31 PM
Subject: [loopantennas] Magnetic Loop Tuner

A very simple way to tune your loop with a minimum of
construction is to look at the tuner at the link below.It uses commonly available old broadcast radio caps
and the circuitry is exceptionally simple. The
only change I would make would be to put a small variable
across the tuning cap for fine tuning.

Bear in mind that I am a QRP man (Yaesu FT-817, but using
this tuner at 5 watts and less has not presented any
problems. Using a 6 ft diameter 1/2 inch copper tubing
loop it will tune 80m nicely.

If the link gives you problems Google G3WME and look for
his loop tuner.

Irv VE6BP

http://www.rsars.org.uk/ELIBRARY/ANTENNAS%20DOCS/HF%20LOOP%20ANTENNA%20TUNER%20-G3WME-2002%20iss%201.2.pdf

[Non-text portions of this message have been removed]

8200. WTB

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 18:36:53 UTC
From: radiotech750
Topic: 8200 Message: 8200

I am looking for a 365 pf air cap to buy. If you have one let me know price you are asking!

Ernie

8201. RE: [loopantennas] WTB

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 18:55:39 UTC
From: Pollock,Raphael E
Topic: 8200 Message: 8201

Can be ordered from Stormwise or Crystal Radio Supply

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of radiotech750
Sent: Friday, January 28, 2011 12:37 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] WTB

I am looking for a 365 pf air cap to buy. If you have one let me know price you are asking!

Ernie

[Non-text portions of this message have been removed]

8202. Re: Magnetic Loop Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 19:45:14 UTC
From: pappy_hiram
Topic: 8196 Message: 8202

I wondered that, too. Maybe he designed it to be taken apart for travel?

Pappy Hiram

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> I wonder why he cut the tubing and then spliced it at the top? Seems like it would be better if it were all one piece.
>
> Steve
> N4LQ
> ----- Original Message -----
> From: Irv F
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, January 26, 2011 11:31 PM
> Subject: [loopantennas] Magnetic Loop Tuner
>
>
>
> A very simple way to tune your loop with a minimum of
> construction is to look at the tuner at the link below.It uses commonly available old broadcast radio caps
> and the circuitry is exceptionally simple. The
> only change I would make would be to put a small variable
> across the tuning cap for fine tuning.
>
> Bear in mind that I am a QRP man (Yaesu FT-817, but using
> this tuner at 5 watts and less has not presented any
> problems. Using a 6 ft diameter 1/2 inch copper tubing
> loop it will tune 80m nicely.
>
> If the link gives you problems Google G3WME and look for
> his loop tuner.
>
> Irv VE6BP
>
> http://www.rsars.org.uk/ELIBRARY/ANTENNAS%20DOCS/HF%20LOOP%20ANTENNA%20TUNER%20-G3WME-2002%20iss%201.2.pdf
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8203. Re: [loopantennas] Re: Magnetic Loop Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 19:52:17 UTC
From: brian nsl
Topic: 8196 Message: 8203

Hi!,
By the way he ' spliced ' the top joint I feel it could be to aid the bending,
i.e. two half circles being easier than a full one with 15mm tube ????
Just a thought.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: pappy_hiram
To: loopantennas@yahoogroups.com
Sent: Friday, January 28, 2011 7:45 PM
Subject: [loopantennas] Re: Magnetic Loop Tuner

[Non-text portions of this message have been removed]

8204. PVC Small Loop Plans for 90 & 60 Meter Tropical Bands?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 19:21:13 UTC
From: Ralph
Topic: 8204 Message: 8204

Been reading many articles to prepare myself to construct a "listen-only" small loop, for the shortwave broadcast tropical bands, meaning 3.2 mc to about 5.2 mc. (If able to include 49 meter band int'l band as well, say up to ~6.3 mc, well that would be a bonus.)

Anyway, I think I can design a 1/10 wavelength small loop for 90 meters and I ought to be able to get it to tune between 3 and 6 mc using a 365 pfd variable cap.

Am thinking about 27 feet of wire on a loop form about 18" on a side, meaning will need about 13 or 14 turns.

Does anybody have a more advanced plan, ALREADY EXISTING? I esp am interested in a hand in determining the structure it will rest on, which I would like to build from PVC for light weight, strength and good looks. Will need to build in an alti-azimuth slant capability, too. (I've seen stuff for 80 meters or 160 meters, but not for 90 and 60 meters, and not on PVC.)

I am sure this had already been done many times already, so am just hoping some of your more experienced hands can help a less technical fellow like myself.

Thanks and regards,

Ralph Perry

8205. RE: [loopantennas] PVC Small Loop Plans for 90 & 60 Meter Tropical Bands?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 20:21:25 UTC
From: Pollock,Raphael E
Topic: 8204 Message: 8205

One of the easiest solutions is an appropriately sized adjustable camera tripod, purchasable @ Target, etc. for $20-30. I have one for a four lbs. ferrite rod antenna for MW dxing. I built a little wooden interface to attach to the mounting plane, also easy to do. Depending on how you construct your loop you could do the same or perhaps use plastic wire tie-downs to accomplish the same...

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Ralph
Sent: Friday, January 28, 2011 1:21 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] PVC Small Loop Plans for 90 & 60 Meter Tropical Bands?

Been reading many articles to prepare myself to construct a "listen-only" small loop, for the shortwave broadcast tropical bands, meaning 3.2 mc to about 5.2 mc. (If able to include 49 meter band int'l band as well, say up to ~6.3 mc, well that would be a bonus.)

Anyway, I think I can design a 1/10 wavelength small loop for 90 meters and I ought to be able to get it to tune between 3 and 6 mc using a 365 pfd variable cap.

Am thinking about 27 feet of wire on a loop form about 18" on a side, meaning will need about 13 or 14 turns.

Does anybody have a more advanced plan, ALREADY EXISTING? I esp am interested in a hand in determining the structure it will rest on, which I would like to build from PVC for light weight, strength and good looks. Will need to build in an alti-azimuth slant capability, too. (I've seen stuff for 80 meters or 160 meters, but not for 90 and 60 meters, and not on PVC.)

I am sure this had already been done many times already, so am just hoping some of your more experienced hands can help a less technical fellow like myself.

Thanks and regards,

Ralph Perry

[Non-text portions of this message have been removed]

8206. Re: [loopantennas] Re: Magnetic Loop Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 21:33:43 UTC
From: Steve Ellington
Topic: 8196 Message: 8206

I"ll have to go with the portability idea. Felxible copper tubing is already bent into a loop when you buy it. Even so, I don't see how taking it apart helps much. One could just wear it around their neck!

Steve
N4LQ
----- Original Message -----
From: brian nsl
To: loopantennas@yahoogroups.com
Sent: Friday, January 28, 2011 2:52 PM
Subject: Re: [loopantennas] Re: Magnetic Loop Tuner

Hi!,
By the way he ' spliced ' the top joint I feel it could be to aid the bending,
i.e. two half circles being easier than a full one with 15mm tube ????
Just a thought.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: pappy_hiram
To: loopantennas@yahoogroups.com
Sent: Friday, January 28, 2011 7:45 PM
Subject: [loopantennas] Re: Magnetic Loop Tuner

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8207. Corky - Re: Magnetic Loop Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 21:59:36 UTC
From: skyspeed77
Topic: 8196 Message: 8207

Hi Irv,
This time it came up without the error message off of the top item from putting in "G3WME Antenna" on Google:

http://www.arkansas-aresraces.org/Antennas/HFAntennas/160m-6m%20HF%20ANTENNA%20TUNER%20%20G3WME%20iss%201.2.pdf

It may be more sophisticated than I need as I'm receiving only and want to cover only the 120-25 meter bands.
I don't have the knowledge of a licensed ham, so I don't know exactly how to modify that unit, however the concept is good, it seems to me.

I was also looking at the Havana Radio simple PI circuit tuner using two variable caps balanced around a coil. I'll try to find it to post the link.

http://www.radiohc.org/Distributions/Dxers/antenna-tuner2.html

http://www.radiohc.org/Distributions/Dxers/pi-tuner1.htm

Another simple design:
http://www.hard-core-dx.com/nordicdx/antenna/lab/tuner.html

Super simple design using heavy-duty surplus components:
http://www.aa5tb.com/tuner.html

I'm probably writing these posts as much for my understanding as any one else's. The antennas come first, and will be tested without tuners at first, chief among them will be an 80 ft. longwire placed in the attic with a balun and coax feed. Height about 25 feet.

--- In loopantennas@yahoogroups.com, "Irv F" <finkirv@...> wrote:
>
> Hi Corky
>
> I'm sorry you couldn't reach the site -- I just checked the
> links a few minutes ago and it is still there -- and has been
> for quite a while.
>
> The small fine tuning capacitor can have any range -- all it
> does is makes it easier to home in on the tuned frequency once you
> have roughly approached it using the large coarser tuning capacitor.
>
> Give the site another try -- either way -- by clicking the link or
> by going to Google and using G3WME as the search term. Once you hit the page, you will have to scroll down as he includes a few items
> on the page.
>
> Hope this helps -- it's a great link

>
> Irv - VE6BP
>
>
>
> --- In loopantennas@yahoogroups.com, "skyspeed77" <skyspeed77@> wrote:
> >
> > Thanks Irv.
> > However I tried it I couldn't get to the G3WME info.
> >
> > I do like your idea to put in the smaller variable cap in parallel
> > to the larger cap. Is there a ratio or value that would be suitable
> > for the 25-90 meter range of bands ?
> >
> > --- In loopantennas@yahoogroups.com, "Irv F" <finkirv@> wrote:
> > >
> > > A very simple way to tune your loop with a minimum of
> > > construction is to look at the tuner at the link below.It uses commonly available old broadcast radio caps
> > > and the circuitry is exceptionally simple. The
> > > only change I would make would be to put a small variable
> > > across the tuning cap for fine tuning.
> > >
> > > Bear in mind that I am a QRP man (Yaesu FT-817, but using
> > > this tuner at 5 watts and less has not presented any
> > > problems. Using a 6 ft diameter 1/2 inch copper tubing
> > > loop it will tune 80m nicely.
> > >
> > > If the link gives you problems Google G3WME and look for
> > > his loop tuner.
> > >
> > > Irv VE6BP
> > >
> > >
> > > http://www.rsars.org.uk/ELIBRARY/ANTENNAS%20DOCS/HF%20LOOP%20ANTENNA%20TUNER%20-G3WME-2002%20iss%201.2.pdf
> > >
> >
>

8208. Re: PVC Small Loop Plans for 90 & 60 Meter Tropical Bands?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-28 22:28:52 UTC
From: Ralph
Topic: 8204 Message: 8208

What a great idea -- a camera tripod assemply to get the tilt functionality. I love it!

--- In loopantennas@yahoogroups.com, "Pollock,Raphael E" <rpollock@...> wrote:
>
> One of the easiest solutions is an appropriately sized adjustable camera tripod, purchasable @ Target, etc. for $20-30. I have one for a four lbs. ferrite rod antenna for MW dxing. I built a little wooden interface to attach to the mounting plane, also easy to do. Depending on how you construct your loop you could do the same or perhaps use plastic wire tie-downs to accomplish the same...
>
> From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Ralph
> Sent: Friday, January 28, 2011 1:21 PM
> To: loopantennas@yahoogroups.com
> Subject: [loopantennas] PVC Small Loop Plans for 90 & 60 Meter Tropical Bands?
>
>
>
> Been reading many articles to prepare myself to construct a "listen-only" small loop, for the shortwave broadcast tropical bands, meaning 3.2 mc to about 5.2 mc. (If able to include 49 meter band int'l band as well, say up to ~6.3 mc, well that would be a bonus.)
>
> Anyway, I think I can design a 1/10 wavelength small loop for 90 meters and I ought to be able to get it to tune between 3 and 6 mc using a 365 pfd variable cap.
>
> Am thinking about 27 feet of wire on a loop form about 18" on a side, meaning will need about 13 or 14 turns.
>
> Does anybody have a more advanced plan, ALREADY EXISTING? I esp am interested in a hand in determining the structure it will rest on, which I would like to build from PVC for light weight, strength and good looks. Will need to build in an alti-azimuth slant capability, too. (I've seen stuff for 80 meters or 160 meters, but not for 90 and 60 meters, and not on PVC.)
>
> I am sure this had already been done many times already, so am just hoping some of your more experienced hands can help a less technical fellow like myself.
>
> Thanks and regards,
>
> Ralph Perry
>
>
>
> [Non-text portions of this message have been removed]
>

8209. Variation !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-29 07:59:47 UTC
From: brian nsl
Topic: 8209 Message: 8209

Hi,

There is an interesting variation of a MW loop antenna on the

same website as the magnetic loop,

www.rsars.org.uk/ELIBRARY/docsants.htm - Cached - Similar

BFBS GURKHA RADIO 1134KHz - 1287KHz LOOP ANTENNA

Broadcasting on 1134Khz , 1251KHz, 1278KHz and 1287Khz

72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

8210. Re: [loopantennas] Variation !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-29 14:07:56 UTC
From: Steve Ellington
Topic: 8209 Message: 8210

Need help with your URL Brian.
I can find ELIBRARY ok but not the rest of your posted URL.

Steve
N4LQ
----- Original Message -----
From: brian nsl
To: loopantennas@yahoogroups.com
Sent: Saturday, January 29, 2011 2:59 AM
Subject: [loopantennas] Variation !!!!

Hi,

There is an interesting variation of a MW loop antenna on the

same website as the magnetic loop,

www.rsars.org.uk/ELIBRARY/docsants.htm - Cached - Similar

BFBS GURKHA RADIO 1134KHz - 1287KHz LOOP ANTENNA

Broadcasting on 1134Khz , 1251KHz, 1278KHz and 1287Khz

72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8211. Re: [loopantennas] Variation !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-29 14:18:55 UTC
From: brian nsl
Topic: 8209 Message: 8211

Steve,
Open this webpage,
a.. RSARS MEMBERS' E-LIBRARY - ROYAL SIGNALS AMATEUR RADIO HOME PAGE

RSARS E-DOCUMENTS. These e-Document files have been created in PDF (Portable Document Format) and are best read using Adobe; Acrobat Reader ® - this free ...
www.rsars.org.uk/ELIBRARY/edocs.htm - Cached
Toggle down to ' HF Antennas & Projects, click as indicated.
On the list shown the antenna is the third item from the bottom.

Any problems mail me direct and I will forward a copy to you.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Saturday, January 29, 2011 2:07 PM
Subject: Re: [loopantennas] Variation !!!!

Need help with your URL Brian.
I can find ELIBRARY ok but not the rest of your posted URL.

Steve

[Non-text portions of this message have been removed]

8212. Re: [loopantennas] Variation !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-29 14:56:32 UTC
From: Steve Ellington
Topic: 8209 Message: 8212

I believe I finally deciphered your link. Here's a simple URL to the link.

http://tinyurl.com/6bh2k4k

Steve
N4LQ
----- Original Message -----
From: brian nsl
To: loopantennas@yahoogroups.com
Sent: Saturday, January 29, 2011 9:18 AM
Subject: Re: [loopantennas] Variation !!!!

Steve,
Open this webpage,
a.. RSARS MEMBERS' E-LIBRARY - ROYAL SIGNALS AMATEUR RADIO HOME PAGE

RSARS E-DOCUMENTS. These e-Document files have been created in PDF (Portable Document Format) and are best read using Adobe; Acrobat Reader ® - this free ...
www.rsars.org.uk/ELIBRARY/edocs.htm - Cached
Toggle down to ' HF Antennas & Projects, click as indicated.
On the list shown the antenna is the third item from the bottom.

Any problems mail me direct and I will forward a copy to you.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Saturday, January 29, 2011 2:07 PM
Subject: Re: [loopantennas] Variation !!!!

Need help with your URL Brian.
I can find ELIBRARY ok but not the rest of your posted URL.

Steve

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8213. Re: [loopantennas] Variation !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-29 15:17:05 UTC
From: Nick B.
Topic: 8209 Message: 8213

Ingenious idea for a frame antenna using one of those document boxes.
Just add a 1-turn coupling loop and a socket to the box and it would be
good for even more RXs.

Nick B.

On 29/01/2011 14:56, Steve Ellington wrote:
>
> I believe I finally deciphered your link. Here's a simple URL to the link.
>
> http://tinyurl.com/6bh2k4k
>
> Steve
> N4LQ
> ----- Original Message -----
> From: brian nsl
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Sent: Saturday, January 29, 2011 9:18 AM
> Subject: Re: [loopantennas] Variation !!!!
>
> Steve,
> Open this webpage,
> a.. RSARS MEMBERS' E-LIBRARY - ROYAL SIGNALS AMATEUR RADIO HOME PAGE
>
> RSARS E-DOCUMENTS. These e-Document files have been created in PDF
> (Portable Document Format) and are best read using Adobe; Acrobat
> Reader ® - this free ...
> www.rsars.org.uk/ELIBRARY/edocs.htm - Cached
> Toggle down to ' HF Antennas & Projects, click as indicated.
> On the list shown the antenna is the third item from the bottom.
>
> Any problems mail me direct and I will forward a copy to you.
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: Steve Ellington
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Sent: Saturday, January 29, 2011 2:07 PM
> Subject: Re: [loopantennas] Variation !!!!
>
> Need help with your URL Brian.
> I can find ELIBRARY ok but not the rest of your posted URL.
>
> Steve
> ---
>

> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

8214. Re: [loopantennas] Variation !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-29 15:40:02 UTC
From: brian nsl
Topic: 8209 Message: 8214

Nick,
A ' bookshelf ' antenna, almost clandestine hi!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Nick B.
To: loopantennas@yahoogroups.com
Sent: Saturday, January 29, 2011 3:17 PM
Subject: Re: [loopantennas] Variation !!!!

Ingenious idea for a frame antenna using one of those document boxes.
Just add a 1-turn coupling loop and a socket to the box and it would be
good for even more RXs.

Nick B.

[Non-text portions of this message have been removed]

8215. 2 x Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-31 14:24:39 UTC
From: stephen_qrp
Topic: 8215 Message: 8215

Hello

I am about to mount 2 Wellbrook loops on one pole, a 1010 & 1530. I understand this is possible but are there considerations I should take account of, such as spacing between them.

Regards to all

8216. RE: [loopantennas] 2 x Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-01-31 16:26:29 UTC
From: Dominique Kremp
Topic: 8215 Message: 8216

Hi Stephen,

I ask myself the same question when I mounted 2 ALA1530 on the same pole, I wondered if spacing was critical or not. I tried various spacings and I found no difference.

Now they are pretty close to each other (15cm / 0.50ft) on the same rotator and both of them work splendid !

Hope it helps

Dominique

NW France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de stephen_qrp
Envoyé : lundi 31 janvier 2011 15:25
À : loopantennas@yahoogroups.com
Objet : [loopantennas] 2 x Wellbrook loops

Hello

I am about to mount 2 Wellbrook loops on one pole, a 1010 & 1530. I understand this is possible but are there considerations I should take account of, such as spacing between them.

Regards to all

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3413 - Date: 30/01/2011

[Non-text portions of this message have been removed]

8217. Re: [loopantennas] 2 x Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-01 11:09:19 UTC
From: Srh Srh
Topic: 8215 Message: 8217

Thank you Dominique.

I have now mounted both on the same rotator using materials I had at home already.
The gap is about 8 cm but initial tests show the same results as before, but time will tell. I did not use the mounts supplied
by Wellbrook as I considered these very weak and would not have given any protection in high winds.

I made a suitable mounting out of wood and if the new setup works then will probably make another
mount out of plastic and perhaps increase the spacing slightly at the same time.

Regards Stephen

From: Dominique Kremp <dominique.kremp@...>
To: loopantennas@yahoogroups.com
Sent: Mon, 31 January, 2011 16:26:29
Subject: RE: [loopantennas] 2 x Wellbrook loops

Hi Stephen,

I ask myself the same question when I mounted 2 ALA1530 on the same pole, I wondered if spacing was critical or not. I tried various spacings and I found no difference.

Now they are pretty close to each other (15cm / 0.50ft) on the same rotator and both of them work splendid !

Hope it helps

Dominique

NW France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de stephen_qrp
Envoyé : lundi 31 janvier 2011 15:25
À : loopantennas@yahoogroups.com
Objet : [loopantennas] 2 x Wellbrook loops

Hello

I am about to mount 2 Wellbrook loops on one pole, a 1010 & 1530. I understand this is possible but are there considerations I should take account of, such as spacing between them.

Regards to all

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3413 - Date: 30/01/2011

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8218. Re: [loopantennas] 2 x Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-01 13:39:45 UTC
From: Dale Parfitt
Topic: 8215 Message: 8218

What is your application for the two loops?
Tnx,
Dale W4OP

----- Original Message -----
From: Srh Srh
To: loopantennas@yahoogroups.com
Sent: Tuesday, February 01, 2011 6:09 AM
Subject: Re: [loopantennas] 2 x Wellbrook loops

Thank you Dominique.

I have now mounted both on the same rotator using materials I had at home already.
The gap is about 8 cm but initial tests show the same results as before, but time will tell. I did not use the mounts supplied
by Wellbrook as I considered these very weak and would not have given any protection in high winds.

I made a suitable mounting out of wood and if the new setup works then will probably make another
mount out of plastic and perhaps increase the spacing slightly at the same time.

Regards Stephen

_____
From: Dominique Kremp <dominique.kremp@...>
To: loopantennas@yahoogroups.com
Sent: Mon, 31 January, 2011 16:26:29
Subject: RE: [loopantennas] 2 x Wellbrook loops

Hi Stephen,

I ask myself the same question when I mounted 2 ALA1530 on the same pole, I wondered if spacing was critical or not. I tried various spacings and I found no difference.

Now they are pretty close to each other (15cm / 0.50ft) on the same rotator and both of them work splendid !

Hope it helps

Dominique

NW France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de stephen_qrp

Envoyé : lundi 31 janvier 2011 15:25
À : loopantennas@yahoogroups.com
Objet : [loopantennas] 2 x Wellbrook loops

Hello

I am about to mount 2 Wellbrook loops on one pole, a 1010 & 1530. I
understand this is possible but are there considerations I should take
account of, such as spacing between them.

Regards to all

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3413 - Date: 30/01/2011

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3414 - Release Date: 01/31/11 02:34:00

[Non-text portions of this message have been removed]

8219. RE: [loopantennas] 2 x Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-01 14:17:05 UTC
From: Dominique Kremp
Topic: 8215 Message: 8219

Each antenna is connected to a receiver. Each receiver has "his" loop !

Hard to understand ?

Dominique

Normandy, France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de Dale Parfitt
Envoyé : mardi 1 février 2011 14:40
À : loopantennas@yahoogroups.com
Objet : Re: [loopantennas] 2 x Wellbrook loops

What is your application for the two loops?
Tnx,
Dale W4OP

----- Original Message -----
From: Srh Srh
To: loopantennas@yahoogroups.com
Sent: Tuesday, February 01, 2011 6:09 AM
Subject: Re: [loopantennas] 2 x Wellbrook loops

Thank you Dominique.

I have now mounted both on the same rotator using materials I had at home already.
The gap is about 8 cm but initial tests show the same results as before, but time will tell. I did not use the mounts supplied
by Wellbrook as I considered these very weak and would not have given any protection in high winds.

I made a suitable mounting out of wood and if the new setup works then will probably make another
mount out of plastic and perhaps increase the spacing slightly at the same time.

Regards Stephen

_____
From: Dominique Kremp <dominique.kremp@...>
To: loopantennas@yahoogroups.com
Sent: Mon, 31 January, 2011 16:26:29
Subject: RE: [loopantennas] 2 x Wellbrook loops

Hi Stephen,

I ask myself the same question when I mounted 2 ALA1530 on the same pole, I wondered if spacing was critical or not. I tried various spacings and I found no difference.

Now they are pretty close to each other (15cm / 0.50ft) on the same rotator and both of them work splendid !

Hope it helps

Dominique

NW France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de stephen_qrp
Envoyé : lundi 31 janvier 2011 15:25
À : loopantennas@yahoogroups.com
Objet : [loopantennas] 2 x Wellbrook loops

Hello

I am about to mount 2 Wellbrook loops on one pole, a 1010 & 1530. I understand this is possible but are there considerations I should take account of, such as spacing between them.

Regards to all

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3413 - Date: 30/01/2011

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com

Version: 9.0.872 / Virus Database: 271.1.1/3414 - Release Date: 01/31/11 02:34:00

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3415 - Date: 31/01/2011

[Non-text portions of this message have been removed]

8220. Re: [loopantennas] 2 x Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-01 14:39:38 UTC
From: Dale Parfitt
Topic: 8215 Message: 8220

Nope- not hard to understand at all. But as they are on the same rotator, is there an advantage over a single loop and a 2X splitter.

Dale W4OP

Each antenna is connected to a receiver. Each receiver has "his" loop !

Hard to understand ?

Dominique

Normandy, France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de Dale Parfitt
Envoyé : mardi 1 février 2011 14:40
À : loopantennas@yahoogroups.com
Objet : Re: [loopantennas] 2 x Wellbrook loops

What is your application for the two loops?
Tnx,
Dale W4OP

----- Original Message -----
From: Srh Srh
To: loopantennas@yahoogroups.com
Sent: Tuesday, February 01, 2011 6:09 AM
Subject: Re: [loopantennas] 2 x Wellbrook loops

Thank you Dominique.

I have now mounted both on the same rotator using materials I had at home
already.
The gap is about 8 cm but initial tests show the same results as before, but
time will tell. I did not use the mounts supplied
by Wellbrook as I considered these very weak and would not have given any
protection in high winds.

I made a suitable mounting out of wood and if the new setup works then will
probably make another
mount out of plastic and perhaps increase the spacing slightly at the same time.

Regards Stephen

_____
From: Dominique Kremp <dominique.kremp@...>
To: loopantennas@yahoogroups.com
Sent: Mon, 31 January, 2011 16:26:29

Subject: RE: [loopantennas] 2 x Wellbrook loops

Hi Stephen,

I ask myself the same question when I mounted 2 ALA1530 on the same pole, I wondered if spacing was critical or not. I tried various spacings and I found no difference.

Now they are pretty close to each other (15cm / 0.50ft) on the same rotator and both of them work splendid !

Hope it helps

Dominique

NW France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de stephen_qrp
Envoyé : lundi 31 janvier 2011 15:25
À : loopantennas@yahoogroups.com
Objet : [loopantennas] 2 x Wellbrook loops

Hello

I am about to mount 2 Wellbrook loops on one pole, a 1010 & 1530. I understand this is possible but are there considerations I should take account of, such as spacing between them.

Regards to all

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3413 - Date: 30/01/2011

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3414 - Release Date: 01/31/11 02:34:00

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

_____

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3415 - Date: 31/01/2011

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3416 - Release Date: 02/01/11 02:34:00

[Non-text portions of this message have been removed]

8221. RE: [loopantennas] 2 x Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-01 16:56:33 UTC
From: Dominique Kremp
Topic: 8215 Message: 8221

Hi Dale,

Sorry about my "Hard to understand ?" It was just a joke ! Hope you can take it !!!

Yes, you're entirely right, a 2 ways splitter + a single loop could do the same of course and would be less expensive !

But I must say I had the opportunity to get the very last ALA1530 version some months ago. As I wanted to compare it to the "old" one and as I only had 1 rotator, I decided to mount both of them on the same rotator. So I could test them exactly under the same conditions with the same receiver (Perseus).

They feed now 2 different receivers. Very convenient indeed !

Have a look at the attached pics. Hope they can get through !

See you

Dominique

Normandy, France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de Dale Parfitt
Envoyé : mardi 1 février 2011 15:40
À : loopantennas@yahoogroups.com
Objet : Re: [loopantennas] 2 x Wellbrook loops

Nope- not hard to understand at all. But as they are on the same rotator, is there an advantage over a single loop and a 2X splitter.

Dale W4OP

Each antenna is connected to a receiver. Each receiver has "his" loop !

Hard to understand ?

Dominique

Normandy, France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de Dale Parfitt
Envoyé : mardi 1 février 2011 14:40
À : loopantennas@yahoogroups.com
Objet : Re: [loopantennas] 2 x Wellbrook loops

What is your application for the two loops?
Tnx,

Dale W4OP

----- Original Message -----
From: Srh Srh
To: loopantennas@yahoogroups.com
Sent: Tuesday, February 01, 2011 6:09 AM
Subject: Re: [loopantennas] 2 x Wellbrook loops

Thank you Dominique.

I have now mounted both on the same rotator using materials I had at home already.
The gap is about 8 cm but initial tests show the same results as before, but time will tell. I did not use the mounts supplied
by Wellbrook as I considered these very weak and would not have given any protection in high winds.

I made a suitable mounting out of wood and if the new setup works then will probably make another
mount out of plastic and perhaps increase the spacing slightly at the same time.

Regards Stephen

_____
From: Dominique Kremp <dominique.kremp@wanadoo.fr>
To: loopantennas@yahoogroups.com
Sent: Mon, 31 January, 2011 16:26:29
Subject: RE: [loopantennas] 2 x Wellbrook loops

Hi Stephen,

I ask myself the same question when I mounted 2 ALA1530 on the same pole, I wondered if spacing was critical or not. I tried various spacings and I found no difference.

Now they are pretty close to each other (15cm / 0.50ft) on the same rotator and both of them work splendid !

Hope it helps

Dominique

NW France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de stephen_qrp
Envoyé : lundi 31 janvier 2011 15:25
À : loopantennas@yahoogroups.com
Objet : [loopantennas] 2 x Wellbrook loops

Hello

I am about to mount 2 Wellbrook loops on one pole, a 1010 & 1530. I understand this is possible but are there considerations I should take

account of, such as spacing between them.

Regards to all

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3413 - Date: 30/01/2011

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3414 - Release Date: 01/31/11 02:34:00

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3415 - Date: 31/01/2011

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3416 - Release Date: 02/01/11 02:34:00

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3415 - Date: 31/01/2011

[Non-text portions of this message have been removed]

8222. RE: [loopantennas] 2 x Wellbrook loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-01 17:22:37 UTC
From: Dominique Kremp
Topic: 8215 Message: 8222

I send the pics to you off-group.

See you

Dominique

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de Dominique Kremp
Envoyé : mardi 1 février 2011 17:57
À : loopantennas@yahoogroups.com
Objet : RE: [loopantennas] 2 x Wellbrook loops

Hi Dale,

Sorry about my "Hard to understand ?" It was just a joke ! Hope you can take it !!!

Yes, you're entirely right, a 2 ways splitter + a single loop could do the same of course and would be less expensive !

But I must say I had the opportunity to get the very last ALA1530 version some months ago. As I wanted to compare it to the "old" one and as I only had 1 rotator, I decided to mount both of them on the same rotator. So I could test them exactly under the same conditions with the same receiver (Perseus).

They feed now 2 different receivers. Very convenient indeed !

Have a look at the attached pics. Hope they can get through !

See you

Dominique

Normandy, France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de Dale Parfitt
Envoyé : mardi 1 février 2011 15:40
À : loopantennas@yahoogroups.com
Objet : Re: [loopantennas] 2 x Wellbrook loops

Nope- not hard to understand at all. But as they are on the same rotator, is there an advantage over a single loop and a 2X splitter.

Dale W4OP

Each antenna is connected to a receiver. Each receiver has "his" loop !

Hard to understand ?

Dominique

Normandy, France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de Dale Parfitt
Envoyé : mardi 1 février 2011 14:40
À : loopantennas@yahoogroups.com
Objet : Re: [loopantennas] 2 x Wellbrook loops

What is your application for the two loops?
Tnx,
Dale W4OP

----- Original Message -----
From: Srh Srh
To: loopantennas@yahoogroups.com
Sent: Tuesday, February 01, 2011 6:09 AM
Subject: Re: [loopantennas] 2 x Wellbrook loops

Thank you Dominique.

I have now mounted both on the same rotator using materials I had at home already.
The gap is about 8 cm but initial tests show the same results as before, but time will tell. I did not use the mounts supplied
by Wellbrook as I considered these very weak and would not have given any protection in high winds.

I made a suitable mounting out of wood and if the new setup works then will probably make another
mount out of plastic and perhaps increase the spacing slightly at the same time.

Regards Stephen

_____
From: Dominique Kremp <dominique.kremp@...>
To: loopantennas@yahoogroups.com
Sent: Mon, 31 January, 2011 16:26:29
Subject: RE: [loopantennas] 2 x Wellbrook loops

Hi Stephen,

I ask myself the same question when I mounted 2 ALA1530 on the same pole, I wondered if spacing was critical or not. I tried various spacings and I found no difference.

Now they are pretty close to each other (15cm / 0.50ft) on the same rotator and both of them work splendid !

Hope it helps

Dominique

NW France

De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de stephen_qrp
Envoyé : lundi 31 janvier 2011 15:25
À : loopantennas@yahoogroups.com
Objet : [loopantennas] 2 x Wellbrook loops

Hello

I am about to mount 2 Wellbrook loops on one pole, a 1010 & 1530. I understand this is possible but are there considerations I should take account of, such as spacing between them.

Regards to all

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3413 - Date: 30/01/2011

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3414 - Release Date: 01/31/11 02:34:00

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3415 - Date: 31/01/2011

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3416 - Release Date: 02/01/11 02:34:00

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3415 - Date: 31/01/2011

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.

http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

Aucun virus trouvé dans ce message.
Analyse effectuée par AVG - www.avg.fr
Version: 10.0.1204 / Base de données virale: 1435/3416 - Date: 01/02/2011

[Non-text portions of this message have been removed]

8223. Loop feed question: should shorten both lines of the transmission line?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-02 22:09:11 UTC
From: alejovarona
Topic: 8223 Message: 8223

Hi all,
Yet another apartment owner looking for a compact antenna.
I've done some reading and I've gone through most of the files in the "Files" section of the group and still one question bothers me. It is concerned with feeding the loop:
I can imagine a dipole folded into a big circumference cut by half, connecting a tuning capacitor on one of the cuts and feeding the circumference on the other cut as if it were a normal dipole...

But in most of the pictures I see that is not the case. You seem to use an "inductive feed loop" acting kind of as a transformer. In essence you are connecting both the core and the braid of a coax line with a coil between them. Which is OK with me (a million loop antenna builders cannot go wrong). But then I cannot stop wondering about the consequences to my rig.

You see I've only built dipoles and yagis and so the excited element as always some dielectric separating both end points of the transmission line. So the question is: will I damage my rig if I transmit with some tens of watts to the inductive feeding loop?

Thanks in advance

8224. Re: Loop feed question: should shorten both lines of the transmission line?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-03 17:39:41 UTC
From: pappy_hiram
Topic: 8223 Message: 8224

Many people look at that and say, "Hey, that's a short circuit!"
It's a short circuit at DC, but not at RF. With a few tens of watts, you need a big honking variable capacitor capable of several kilovolts else it will flash over. A large transmitter type variable or a vacuum variable is necessary for this part. High RF voltages will be present even at a few watts of RF power.

Here's what you do, tune up the rig into a dummy load, switch over to the antenna, tune the variable on the antenna for a dip in final current, indicating resonance. Do this at the lowest power your rig will operate at. You need some sort of SWR indicator or wattmeter to do this. You also need a "chicken stick," some sort of insulated shaft to turn the variable on the loop, because it is a high voltage point on the antenna. After you know you are tuned properly, you can increase power.

The "inductive feed loop" is typically 1/5 the size of the main loop.

Let us know what you build and how it works out.

Pappy Hiram

--- In loopantennas@yahoogroups.com, "alejovarona" <alejovarona@...> wrote:
>
> Hi all,
> Yet another apartment owner looking for a compact antenna.
> I've done some reading and I've gone through most of the files in the "Files" section of the group and still one question bothers me. It is concerned with feeding the loop:
> I can imagine a dipole folded into a big circumference cut by half, connecting a tuning capacitor on one of the cuts and feeding the circumference on the other cut as if it were a normal dipole...
>
> But in most of the pictures I see that is not the case. You seem to use an "inductive feed loop" acting kind of as a transformer. In essence you are connecting both the core and the braid of a coax line with a coil between them. Which is OK with me (a million loop antenna builders cannot go wrong). But then I cannot stop wondering about the consequences to my rig.
>
> You see I've only built dipoles and yagis and so the excited element as always some dielectric separating both end points of the transmission line. So the question is: will I damage my rig if I transmit with some tens of watts to the inductive feeding loop?
>
> Thanks in advance
>

8225. Re: [loopantennas] Re: Twin Lead J-Pole at 10 meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-03 18:12:20 UTC
From: Timothy-Allen Albertson
Topic: 8185 Message: 8225

tnx sorry abt the delay in replying 73 de kg6irh/0

On Sun, Jan 23, 2011 at 4:58 PM, pappy_hiram <daveleb55@...> wrote:

>
>
> Here's a calculator for determining the dimensions:
>
> http://www.hamuniverse.com/jpole.html
>
>

[Non-text portions of this message have been removed]

8226. Aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-04 20:09:14 UTC
From: John McKee
Topic: 8226 Message: 8226

Anyone have experience building an aperiodic receive loop? I am trying to understand how to choose the value of the loading resistor.
Thanks,
John McKee

[Non-text portions of this message have been removed]

8227. Re: [loopantennas] Aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-04 23:41:49 UTC
From: Steve Ellington
Topic: 8226 Message: 8227

John:
I don't think you want any resistors in your loop. Where did you see such a plan?

Steve
N4LQ
----- Original Message -----
From: John McKee
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 3:09 PM
Subject: [loopantennas] Aperiodic loop antenna

Anyone have experience building an aperiodic receive loop? I am trying to understand how to choose the value of the loading resistor.
Thanks,
John McKee

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8228. Re: [loopantennas] Aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-04 23:46:41 UTC
From: Dale Parfitt
Topic: 8226 Message: 8228

Some of the very early Flag designs (preceded amateur use) appeared as a round loop with a resistor in the side opposite the feed. I think I have the reference here. This evolved into the terminated Flag and Pennant "loops" we are all familiar with today. Of course, they behave as phased verticals, not traditional loops. This may or may not be what the original poster is referring to.

Dale W4OP

----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 6:41 PM
Subject: Re: [loopantennas] Aperiodic loop antenna

John:
I don't think you want any resistors in your loop. Where did you see such a plan?

Steve
N4LQ
----- Original Message -----
From: John McKee
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 3:09 PM
Subject: [loopantennas] Aperiodic loop antenna

Anyone have experience building an aperiodic receive loop? I am trying to understand how to choose the value of the loading resistor.
Thanks,
John McKee

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3422 - Release Date: 02/04/11 02:34:00

[Non-text portions of this message have been removed]

8229. Re: [loopantennas] Aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-04 23:58:27 UTC
From: Steve Ellington
Topic: 8226 Message: 8229

Could be Dale. Aperiodic would suggest a non-resonant loop and a resistor would certainly help eliminate resonance!
Or maybe it was a trick question.

Steve
N4LQ
----- Original Message -----
From: Dale Parfitt
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 6:46 PM
Subject: Re: [loopantennas] Aperiodic loop antenna

Some of the very early Flag designs (preceded amateur use) appeared as a round loop with a resistor in the side opposite the feed. I think I have the reference here. This evolved into the terminated Flag and Pennant "loops" we are all familiar with today. Of course, they behave as phased verticals, not traditional loops. This may or may not be what the original poster is referring to.

Dale W4OP

----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 6:41 PM
Subject: Re: [loopantennas] Aperiodic loop antenna

John:
I don't think you want any resistors in your loop. Where did you see such a plan?

Steve
N4LQ
----- Original Message -----
From: John McKee
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 3:09 PM
Subject: [loopantennas] Aperiodic loop antenna

Anyone have experience building an aperiodic receive loop? I am trying to understand how to choose the value of the loading resistor.
Thanks,
John McKee

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3422 - Release Date: 02/04/11 02:34:00

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8230. Re: [loopantennas] Aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-05 01:45:43 UTC
From: Dale Parfitt
Topic: 8226 Message: 8230

Hate the trick questions- I'm no good at trick answers.

Dale W4OP
----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 6:58 PM
Subject: Re: [loopantennas] Aperiodic loop antenna

Could be Dale. Aperiodic would suggest a non-resonant loop and a resistor would certainly help eliminate resonance!
Or maybe it was a trick question.

Steve
N4LQ
----- Original Message -----
From: Dale Parfitt
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 6:46 PM
Subject: Re: [loopantennas] Aperiodic loop antenna

Some of the very early Flag designs (preceded amateur use) appeared as a round loop with a resistor in the side opposite the feed. I think I have the reference here. This evolved into the terminated Flag and Pennant "loops" we are all familiar with today. Of course, they behave as phased verticals, not traditional loops. This may or may not be what the original poster is referring to.

Dale W4OP

----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 6:41 PM
Subject: Re: [loopantennas] Aperiodic loop antenna

John:
I don't think you want any resistors in your loop. Where did you see such a plan?

Steve
N4LQ
----- Original Message -----
From: John McKee
To: loopantennas@yahoogroups.com
Sent: Friday, February 04, 2011 3:09 PM
Subject: [loopantennas] Aperiodic loop antenna

Anyone have experience building an aperiodic receive loop? I am trying to understand how to choose the value of the loading resistor.
Thanks,
John McKee

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3422 - Release Date: 02/04/11 02:34:00

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3422 - Release Date: 02/04/11 02:34:00

[Non-text portions of this message have been removed]

8231. Re: Aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-05 19:05:18 UTC
From: bingybear
Topic: 8226 Message: 8231

An Aperiodic loop antenna is not a "small" loop, but a bit larger of a loop that is unbalanced feed and has the resistor in the middle of the loop according to the ARRL Antenna Handbook. The resistor makes this look more like two closely spaced dipoles and produces more of an omni pattern. Not a trick question... but not the electrically small loops that are typically covered here.

jim

--- In loopantennas@yahoogroups.com, "Dale Parfitt" <parinc1@...> wrote:
>
> Hate the trick questions- I'm no good at trick answers.
>
> Dale W4OP
> ----- Original Message -----
> From: Steve Ellington
> To: loopantennas@yahoogroups.com
> Sent: Friday, February 04, 2011 6:58 PM
> Subject: Re: [loopantennas] Aperiodic loop antenna
>
>
>
> Could be Dale. Aperiodic would suggest a non-resonant loop and a resistor would certainly help eliminate resonance!
> Or maybe it was a trick question.
>
> Steve
> N4LQ
> ----- Original Message -----
> From: Dale Parfitt
> To: loopantennas@yahoogroups.com
> Sent: Friday, February 04, 2011 6:46 PM
> Subject: Re: [loopantennas] Aperiodic loop antenna
>
> Some of the very early Flag designs (preceded amateur use) appeared as a round loop with a resistor in the side opposite the feed. I think I have the reference here. This evolved into the terminated Flag and Pennant "loops" we are all familiar with today. Of course, they behave as phased verticals, not traditional loops. This may or may not be what the original poster is referring to.
>
> Dale W4OP
>
> ----- Original Message -----
> From: Steve Ellington
> To: loopantennas@yahoogroups.com
> Sent: Friday, February 04, 2011 6:41 PM

> Subject: Re: [loopantennas] Aperiodic loop antenna
>
> John:
> I don't think you want any resistors in your loop. Where did you see such a plan?
>
> Steve
> N4LQ
> ----- Original Message -----
> From: John McKee
> To: loopantennas@yahoogroups.com
> Sent: Friday, February 04, 2011 3:09 PM
> Subject: [loopantennas] Aperiodic loop antenna
>
> Anyone have experience building an aperiodic receive loop? I am trying to understand how to choose the value of the loading resistor.
> Thanks,
> John McKee
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
> ---
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.872 / Virus Database: 271.1.1/3422 - Release Date: 02/04/11 02:34:00
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
> ---
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.872 / Virus Database: 271.1.1/3422 - Release Date: 02/04/11 02:34:00
>
>
> [Non-text portions of this message have been removed]
>

8232. LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-05 19:00:32 UTC
From: Brian Burns
Topic: 8232 Message: 8232

Hello All,

Well, as Yogi Berra said "Nostalgia ain't what it used to be". In spite of that, I've been bitten by the ham radio bug again after an absence of over 50 years. A couple of ham buddies from high school looked me up on the web, and one offered to set me up with his spare equipment if I wanted to renew my license.

All of which has gotten me thinking about antennas for my tree filled location here in redwood country on California's north coast. There are two tall trees, with none in between, that are separated by perhaps 200 feet that would lend themselves to supporting a LARGE vertical loop. It could be a rectangle as much as 175 feet long by 50 or more feet tall, and 10 feet off the ground.

My question is what would be an optimum use of all this space? I'm interested in all the bands from 80 through 10 meters, and will have a Harvey Wells Z Match antenna tuner for matching things up. Is there any advantage in making it as large as possible? Any trade-offs?

Thanks a bunch,

Brian Burns-the once and future K6UCD

See my website: lessonsinlutherie.com

[Non-text portions of this message have been removed]

8233. Re: [loopantennas] LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-05 21:27:44 UTC
From: Steve Ellington
Topic: 8232 Message: 8233

Large vertical loops that are 1 wavelength in circumference have a low angle take off and do well for DX only on the fundamental frequency. A 270' vert. loop would do fine on 80m but on harmonics the angle would increase which is normally the opposite of what you would want.
If the same loop were horizontal, the take off angle would be high if your height is 50' but only on the fundamental. On harmonics it would become progressively lower which is desirable. Of course it takes a minimum of 3 supports. If you can make the loop larger, like 560' or so, the take off angle will then be lower on 80m also.
If you want local net coverage on 80m, the full wave horizontal loop is hard to beat. It then becomes a great DX antenna on the higher bands.
73
Steve
N4LQ
----- Original Message -----
From: Brian Burns
To: loopantennas@yahoogroups.com
Sent: Saturday, February 05, 2011 2:00 PM
Subject: [loopantennas] LARGE vertical loop

Hello All,

Well, as Yogi Berra said "Nostalgia ain't what it used to be". In spite of that, I've been bitten by the ham radio bug again after an absence of over 50 years. A couple of ham buddies from high school looked me up on the web, and one offered to set me up with his spare equipment if I wanted to renew my license.

All of which has gotten me thinking about antennas for my tree filled location here in redwood country on California's north coast. There are two tall trees, with none in between, that are separated by perhaps 200 feet that would lend themselves to supporting a LARGE vertical loop. It could be a rectangle as much as 175 feet long by 50 or more feet tall, and 10 feet off the ground.

My question is what would be an optimum use of all this space? I'm interested in all the bands from 80 through 10 meters, and will have a Harvey Wells Z Match antenna tuner for matching things up. Is there any advantage in making it as large as possible? Any trade-offs?

Thanks a bunch,

Brian Burns-the once and future K6UCD

See my website: lessonsinlutherie.com

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8234. Re: [loopantennas] LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-05 21:49:59 UTC
From: Dale Parfitt
Topic: 8232 Message: 8234

Without resorting to modeling, I would think a 1 wavelength vertically oriented loop's takeoff angle would depend entirely on where it is fed. If it's fed at the bottom (or top) , then the takeoff angle would be almost identical to a half wave dipole whose height was the center of the loop's height. This could be a real cloud warmer if the loop is hung with the bottom close to the ground. If fed on a side then the takeoff angle would be lower and more independent of height.

Dale W4OP

----- Original Message -----
From: Steve Ellington
To: loopantennas@yahoogroups.com
Sent: Saturday, February 05, 2011 4:27 PM
Subject: Re: [loopantennas] LARGE vertical loop

Large vertical loops that are 1 wavelength in circumference have a low angle take off and do well for DX only on the fundamental frequency. A 270' vert. loop would do fine on 80m but on harmonics the angle would increase which is normally the opposite of what you would want.
If the same loop were horizontal, the take off angle would be high if your height is 50' but only on the fundamental. On harmonics it would become progressively lower which is desirable. Of course it takes a minimum of 3 supports. If you can make the loop larger, like 560' or so, the take off angle will then be lower on 80m also.
If you want local net coverage on 80m, the full wave horizontal loop is hard to beat. It then becomes a great DX antenna on the higher bands.
73
Steve
N4LQ
----- Original Message -----
From: Brian Burns
To: loopantennas@yahoogroups.com
Sent: Saturday, February 05, 2011 2:00 PM
Subject: [loopantennas] LARGE vertical loop

Hello All,

Well, as Yogi Berra said "Nostalgia ain't what it used to be". In spite of that, I've been bitten by the ham radio bug again after an absence of over 50 years. A couple of ham buddies from high school looked me up on the web, and one offered to set me up with his spare equipment if I wanted to renew my license.

All of which has gotten me thinking about antennas for my tree filled location here in redwood country on California's north coast. There are two tall trees, with none in between, that are separated by perhaps 200 feet that would lend themselves to supporting a LARGE vertical loop. It could be

a rectangle as much as 175 feet long by 50 or more feet tall, and 10 feet off the ground.

My question is what would be an optimum use of all this space? I'm interested in all the bands from 80 through 10 meters, and will have a Harvey Wells Z Match antenna tuner for matching things up. Is there any advantage in making it as large as possible? Any trade-offs?

Thanks a bunch,

Brian Burns-the once and future K6UCD

See my website: lessonsinlutherie.com

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3423 - Release Date: 02/04/11 14:36:00

[Non-text portions of this message have been removed]

8235. Re: [loopantennas] LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-05 23:32:01 UTC
From: van wd8aam
Topic: 8232 Message: 8235

VERY Nice Explanation Steve!
Thanks
I have a feeling that many others were helped
by your explanation of the loop radiation, like myself.
van
wd8aam

At 21:27 2/5/2011, you wrote:
>Large vertical loops that are 1 wavelength in circumference have a
>low angle take off and do well for DX only on the fundamental
>frequency. A 270' vert. loop would do fine on 80m but on harmonics
>the angle would increase which is normally the opposite of what you would want.
>If the same loop were horizontal, the take off angle would be high
>if your height is 50' but only on the fundamental. On harmonics it
>would become progressively lower which is desirable. Of course it
>takes a minimum of 3 supports. If you can make the loop larger, like
>560' or so, the take off angle will then be lower on 80m also.
>If you want local net coverage on 80m, the full wave horizontal loop
>is hard to beat. It then becomes a great DX antenna on the higher bands.
>73
>Steve
>N4LQ
> ----- Original Message -----
> From: Brian Burns
> To: loopantennas@yahoogroups.com
> Sent: Saturday, February 05, 2011 2:00 PM
> Subject: [loopantennas] LARGE vertical loop

8236. Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-05 21:19:30 UTC
From: Fred
Topic: 8232 Message: 8236

Brian wow you are so lucky to have those two trees. Put your loop up feed it anywhere with ladder or window line, run it to the sofit on your house, then tie it to a Balun Designs or DX Engineering 4 to 1 balun, then run the shortest piece of coax from the balun to your tuner. It will work like a hose and probably work on 160 too.
73's
Fred

--- In loopantennas@yahoogroups.com, "Brian Burns" <burnsguitar@...> wrote:
>
> Hello All,
>
>
>
> Well, as Yogi Berra said "Nostalgia ain't what it used to be". In spite of
> that, I've been bitten by the ham radio bug again after an absence of over
> 50 years. A couple of ham buddies from high school looked me up on the web,
> and one offered to set me up with his spare equipment if I wanted to renew
> my license.
>
>
>
> All of which has gotten me thinking about antennas for my tree filled
> location here in redwood country on California's north coast. There are two
> tall trees, with none in between, that are separated by perhaps 200 feet
> that would lend themselves to supporting a LARGE vertical loop. It could be
> a rectangle as much as 175 feet long by 50 or more feet tall, and 10 feet
> off the ground.
>
>
>
> My question is what would be an optimum use of all this space? I'm
> interested in all the bands from 80 through 10 meters, and will have a
> Harvey Wells Z Match antenna tuner for matching things up. Is there any
> advantage in making it as large as possible? Any trade-offs?
>
>
>
> Thanks a bunch,
>
>
>
> Brian Burns-the once and future K6UCD
>
>
>

> See my website: lessonsinlutherie.com
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8237. RE: [loopantennas] Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 02:14:18 UTC
From: Brian Burns
Topic: 8232 Message: 8237

Hello Fred,

Thanks for the encouragement, but I subscribed to the "skywave" group too
and got this caution:

For multiband use you can just use a horizontal loop or a horizontal dipole
A vertical loop is only for one or 2 bands ... so think of building a dipole
or a horizontal loop with the 2 trees and a third support
Okay you would need a third pole tree mast .. whatever
But a vertical will not work multiband
Dg9bfc
Sigi

My property is long and skinny, so a horizontal loop is not practical. Any
ideas?

Cheers,

Brian

wow you are so lucky to have those two trees. Put your loop up feed it
anywhere with ladder or window line, run it to the sofit on your house, then
tie it to a Balun Designs or DX Engineering 4 to 1 balun, then run the
shortest piece of coax from the balun to your tuner. It will work like a
hose and probably work on 160 too.
73's
Fred

--- In loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
, "Brian Burns" <burnsguitar@...> wrote:
>
> Hello All,
>
>
>
> Well, as Yogi Berra said "Nostalgia ain't what it used to be". In spite of
> that, I've been bitten by the ham radio bug again after an absence of over
> 50 years. A couple of ham buddies from high school looked me up on the
web,
> and one offered to set me up with his spare equipment if I wanted to renew
> my license.
>
>
>
> All of which has gotten me thinking about antennas for my tree filled
> location here in redwood country on California's north coast. There are
two

> tall trees, with none in between, that are separated by perhaps 200 feet
> that would lend themselves to supporting a LARGE vertical loop. It could
be
> a rectangle as much as 175 feet long by 50 or more feet tall, and 10 feet
> off the ground.
>
>
>
> My question is what would be an optimum use of all this space? I'm
> interested in all the bands from 80 through 10 meters, and will have a
> Harvey Wells Z Match antenna tuner for matching things up. Is there any
> advantage in making it as large as possible? Any trade-offs?
>
>
>
> Thanks a bunch,
>
>
>
> Brian Burns-the once and future K6UCD
>
>
>
> See my website: lessonsinlutherie.com
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

8238. Re: [loopantennas] Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 02:18:41 UTC
From: John Popelish
Topic: 8232 Message: 8238

On 02/05/2011 09:14 PM, Brian Burns wrote:
(snip)
> My property is long and skinny, so a horizontal loop is not practical. Any
> ideas?

Is your property long and skinny in the vertical or
horizontal direction? ;-)

--
Regards,

John Popelish

8239. Re: [loopantennas] LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 15:56:30 UTC
From: M HOLDEN
Topic: 8232 Message: 8239

Over the years, my horizontal loops, at never more than 20 feet in the air, have served me well. To make them work as multi-band antennas, feed them straight in with 300 or 450 ohm line, NEVER use coax cable as it only works at ONE impedance! A good tuner will get you on all the bands, and avoid using a balun unless you intend to cook eggs while you transmit. Treat it as a doublet and tune in the same way. My present loop is 188Ft 6ins circumference and fed with 300 ohm slotted ribbon. It works well on 80 through 10 even though it was only originally meant for 60M. A loop like this is electrically quiet as local spits and sparks are noise cancelled.
Given the space, a 283 footer or even a 566 footer will put any station on the map big time.
Regards to all, Mike G4HOL

From: van wd8aam <vlincoln@...>
To: loopantennas@yahoogroups.com
Cc:
Sent: Saturday, 5 February 2011, 23:32:01
Subject: Re: [loopantennas] LARGE vertical loop

VERY Nice Explanation Steve!
Thanks
I have a feeling that many others were helped
by your explanation of the loop radiation, like myself.
van
wd8aam

At 21:27 2/5/2011, you wrote:
>Large vertical loops that are 1 wavelength in circumference have a
>low angle take off and do well for DX only on the fundamental
>frequency. A 270' vert. loop would do fine on 80m but on harmonics
>the angle would increase which is normally the opposite of what you would want.
>If the same loop were horizontal, the take off angle would be high
>if your height is 50' but only on the fundamental. On harmonics it
>would become progressively lower which is desirable. Of course it
>takes a minimum of 3 supports. If you can make the loop larger, like
>560' or so, the take off angle will then be lower on 80m also.
>If you want local net coverage on 80m, the full wave horizontal loop
>is hard to beat. It then becomes a great DX antenna on the higher bands.
>73
>Steve
>N4LQ
> ----- Original Message -----
> From: Brian Burns
> To: loopantennas@yahoogroups.com
> Sent: Saturday, February 05, 2011 2:00 PM
> Subject: [loopantennas] LARGE vertical loop

[Non-text portions of this message have been removed]

8240. Re: [loopantennas] LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 16:44:03 UTC
From: Steve Ellington
Topic: 8232 Message: 8240

I've used horizontal loops for years. They are cut to resonance on the fundamental frequency. SWR is not 1:1 but seldom exceeds 4:1 on any band. Coax is not a problem under these conditions. A 188' loop would be a problem on no harmonically related bands and certainly ladder line should be used.
I don't understand the balun comment. I've used coax and a 4:1 balun at the antenna. On harmonics, the balun provided a better match but on the fundamental fq. the balun had more negative effects. A 1:1 balun at the antenna when using coax would help reduce radiation from the coax's shield.

The original horizontal article by Dave W0MHS in QST 1985 is available to ARRL members on their web site. Dave recommended coax and no balun. I've tried virtually every combination of feeder and they all work. Some lengths give trouble but you can play with the length a bit and overcome tuning problems. Normally, rigs with internal tuners have no problem matching a coax fed loop on any band. 60m might be the exception.

Steve
N4LQ
----- Original Message -----
From: M HOLDEN
To: loopantennas@yahoogroups.com
Sent: Sunday, February 06, 2011 10:56 AM
Subject: Re: [loopantennas] LARGE vertical loop

Over the years, my horizontal loops, at never more than 20 feet in the air, have served me well. To make them work as multi-band antennas, feed them straight in with 300 or 450 ohm line, NEVER use coax cable as it only works at ONE impedance! A good tuner will get you on all the bands, and avoid using a balun unless you intend to cook eggs while you transmit. Treat it as a doublet and tune in the same way. My present loop is 188Ft 6ins circumference and fed with 300 ohm slotted ribbon. It works well on 80 through 10 even though it was only originally meant for 60M. A loop like this is electrically quiet as local spits and sparks are noise cancelled.
Given the space, a 283 footer or even a 566 footer will put any station on the map big time.
Regards to all, Mike G4HOL

From: van wd8aam <vlincoln@...>
To: loopantennas@yahoogroups.com
Cc:
Sent: Saturday, 5 February 2011, 23:32:01
Subject: Re: [loopantennas] LARGE vertical loop

VERY Nice Explanation Steve!
Thanks
I have a feeling that many others were helped
by your explanation of the loop radiation, like myself.
van

wd8aam

At 21:27 2/5/2011, you wrote:
>Large vertical loops that are 1 wavelength in circumference have a
>low angle take off and do well for DX only on the fundamental
>frequency. A 270' vert. loop would do fine on 80m but on harmonics
>the angle would increase which is normally the opposite of what you would want.
>If the same loop were horizontal, the take off angle would be high
>if your height is 50' but only on the fundamental. On harmonics it
>would become progressively lower which is desirable. Of course it
>takes a minimum of 3 supports. If you can make the loop larger, like
>560' or so, the take off angle will then be lower on 80m also.
>If you want local net coverage on 80m, the full wave horizontal loop
>is hard to beat. It then becomes a great DX antenna on the higher bands.
>73
>Steve
>N4LQ
> ----- Original Message -----
> From: Brian Burns
> To: loopantennas@yahoogroups.com
> Sent: Saturday, February 05, 2011 2:00 PM
> Subject: [loopantennas] LARGE vertical loop

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8241. Re: [loopantennas] Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 16:43:50 UTC
From: Andy
Topic: 8232 Message: 8241

> For multiband use you can just use a horizontal loop or a horizontal dipole
> A vertical loop is only for one or 2 bands ...

I think this caution is the same as what Steve said. It will work on harmonics, it's just that more of your signal goes skyward where it doesn't help.

But if I understand correctly, on harmonics the loop's pattern tends to flatten out somewhat into the plane of the loop. So you might get good radiation off both ends of the loop (as well as up), which might still be beneficial even if you lose that strong broadside component on the best band where it's a full wavelength long.

I don't think Sigi means the vertical loop can't be matched on more than 1 or 2 bands. It's just that the pattern is not as ideal as you'd want.

On the other hand, he does say it "will not work multiband", which is a surprisingly strong statement, and I'm not sure I've seen that before regarding loops.

Andy

8242. Re: [loopantennas] Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 17:44:41 UTC
From: M HOLDEN
Topic: 8232 Message: 8242

I think Sigi must be using coaxial cable then.....
The theory and the practice don't always agree, so for anyone serious about experimenting, this hobby is much to do with "suck it and see" technology. Mike G4HOL

From: Andy <ai.egrps@...>
To: loopantennas@yahoogroups.com
Cc:
Sent: Sunday, 6 February 2011, 16:43:50
Subject: Re: [loopantennas] Re: LARGE vertical loop

> For multiband use you can just use a horizontal loop or a horizontal dipole
> A vertical loop is only for one or 2 bands ...

I think this caution is the same as what Steve said. It will work on harmonics, it's just that more of your signal goes skyward where it doesn't help.

But if I understand correctly, on harmonics the loop's pattern tends to flatten out somewhat into the plane of the loop. So you might get good radiation off both ends of the loop (as well as up), which might still be beneficial even if you lose that strong broadside component on the best band where it's a full wavelength long.

I don't think Sigi means the vertical loop can't be matched on more than 1 or 2 bands. It's just that the pattern is not as ideal as you'd want.

On the other hand, he does say it "will not work multiband", which is a surprisingly strong statement, and I'm not sure I've seen that before regarding loops.

Andy

[Non-text portions of this message have been removed]

8243. Re: [loopantennas] LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 18:08:07 UTC
From: M HOLDEN
Topic: 8232 Message: 8243

Hi Steve.At resonance the feed impedance is around 110 Ohms If you feed a loop with a quarter wave of 75 Ohm coax, you will have a matching section at the fundamental freq of suitable match to a 50 Ohm rig. My 60 metre loop loves not just its fundamental freq, but with a simple manual tuner radiates brilliantly on 80 and 40 too. If it was higher above ground it would be just great on 20,15 and 10 but those bands are not used much by me. (Yes it works on them quite well, but real Dx would be better served with a much higher antenna.) Non-resonant loops are still viable, they will radiate effectively, but I believe that the radiation patterns are a more precise shape if resonance can be fitted around a fundamental figure like 3.55 or 7.1 MHz.
The balun is really a single impedance device. It was designed to feed a folded dipole with low impedance coaxial etc. A multi band loop will present it with some very odd impedances which will produce inefficiency and loss. It will still work. An antenna that is poor, when "tuned" with an auto or manual tuner is still poor, and the tuner just spares the feelings of a 50 Ohm P.A.
Best wishes, Mike G4HOL

From: Steve Ellington <n4lq@carolina.rr.com>
To: loopantennas@yahoogroups.com
Cc:
Sent: Sunday, 6 February 2011, 16:44:03
Subject: Re: [loopantennas] LARGE vertical loop

I've used horizontal loops for years. They are cut to resonance on the fundamental frequency. SWR is not 1:1 but seldom exceeds 4:1 on any band. Coax is not a problem under these conditions. A 188' loop would be a problem on no harmonically related bands and certainly ladder line should be used.
I don't understand the balun comment. I've used coax and a 4:1 balun at the antenna. On harmonics, the balun provided a better match but on the fundamental fq. the balun had more negative effects. A 1:1 balun at the antenna when using coax would help reduce radiation from the coax's shield.

The original horizontal article by Dave W0MHS in QST 1985 is available to ARRL members on their web site. Dave recommended coax and no balun. I've tried virtually every combination of feeder and they all work. Some lengths give trouble but you can play with the length a bit and overcome tuning problems. Normally, rigs with internal tuners have no problem matching a coax fed loop on any band. 60m might be the exception.

Steve
N4LQ
----- Original Message -----
From: M HOLDEN
To: loopantennas@yahoogroups.com
Sent: Sunday, February 06, 2011 10:56 AM
Subject: Re: [loopantennas] LARGE vertical loop

Over the years, my horizontal loops, at never more than 20 feet in the air, have served me well. To make them work as multi-band antennas, feed them straight in with 300 or 450 ohm line, NEVER use coax cable as it only works at ONE impedance! A good tuner will get you on all the bands, and avoid using a balun unless you intend to cook eggs while you transmit. Treat it as a doublet and tune in the same way. My present loop is 188Ft 6ins circumference and fed with 300 ohm slotted ribbon. It works well on 80 through 10 even though it was only originally meant for 60M. A loop like this is electrically quiet as local spits and sparks are noise cancelled.
Given the space, a 283 footer or even a 566 footer will put any station on the map big time.
Regards to all, Mike G4HOL

From: van wd8aam <vlincoln@...>
To: loopantennas@yahoogroups.com
Cc:
Sent: Saturday, 5 February 2011, 23:32:01
Subject: Re: [loopantennas] LARGE vertical loop

VERY Nice Explanation Steve!
Thanks
I have a feeling that many others were helped
by your explanation of the loop radiation, like myself.
van
wd8aam

At 21:27 2/5/2011, you wrote:
>Large vertical loops that are 1 wavelength in circumference have a
>low angle take off and do well for DX only on the fundamental
>frequency. A 270' vert. loop would do fine on 80m but on harmonics
>the angle would increase which is normally the opposite of what you would want.
>If the same loop were horizontal, the take off angle would be high
>if your height is 50' but only on the fundamental. On harmonics it
>would become progressively lower which is desirable. Of course it
>takes a minimum of 3 supports. If you can make the loop larger, like
>560' or so, the take off angle will then be lower on 80m also.
>If you want local net coverage on 80m, the full wave horizontal loop
>is hard to beat. It then becomes a great DX antenna on the higher bands.
>73
>Steve
>N4LQ
> ----- Original Message -----
> From: Brian Burns
> To: loopantennas@yahoogroups.com
> Sent: Saturday, February 05, 2011 2:00 PM
> Subject: [loopantennas] LARGE vertical loop

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8244. Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 18:08:08 UTC
From: Fred
Topic: 8232 Message: 8244

Brian remember that most tuners have a built in 4:1 balun for 300 or 450 ohm feed line. Now if you have a balanced tuner like say the old Johnson Match Box you can get away from balun use altogether.
You might want to goggle vertical loop antennas and see what comes up, I was somewhat surprised at the amount of information that was there.

73's
Fred

--- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@...> wrote:
>
> Over the years, my horizontal loops, at never more than 20 feet in the air, have served me well. To make them work as multi-band antennas, feed them straight in with 300 or 450 ohm line, NEVER use coax cable as it only works at ONE impedance! A good tuner will get you on all the bands, and avoid using a balun unless you intend to cook eggs while you transmit. Treat it as a doublet and tune in the same way. My present loop is 188Ft 6ins circumference and fed with 300 ohm slotted ribbon. It works well on 80 through 10 even though it was only originally meant for 60M. A loop like this is electrically quiet as local spits and sparks are noise cancelled.
> Given the space, a 283 footer or even a 566 footer will put any station on the map big time.
> Regards to all, Mike G4HOL
>
>
>

8245. RE: [loopantennas] Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 18:47:56 UTC
From: Brian Burns
Topic: 8232 Message: 8245

Hello All,

Thanks for all the suggestions! Here is a bit of clarification.

My property is actually a 1.6 acre right triangle with a 600 foot hypotenuse. My guitar shop and ham shack are squeezed up into the narrow end where it gets down to about 40 feet wide. There aren't any conveniently located trees, or much space, for a horizontal loop, so that would have to be quite low to the ground.

The two 100 foot trees that I mentioned earlier are right on the property line that forms the height of the triangle, and are separated by perhaps 175 feet.. The whole neighborhood is full of other 100 foot plus pines and redwoods. My thought is that a rectangular (inverted triangle?) vertical loop fed at the center of the bottom would put a long leg way up at the top of the tree line, and limit the length of the feed line.

Cheers,

Brian

> My property is long and skinny, so a horizontal loop is not practical. Any
> ideas?

Is your property long and skinny in the vertical or
horizontal direction? ;-)

--
Regards,

John Popelish

.

<http://geo.yahoo.com/serv?s=97359714/grpId=12851910/grpspId=1708396379/msgId=8238/stime=1296958737/nc1=1/nc2=2/nc3=3>

[Non-text portions of this message have been removed]

8246. Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-06 19:09:18 UTC
From: Fred
Topic: 8232 Message: 8246

Here ya go Brian found this for you:

http://web.archive.org/web/20070203063640/www.bloomington.in.us/~wh2t/Super+Loop+Antenna.htm

73's
Fred

--- In loopantennas@yahoogroups.com, "Fred" <n5jzb@...> wrote:
>
>
> Brian remember that most tuners have a built in 4:1 balun for 300 or 450 ohm feed line. Now if you have a balanced tuner like say the old Johnson Match Box you can get away from balun use altogether.
> You might want to goggle vertical loop antennas and see what comes up, I was somewhat surprised at the amount of information that was there.
>
> 73's
> Fred
>
>
>
> --- In loopantennas@yahoogroups.com, M HOLDEN <mholden909@> wrote:
> >
> > Over the years, my horizontal loops, at never more than 20 feet in the air, have served me well. To make them work as multi-band antennas, feed them straight in with 300 or 450 ohm line, NEVER use coax cable as it only works at ONE impedance! A good tuner will get you on all the bands, and avoid using a balun unless you intend to cook eggs while you transmit. Treat it as a doublet and tune in the same way. My present loop is 188Ft 6ins circumference and fed with 300 ohm slotted ribbon. It works well on 80 through 10 even though it was only originally meant for 60M. A loop like this is electrically quiet as local spits and sparks are noise cancelled.
> > Given the space, a 283 footer or even a 566 footer will put any station on the map big time.
> > Regards to all, Mike G4HOL
> >
> >
> >
>

8247. aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-07 14:22:01 UTC
From: John McKee
Topic: 8247 Message: 8247

I saw a reference in the ARRL handbook to a aperiodic loop and from what they show, it appears to be an unbalanced loop with a loading resistor of some unspecified value at the loop mid point. The only commercial application I could find is one from usantennaproducts.com. They acquired it from Ultra Electronics of Nova Scotia, Canada. Somewhere down in the description however they say the loops are balanced so at this point I'm not sure what I'm looking at. It makes an interesting looking low profile directional receive antenna that doesn't take up acres of space or require tall support structures. If you want to take a look, go to usantennaproducts.com, select the products tab at the top of the page and then select the hermesloop.pdf datasheet. They don't give a lot of details but it's interesting reading. - John M

[Non-text portions of this message have been removed]

8248. Re: [loopantennas] aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-07 14:58:32 UTC
From: Dale Parfitt
Topic: 8247 Message: 8248

Hi John,
While I have not seen your link- in a previous post I mentioned that this family of antenna appears to be the forerunner of the Flag and Pennants that we use on HF today.
My current Flag is 12 X 6' and shows an excellent F/B of between 18-21dB. One must take careful precautions to ensure common mode does not squirrel up the pattern- but this is the case for any antenna whose dimensions are small compared to a wavelength.

These antennas are not any more complicated to build than loops but show a considerably better RDF- 7.4 vs. 4.0 approx- (receive directivity factor- see W8JI or ON4UN) than small loops. Having essentially a cardioid pattern, they also don't suffer from the 180 degree ambiguity issue that loops have.
Dale W4OP

I saw a reference in the ARRL handbook to a aperiodic loop and from what they show, it appears to be an unbalanced loop with a loading resistor of some unspecified value at the loop mid point. The only commercial application I could find is one from usantennaproducts.com. They acquired it from Ultra Electronics of Nova Scotia, Canada. Somewhere down in the description however they say the loops are balanced so at this point I'm not sure what I'm looking at. It makes an interesting looking low profile directional receive antenna that doesn't take up acres of space or require tall support structures. If you want to take a look, go to usantennaproducts.com, select the products tab at the top of the page and then select the hermesloop.pdf datasheet. They don't give a lot of details but it's interesting reading. - John M

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3427 - Release Date: 02/06/11 14:34:00

[Non-text portions of this message have been removed]

8249. Re: [loopantennas] aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-07 15:35:15 UTC
From: brian nsl
Topic: 8247 Message: 8249

John,
Thank you for providing the interesting antenna link.
I was particularly interested in the companys Model - 1942 NVIS antenna
and its small erected footprint using a single support.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: John McKee
To: loopantennas@yahoogroups.com
Sent: Monday, February 07, 2011 2:22 PM
Subject: [loopantennas] aperiodic loop antenna

[Non-text portions of this message have been removed]

8250. Re: aperiodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-07 18:02:38 UTC
From: Darren Hennig
Topic: 8247 Message: 8250

I built a few small indoor aperiodics using planar wire loops fed into a low noise, 50 ohm input in-line RF broadband amp. All that is needed to make a "loop" aperiodic is a broadband low-noise amp that accepts an input impedance of around 25-100 ohm, 50-75 is ideal. The isolating resistor in the apex or top of the loop, opposite the feed, is a non-inductive type ideally.

Tests with my units were very broadband, and fairly low noise. They definitely showed a cardioid response in behavior until getting close to the high f limit where they were more omni in response.

The arrays shown in the ARRL do not say much - these receiving loops can be multiplexed and phased to provide a steerable response.

Darren
VE6IZ

[Non-text portions of this message have been removed]

8251. RE: [loopantennas] Re: LARGE vertical loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-08 01:27:33 UTC
From: Brian Burns
Topic: 8232 Message: 8251

Hello Fred,

Thanks for the link-duly bookmarked. Here is an excellent link for general loop info in case you haven't run across it:

http://mysite.verizon.net/ka1fsb/loopants.html#shapesize

Hello Andy,

The general discussion of loop antennas at the link above makes no mention of a vertical loop's working only on one or two bands.

And here is an interesting quote from his article:

"It should be noted that horizontal loops can only transmit in the horizontal plane. And that vertical loops can be fed in such a way as to either effect horizontal polarization or vertical polarization depending on how (i.e., where) they are fed. If a vertically oriented antenna is fed at either the bottom or the top, the polarization will be horizontal; if fed on the side or bottom corner, it will be vertical. If you are going to the trouble of putting up a large vertical loop, be sure to feed it to take advantage of the low angle of radiation mentioned above!"

He is recommending feeding it at the side or corner for vertical polarization-- "to take advantage of the low angle of radiation mentioned above!"

Another aspect of the vertical loop as mentioned in an earlier post by Steve:

"Large vertical loops that are 1 wavelength in circumference have a low angle take off and do well for DX only on the fundamental frequency. A 270' vert. loop would do fine on 80m but on harmonics the angle would increase which is normally the opposite of what you would want."

So, my question is, does feeding a vertical loop at the top or bottom for horizontal polarization make for the desirable lower take off angles on the higher bands as with a horizontal loop? I'm going to all this trouble because my antenna site is ideal for a very large vertical loop, and is a lousy site for a horizontal one.

I would ask KA1FSB directly if I had an email for him. Anybody know it, or how to find it? I tried QRZ.

Cheers,

Brian

.

<http://geo.yahoo.com/serv?s=97359714/grpId=12851910/grpspId=1708396379/msgId=8246/stime=1297019361/nc1=4025321/nc2=5898817/nc3=4507179>

[Non-text portions of this message have been removed]

8252. What ferrite core material?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-08 16:34:14 UTC
From: BriggsL
Topic: 8252 Message: 8252

Greetings all-
I am quite new to loop antennas and have decided to jump in and get wet by building a ferrite cored loop similar to) what is shown here:
(http://www.sarmento.eng.br/Loop_Ferrite_Rod_Antenna.htm).
I need to ask the group what ferrite material should I use for MW DXing and what materials are used for LW & HF antennas. A source recommendation for the ferrite rods would be helpful too.
Tnx in advance,
Briggs Longbothum, ab2nj
Gloucester, Ma. FN42pp

8253. RE: [loopantennas] What ferrite core material?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-08 16:59:11 UTC
From: Pollock,Raphael E
Topic: 8252 Message: 8253

Congrats Briggs!

There are a few of us ferrite loopies out and about. Many of us have used the monster ferrites from Stormwise.com. Amidon is another possible source. If you would like to see some additional detail you can go to the ultralights group file area, look in the antennas file where I have downloaded a series of "how I made it" pictures. I have also downloaded a video on Youtube (search using the term "ferrite rod antenna") to see one in action. The Brazilian friends have also made a number of videos which can be seen on Youtube. Best of luck and please feel free to ask questions...

Raph Pollock

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of BriggsL
Sent: Tuesday, February 08, 2011 10:34 AM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] What ferrite core material?

Greetings all-
I am quite new to loop antennas and have decided to jump in and get wet by building a ferrite cored loop similar to) what is shown here:
(http://www.sarmento.eng.br/Loop_Ferrite_Rod_Antenna.htm).
I need to ask the group what ferrite material should I use for MW DXing and what materials are used for LW & HF antennas. A source recommendation for the ferrite rods would be helpful too.
Tnx in advance,
Briggs Longbothum, ab2nj
Gloucester, Ma. FN42pp

[Non-text portions of this message have been removed]

8254. Re: [loopantennas] What ferrite core material?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-08 17:08:11 UTC
From: John Popelish
Topic: 8252 Message: 8254

On 02/08/2011 11:34 AM, BriggsL wrote:
> Greetings all- I am quite new to loop antennas and have
> decided to jump in and get wet by building a ferrite
> cored loop similar to) what is shown here:
> (http://www.sarmento.eng.br/Loop_Ferrite_Rod_Antenna.htm).
>
I need to ask the group what ferrite material should I
> use for MW DXing and what materials are used for LW& HF
> antennas. A source recommendation for the ferrite rods
> would be helpful too.

Rather than try to give you a course, I suggest you start at
the group formed to discuss this very topic:

http://groups.yahoo.com/group/ferriterodantennaexperimenters/

--
Regards,

John Popelish

8255. Re: [loopantennas] What ferrite core material?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-08 18:26:10 UTC
From: Chris Trask
Topic: 8252 Message: 8255

>
> I am quite new to loop antennas and have decided to jump in and get wet
> by building a ferrite cored loop similar to) what is shown here:
>
> (http://www.sarmento.eng.br/Loop_Ferrite_Rod_Antenna.htm).
>
> I need to ask the group what ferrite material should I use for MW DXing
> and what materials are used for LW & HF antennas. A source recommendation
> for the ferrite rods would be helpful too.
>

The ferrite rods are quite expensive and there's not much choice in the materials. You might want to check out the Yahoo! ferrite rod antenna group:

http://groups.yahoo.com/group/ferriterodantennaexperimenters/

and look through the files section. John Popelish did some nice work using ferrite toroids to make a rod antenna that is far less expensive, plus you have a wide choice of materials.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8256. A couple of broadband loop and mag loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-08 21:44:32 UTC
From: rdavies6
Topic: 8256 Message: 8256

I have a couple of questions for the group. The fIrst question is around the construction of a loop for my Wellbrook ALA100M. I've been dabbling with a couple of different types of wire for the loops. I found out that thin stranded wire doesn't seem to work as well as thicker, enameled cooper wire (tired up to 16 ga so far). Is there any benefit to extrapolating the thickness of the wire and building say a 15mm diameter copper pipe loop (maybe as small as 1m -1.3 m diameter as I want the loop for indoors receiving). Any thoughts?

The second question is around a design aspect of magnetic loop antenna I plan to build over the next couple of weekends. Is there any preference or characteristics to the coupling loop that is worth bearing in mind? Should it be insulated coax, or enameled cooper, should it be think, thin...or is it predominately the shape of the loop that critical? Any guidance?

Many Thanks

Robin
G7VKQ

8257. Re: [loopantennas] A couple of broadband loop and mag loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-09 11:24:26 UTC
From: Andy Ikin
Topic: 8256 Message: 8257

Robin G7VKQ Wrot on the 8th Feb 2011

"I have a couple of questions for the group. The fIrst question is around the construction of a loop for my Wellbrook ALA100M. I've been dabbling with a couple of different types of wire for the loops. I found out that thin stranded wire doesn't seem to work as well as thicker, enameled cooper wire (tired up to 16 ga so far). Is there any benefit to extrapolating the thickness of the wire and building say a 15mm diameter copper pipe loop (maybe as small as 1m -1.3 m diameter as I want the loop for indoors receiving). Any thoughts?

The second question is around a design aspect of magnetic loop antenna I plan to build over the next couple of weekends. Is there any preference or characteristics to the coupling loop that is worth bearing in mind? Should it be insulated coax, or enameled cooper, should it be think, thin...or is it predominately the shape of the loop that critical? Any guidance?"

Robin, the optimum loop inductance for the ALA100M is approx. 5uH-6uH. This can be achieved using a square loop with a circumference of say 5-6m of RG58c (screen only). Using thin wire with the same loop size will make the loop inductance too high, with the result that the increased reactance will act as a series impedance, limiting the loops current to the amplifier. You can still make the loop a bit larger and keep the inductance low by using RG58c screen in parallel, spaced about 2 inches apart. You also have the option of using 22mm copper pipe for a 1.5m diam loop.

Kind regards

Andrew Ikin.

[Non-text portions of this message have been removed]

8258. Re: A couple of broadband loop and mag loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-09 12:48:09 UTC
From: rdavies6
Topic: 8256 Message: 8258

Andy

That's wonderful information - many thanks for the guidance. I've got some RG58 sitting around I could use to try out a 5 or 6m loop. I've also got some 22mm copper pipe as well; I was earmarking that for some mag loop tests as my new variable air cap is now ready to pick up from Jackson Bros...but I could rethink my plan around the sequence of my experiments.

Many thanks
Robin
G7VKQ
--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
>
> Robin G7VKQ Wrot on the 8th Feb 2011
>
>
> "I have a couple of questions for the group. The fIrst question is around the construction of a loop for my Wellbrook ALA100M. I've been dabbling with a couple of different types of wire for the loops. I found out that thin stranded wire doesn't seem to work as well as thicker, enameled cooper wire (tired up to 16 ga so far). Is there any benefit to extrapolating the thickness of the wire and building say a 15mm diameter copper pipe loop (maybe as small as 1m -1.3 m diameter as I want the loop for indoors receiving). Any thoughts?
>
> The second question is around a design aspect of magnetic loop antenna I plan to build over the next couple of weekends. Is there any preference or characteristics to the coupling loop that is worth bearing in mind? Should it be insulated coax, or enameled cooper, should it be think, thin...or is it predominately the shape of the loop that critical? Any guidance?"
>
>
> Robin, the optimum loop inductance for the ALA100M is approx. 5uH-6uH. This can be achieved using a square loop with a circumference of say 5-6m of RG58c (screen only). Using thin wire with the same loop size will make the loop inductance too high, with the result that the increased reactance will act as a series impedance, limiting the loops current to the amplifier. You can still make the loop a bit larger and keep the inductance low by using RG58c screen in parallel, spaced about 2 inches apart. You also have the option of using 22mm copper pipe for a 1.5m diam loop.
>
>
>
> Kind regards
>
>

>
> Andrew Ikin.
>
>
>
>
> [Non-text portions of this message have been removed]
>

8259. What ferrite core material? (more)

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-09 17:09:29 UTC
From: BriggsL
Topic: 8259 Message: 8259

Thanks everybody for your considered replies. These are just the "pointers" and suggestions I was hoping for. Great & helpful group!

Have a great day all,
Briggs Longbothum, ab2nj

8260. Re: [loopantennas] A couple of broadband loop and mag loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-09 13:49:10 UTC
From: OH1KIO
Topic: 8256 Message: 8260

Hello Andrew,

> ... the optimum loop inductance for the ALA100M is approx. 5uH-6uH.
> This can be achieved using a square loop with a circumference of say 5-6m of RG58c (screen only).
> Using thin wire with the same loop size will make the loop inductance too high,...
> ...
> You also have the option of using 22mm copper pipe for a 1.5m diam loop.

Very good information indeed!

Could you tell, what would be the equivalent values for the ALA100L, please? I have one and just yesterday heavy snow broke down it's 'pentagon loop' :-(So now I need to make a new and better design. I'm planning to use either insulated wire (#18 AWG) or 12mm diameter copper pipe.

So which circumference would be best for ALA100L and #18 AWG wire or 12mm copper pipe?

Thanks and 73!

Markus OH1KIO

8261. Re: [loopantennas] A couple of broadband loop and mag loop Questions

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-10 19:19:32 UTC
From: Andy Ikin
Topic: 8256 Message: 8261

Markus OH1KIO wrote on the 10th Feb.

"Could you tell, what would be the equivalent values for the ALA100L,
please? I have one and just yesterday heavy snow broke down it's
'pentagon loop' :-(So now I need to make a new and better design.
I'm planning to use either insulated wire (#18 AWG) or 12mm diameter
copper pipe.

So which circumference would be best for ALA100L and #18 AWG wire or
12mm copper pipe?"

Dear Markus,

The ALA100 has a higher input z and lower gain compared to the ALA100M, hence it requires a larger loop. A 20m wire circumference using 18 gauge is just fine. I doubt that you would see much improvement using 12mm copper pipe. If you are interested in LF you can make the loop larger.

Kind regards

Andrew Ikin.

[Non-text portions of this message have been removed]

8262. Re: Terminating Resistor Assy - sources / designs ???

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-12 14:28:13 UTC
From: DRK45365
Topic: 7874 Message: 8262

Lets try this again and hope the subject does not get hijacked like last time.

--- In loopantennas@yahoogroups.com, "Kuby" <n6jsx@...> wrote:
>
> Looking for "economical" sources/leads to buy non-inductive 2-10W terminating resistors for T2FD/Rhombic type antennas.
>
> Any designs on making a loop "terminating resistor assembly" to accommodate 125W HF input?
>

8263. de31ms + copper pipe

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-12 07:07:24 UTC
From: Juanen en
Topic: 8263 Message: 8263

Hi, I´m noob in loop antennas and would want to know if,

is it possible to replace the original loop antenna of degen de31ms by copper pipe?

Sorry for my English

Kind regards,Juanen

8264. Re: [loopantennas] Re: Terminating Resistor Assy - sources / designs ???

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-12 17:05:01 UTC
From: Andy
Topic: 7874 Message: 8264

> Looking for "economical" sources/leads to buy non-inductive
> 2-10W terminating resistors for T2FD/Rhombic type antennas.

Off-hand, one source would be ordinary carbon composition resistors in the ~ half-watt range. Take two dozen 100 ohm resistors, wired series/parallel (a dozen in series, then in parallel with another one just like it), and you get 600 ohms and it should handle up to 12 watts.

There are places that stock non-inductive resistors; I just haven't kept track of them. I think even B&W sells them (specifically for T2FD antennas), but theirs are probably not cheap.

You do need to keep in mind that 125W into one of these antennas doesn't tell you how much power the resistor needs to handle. It depends a lot on frequency. Expect that they need to dissipate more on the lower frequencies where the antenna efficiency goes way down.

Andy

8265. Re: Terminating Resistor Assy - sources / designs ???

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-12 19:58:49 UTC
From: Greg Ella
Topic: 7874 Message: 8265

I just Googled "Non inductive RF power resistor" and several promising US companies came up.

--- In loopantennas@yahoogroups.com, "DRK45365" <n6jsx@...> wrote:
>
> Lets try this again and hope the subject does not get hijacked like last time.
>
> --- In loopantennas@yahoogroups.com, "Kuby" <n6jsx@> wrote:
> >
> > Looking for "economical" sources/leads to buy non-inductive 2-10W terminating resistors for T2FD/Rhombic type antennas.
> >
> > Any designs on making a loop "terminating resistor assembly" to accommodate 125W HF input?
> >
>

8266. Re: [loopantennas] Re: Terminating Resistor Assy - sources / designs ???

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-12 21:39:18 UTC
From: John Popelish
Topic: 7874 Message: 8266

On 02/12/2011 02:58 PM, Greg Ella wrote:
>
> I just Googled "Non inductive RF power resistor" and
> several promising US companies came up.

Digikey sells the 5 watt version of these for about $3 each.
http://www.millsresistor.com/pdf/pg16prn.pdf

They also sell these high surge, ceramic bulk resistive
element resistors, but they are quite a bit pricier:
http://www.ohmite.com/catalog/pdf/a_series.pdf
--
Regards,

John Popelish

8267. Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-13 06:04:28 UTC
From: Steve
Topic: 8267 Message: 8267

I have just joined the loopantennas. I joined to learn how to make an antenna to be able to receive AM signals out of Chicago. There is a station that broadcast old radio dramas. It is 780 hz. Please be patience as I know nothing of electronics. stevestanfill

8268. Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-13 06:28:10 UTC
From: Steve
Topic: 8267 Message: 8268

I forgot to mention that I live in rural West Tennessee.

8269. Re: [loopantennas] Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-13 07:24:51 UTC
From: Pollock,Raphael E
Topic: 8267 Message: 8269

Where do you live? 780 (WBBM; Chicago) is fairly easy to get here in Houston, TX most evenings even without a loop--although much stronger reception with a loop. Many easy to build plans are available on the internet.

From: Steve [mailto:sstevev@...]
Sent: Sunday, February 13, 2011 12:04 AM
To: loopantennas@yahoogroups.com <loopantennas@yahoogroups.com>
Subject: [loopantennas] Intro

I have just joined the loopantennas. I joined to learn how to make an antenna to be able to receive AM signals out of Chicago. There is a station that broadcast old radio dramas. It is 780 hz. Please be patience as I know nothing of electronics. stevestanfill

[Non-text portions of this message have been removed]

8270. Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 04:53:42 UTC
From: Steve
Topic: 8267 Message: 8270

I can get it on my way home, but when I go inside my house, I can't. I would like to finish the programs I listened to on my way home. I thought a better antenna might help. Thanks Steve

8271. Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 15:13:54 UTC
From: tenorman1952
Topic: 8267 Message: 8271

--- In loopantennas@yahoogroups.com, "Steve" <sstevev@...> wrote:
>
> I can get it on my way home, but when I go inside my house, I can't. I would like to finish the programs I listened to on my way home. I thought a better antenna might help. Thanks Steve
>

That's what got me into it, researching good AM antennas. Zip in the house, though I had a good AM/FM tuner. First time I hooked up a simple untuned loop I was amazed.

Paul

8272. Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 17:02:26 UTC
From: wild_bill_yonder
Topic: 8267 Message: 8272

A little bit of a detour from your question, Steve, but I was looking at the WBBM site and couldn't find any mention of old radio shows. I listen to some shows on 740kHz out of toronto, the call letters are CFZM, but they never mention them, just "zoomer radio". Two old shows Mon to Thu, 10pm to 11pm. Another one if you can get them is CHML 900kHz from Hamilton, Ont. Start times vary, after sports programming is over, usually around 10pm but runs until 2pm.

Bill Kulze

--- In loopantennas@yahoogroups.com, "Steve" <sstevev@...> wrote:
>
> I have just joined the loopantennas. I joined to learn how to make an antenna to be able to receive AM signals out of Chicago. There is a station that broadcast old radio dramas. It is 780 hz. Please be patience as I know nothing of electronics. stevestanfill
>

8273. Re: {Z Scanned} [loopantennas] Digest Number 1811

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 15:23:30 UTC
From: Editor (Kevin)
Topic: 8273 Message: 8273

Hi:

If you are wishing to create a termination load for a Rhombic Antenna, you need to have something that will take 50% of the power you intend to transmit. So for a 100 watt radio, you need to dissipate 50 watts of energy. If you are sending data (sustained traffic) for extended periods, I would consider something a bit higher in capacity. We are using a 600 watt load for a 1 KW system.

If you are interested, I can send the URL's to a number of sites that are a bit more technical.

Kevin

On 2/12/2011 7:07 AM, loopantennas@yahoogroups.com wrote:
> There is 1 message in this issue.
>
> Topics in this digest:
>
> 1a. Re: Terminating Resistor Assy - sources / designs ???
> From: DRK45365
>
>
> Message
> _____
> 1a. Re: Terminating Resistor Assy - sources / designs ???
> Posted by: "DRK45365" n6jsx@... n6jsx
> Date: Sat Feb 12, 2011 6:28 am ((PST))
>
> Lets try this again and hope the subject does not get hijacked like last time.
>
> --- In loopantennas@yahoogroups.com, "Kuby" <n6jsx@...> wrote:
>>
>> Looking for "economical" sources/leads to buy non-inductive 2-10W terminating resistors for T2FD/Rhombic type antennas.
>>
>> Any designs on making a loop "terminating resistor assembly" to accommodate 125W HF input?
>>

8274. Re: [loopantennas] Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 17:19:02 UTC
From: Dale Parfitt
Topic: 8267 Message: 8274

Still off topic- but you can also pick up an internet radio for under $100. Programming is free. YUSA is up there- they were the first OTR station on the air 24/7- initially on C band satellite. Totally volunteer with volunteer DJ's (Ronnie Milsap is one of them). YUSA is run by a ham in Dallas and his wife.

Also on Internet radio is Crimestop and others. You don't need an internet radio of course, it just frees up your computer and makes channel changing a snap.

Dale W4OP

----- Original Message -----
From: wild_bill_yonder
To: loopantennas@yahoogroups.com
Sent: Monday, February 14, 2011 12:02 PM
Subject: [loopantennas] Re: Intro

A little bit of a detour from your question, Steve, but I was looking at the WBBM site and couldn't find any mention of old radio shows. I listen to some shows on 740kHz out of toronto, the call letters are CFZM, but they never mention them, just "zoomer radio". Two old shows Mon to Thu, 10pm to 11pm. Another one if you can get them is CHML 900kHz from Hamilton, Ont. Start times vary, after sports programming is over, usually around 10pm but runs until 2pm.

Bill Kulze

--- In loopantennas@yahoogroups.com, "Steve" <sstevev@...> wrote:
>
> I have just joined the loopantennas. I joined to learn how to make an antenna to be able to receive AM signals out of Chicago. There is a station that broadcast old radio dramas. It is 780 hz. Please be patience as I know nothing of electronics. stevestanfill
>

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3443 - Release Date: 02/14/11 02:34:00

[Non-text portions of this message have been removed]

8275. Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 17:36:51 UTC
From: Steve
Topic: 8267 Message: 8275

I may have the location wrong on my radio dial. I listen between 12:oo and 1:00 AM. I know I listen to wgn and another station I thought was also in chicago. I may have been mistaken on the location.

8276. RE: [loopantennas] Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 18:38:51 UTC
From: Wild, Larry
Topic: 8267 Message: 8276

Hi Steve
The station you are listening to is WBBM-780 in Chicago. They broadcast When Radio Was (a really stupid title for an OTR show) from 12:05am to 1:am Tuesday morning (Monday night) through Saturday morning (Friday night). It follows the CBS news. I listen almost every night, although I often fall asleep in the middle of the program. I use a RS portable, the DX396 which I bought about 8 years ago.

Larry Wild
Old guy from Aberdeen, South Dakota

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Steve
Sent: Monday, February 14, 2011 11:37 AM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: Intro

I may have the location wrong on my radio dial. I listen between 12:oo and 1:00 AM. I know I listen to wgn and another station I thought was also in chicago. I may have been mistaken on the location.

8277. Built A Tunable Ferrite Loop Antenna For The KA-35 For LW

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 18:03:12 UTC
From: Adam E
Topic: 8277 Message: 8277

I was working on a new loop antenna for my KA-35. If you have a KA-35 you can take a 470 pF capacitor and solder it to a left channel connector to any tunable loop antenna connection.

I took my long wave antenna coupler apart and placed in a non working KA-35 ferrite 250 turn loop antenna element soldered a variable tuning capacitor. I used 6 to 10 turns of 22 awg wire and soldered a 470 pF capacitor inside the left channel part of the jack and the other lead to the ground shielded part of the jack.

The reception was dramatically improved and I copied beacon EMR from Emory (Augusta GA) last night on 385 kHz in the living room. Kaito needs to wake up and build something like this with a switchable preamp. Soon I will try to build one with a small RF preamp soon to connect to the 470 pF capacitor.

I will have to provide pictures soon as possible when I get the time, and a demo video. This project is for hobbyist non commercial purposes only and for experimentation. There is a schematic diagram in the photos section. Enjoy.

Adam Ebel
Virginia Beach, VA

8278. Re: [loopantennas] Built A Tunable Ferrite Loop Antenna For The KA-35 For LW

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-14 20:03:25 UTC
From: Chris Trask
Topic: 8277 Message: 8278

>
> I took my long wave antenna coupler apart and placed in a non working
KA-35
> ferrite 250 turn loop antenna element soldered a variable tuning
capacitor.
> I used 6 to 10 turns of 22 awg wire and soldered a 470 pF capacitor inside
> the left channel part of the jack and the other lead to the ground
shielded
> part of the jack.
>
> The reception was dramatically improved and I copied beacon EMR from Emory
> (Augusta GA) last night on 385 kHz in the living room. Kaito needs to
wake
> up and build something like this with a switchable preamp. Soon I will
try
> to build one with a small RF preamp soon to connect to the 470 pF
capacitor.
>
> I will have to provide pictures soon as possible when I get the time, and
a
> demo video. This project is for hobbyist non commercial purposes only and
> for experimentation. There is a schematic diagram in the photos section.
> Enjoy.
>

Something like this?

http://www.home.earthlink.net/~christrask/Paper006.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8279. Re: Built A Tunable Ferrite Loop Antenna For The KA-35 For LW

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-15 00:32:49 UTC
From: Adam E
Topic: 8277 Message: 8279

Chris, No, It's nothing like that. It's a very simple homebrew ferrite loop antenna for LW. I have placed the schematic diagram, and wiring diagram in the "gccengineering" photos album. Regarding the amplifier, I have not added a small amplifier circuit yet, it will need to be in a different enclosure, something a little bit bigger than the small enclosure for the ferrite rod antenna. This type is a non remote type that requires a 266 pF variable tuning capacitor, that resonates the ferrite rod coil and transfers the signal to a 10 turn coil and sent through a 470 pF capacitor into the amplifier circuit within the KA-35. It's nothing more than a loop antenna like the Terk or AN-200 from Grundig. It's a very simple home brew antenna project that I want to share with everyone here who has a KA-35 or loop antenna preamp circuit in a box. Now for remote types, I will have to build a different tuning circuit and has a preamp circuit, but that is down the road.

Adam Ebel
Virginia Beach, VA

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > I took my long wave antenna coupler apart and placed in a non working
> KA-35
> > ferrite 250 turn loop antenna element soldered a variable tuning
> capacitor.
> > I used 6 to 10 turns of 22 awg wire and soldered a 470 pF capacitor inside
> > the left channel part of the jack and the other lead to the ground
> shielded
> > part of the jack.
> >
> > The reception was dramatically improved and I copied beacon EMR from Emory
> > (Augusta GA) last night on 385 kHz in the living room. Kaito needs to
> wake
> > up and build something like this with a switchable preamp. Soon I will
> try
> > to build one with a small RF preamp soon to connect to the 470 pF
> capacitor.
> >
> > I will have to provide pictures soon as possible when I get the time, and
> a
> > demo video. This project is for hobbyist non commercial purposes only and
> > for experimentation. There is a schematic diagram in the photos section.
> > Enjoy.
> >
>
> Something like this?
>

> http://www.home.earthlink.net/~christrask/Paper006.html
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

8280. Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-15 16:16:58 UTC
From: airchecklover
Topic: 8267 Message: 8280

Haven't listened lately but WGN used to run OTR so you are probably right.
Mark
++++++++++++++++++++++++++++++++++++

--- In loopantennas@yahoogroups.com, "Steve" <sstevev@...> wrote:
>
> I may have the location wrong on my radio dial. I listen between 12:oo and 1:00 AM. I know I listen to wgn and another station I thought was also in chicago. I may have been mistaken on the location.
>

8281. Re: Built A Tunable Ferrite Loop Antenna For The KA-35 For LW

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-15 16:26:19 UTC
From: aircheckIover
Topic: 8277 Message: 8281

Adam; Nice diagrams!! For sake of accuracy, the diagram marked "KA35loopantennawiringdiagram" needs a tweak: bottom right hand column says "use more turns = LF / use more turns = HF" Should it be "use more turns = LF / use less turns = HF" ??

Mark

++++++++++++++++++++++++++

--- In loopantennas@yahoogroups.com, "Adam E" <gccradioscience@...> wrote:
>
>
> Chris, No, It's nothing like that. It's a very simple homebrew
> ferrite loop antenna for LW. I have placed the schematic diagram, and wiring diagram in the "gccengineering" photos album. Regarding the amplifier, I have not added a small amplifier circuit yet, it will need to be in a different enclosure, something a little bit bigger than the small enclosure for the ferrite rod antenna. This type is a
> non remote type that requires a 266 pF variable tuning capacitor, that resonates the ferrite rod coil and transfers the signal to a 10 turn coil and sent through a 470 pF capacitor into the amplifier circuit within the KA-35. It's nothing more than a loop antenna like the Terk or AN-200 from Grundig. It's a very simple home brew antenna project that I want to share with everyone here who has a KA-35 or loop antenna preamp circuit in a box. Now for remote types, I will have to build a different tuning circuit and has a preamp circuit, but that is down the road.
>
>
> Adam Ebel
> Virginia Beach, VA
>
>
>
> --- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@> wrote:
> >
> > >
> > > I took my long wave antenna coupler apart and placed in a non working
> > KA-35
> > > ferrite 250 turn loop antenna element soldered a variable tuning
> > capacitor.
> > > I used 6 to 10 turns of 22 awg wire and soldered a 470 pF capacitor inside
> > > the left channel part of the jack and the other lead to the ground
> > shielded
> > > part of the jack.
> > >
> > > The reception was dramatically improved and I copied beacon EMR from Emory
> > > (Augusta GA) last night on 385 kHz in the living room. Kaito needs to
> > wake

> > > up and build something like this with a switchable preamp. Soon I will
> > try
> > > to build one with a small RF preamp soon to connect to the 470 pF
> > capacitor.
> > >
> > > I will have to provide pictures soon as possible when I get the time, and
> > a
> > > demo video. This project is for hobbyist non commercial purposes only and
> > > for experimentation. There is a schematic diagram in the photos section.
> > > Enjoy.
> > >
> >
> > Something like this?
> >
> > http://www.home.earthlink.net/~christrask/Paper006.html
> >
> >
> > Chris Trask
> > N7ZWY / WDX3HLB
> > Senior Member IEEE
> > http://www.home.earthlink.net/~christrask/
> >
>

8282. Lowfing !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-15 17:26:24 UTC
From: brian nsl
Topic: 8282 Message: 8282

Hi,
Anyone interested in the art of ' Lowfing ' with loop antennas
this website is well worth a look through,

a.. 136 kHz technical pages (homebrew stuff)

20 May 2008 ... VLF/LF to 28.5 MHz Receiving Converter (by DF3LP)
a.. Converts longwave to the 10 meter amateur. If your receiver does not cover 136kHz a ...
www.qsl.net/on7yd/136brew.htm - Cached - Similar

Have fun,
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

8283. Re: Built A Tunable Ferrite Loop Antenna For The KA-35 For LW

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-15 16:41:55 UTC
From: Adam E
Topic: 8277 Message: 8283

Yes it should, I worked too hard on the diagram, I will have to make that correction thanks. Give the project try when you can if you have a KA-35 or Degen. Don't forget the series 470 pF capacitor to solder to the left channel lug. Thanks for the correction.

Adam Ebel
Virginia Beach, VA

--- In loopantennas@yahoogroups.com, "airchecklover" <mdh@...> wrote:
>
> Adam; Nice diagrams!! For sake of accuracy, the diagram marked "KA35loopantennawiringdiagram" needs a tweak: bottom right hand column says "use more turns = LF / use more turns = HF" Should it be "use more turns = LF / use less turns = HF" ??
>
> Mark
>
> ++++++++++++++++++++++++++
>
> --- In loopantennas@yahoogroups.com, "Adam E" <gccradioscience@> wrote:
> >
> >
> > Chris, No, It's nothing like that. It's a very simple homebrew
> > ferrite loop antenna for LW. I have placed the schematic diagram, and wiring diagram in the "gccengineering" photos album. Regarding the amplifier, I have not added a small amplifier circuit yet, it will need to be in a different enclosure, something a little bit bigger than the small enclosure for the ferrite rod antenna. This type is a
> > non remote type that requires a 266 pF variable tuning capacitor, that resonates the ferrite rod coil and transfers the signal to a 10 turn coil and sent through a 470 pF capacitor into the amplifier circuit within the KA-35. It's nothing more than a loop antenna like the Terk or AN-200 from Grundig. It's a very simple home brew antenna project that I want to share with everyone here who has a KA-35 or loop antenna preamp circuit in a box. Now for remote types, I will have to build a different tuning circuit and has a preamp circuit, but that is down the road.
> >
> >
> > Adam Ebel
> > Virginia Beach, VA
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@> wrote:
> > >
> > > >
> > > > I took my long wave antenna coupler apart and placed in a non working
> > > KA-35

> > > > ferrite 250 turn loop antenna element soldered a variable tuning
> > > capacitor.
> > > > I used 6 to 10 turns of 22 awg wire and soldered a 470 pF capacitor inside
> > > > the left channel part of the jack and the other lead to the ground
> > > shielded
> > > > part of the jack.
> > > >
> > > > The reception was dramatically improved and I copied beacon EMR from Emory
> > > > (Augusta GA) last night on 385 kHz in the living room. Kaito needs to
> > > wake
> > > > up and build something like this with a switchable preamp. Soon I will
> > > try
> > > > to build one with a small RF preamp soon to connect to the 470 pF
> > > capacitor.
> > > >
> > > > I will have to provide pictures soon as possible when I get the time, and
> > > a
> > > > demo video. This project is for hobbyist non commercial purposes only and
> > > > for experimentation. There is a schematic diagram in the photos section.
> > > > Enjoy.
> > > >
> > >
> > > Something like this?
> > >
> > > http://www.home.earthlink.net/~christrask/Paper006.html
> > >
> > >
> > > Chris Trask
> > > N7ZWY / WDX3HLB
> > > Senior Member IEEE
> > > http://www.home.earthlink.net/~christrask/
> > >
> >
>

8284. Re: Lowfing !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-15 23:15:45 UTC
From: Adam E
Topic: 8282 Message: 8284

Sound great. I will check it out. Still, did you check out my ferrite loop antenna? Ok, I will have to get my camera out and make a video of me tuning the loop in the living room. I will check the site out.
Thanks.

Adam Ebel
Virginia Beach, VA

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Hi,
> Anyone interested in the art of ' Lowfing ' with loop antennas
> this website is well worth a look through,
>
> a.. 136 kHz technical pages (homebrew stuff)
>
> 20 May 2008 ... VLF/LF to 28.5 MHz Receiving Converter (by DF3LP)
> a.. Converts longwave to the 10 meter amateur. If your receiver does not cover 136kHz a
...
> www.qsl.net/on7yd/136brew.htm - Cached - Similar
>
> Have fun,
> 72, Brian, G0NSL-QRP.
>
> [Non-text portions of this message have been removed]
>

8285. 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-19 20:19:43 UTC
From: DRK45365
Topic: 8285 Message: 8285

Anyone have a 160m loop up? How high off the ground? How fed?

How does it work? Any pro's, con's methods in using/building?

Anyone model a 160m loop using 450 ladder line feed?

8286. Re: [loopantennas] 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-19 21:14:28 UTC
From: Dale Parfitt
Topic: 8285 Message: 8286

Is your use for 160M only? Is this for DX or local use?
If for DX, you're as well off with a dipole as high as you can get it.
If for NVIS, I guess the full wave loop has some gain compared to a dipole when mounted low. Personally, I can't see the advantage when it requires 2X the wire and 2X the supports, unless you want to also use it on higher bands- as the VSWR excursions are not as great as would be w/ a 160M dipole.

Dale W4OP

Anyone have a 160m loop up? How high off the ground? How fed?

How does it work? Any pro's, con's methods in using/building?

Anyone model a 160m loop using 450 ladder line feed?

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3453 - Release Date: 02/19/11 02:34:00

[Non-text portions of this message have been removed]

8287. Re: 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-20 19:48:27 UTC
From: DRK45365
Topic: 8285 Message: 8287

This will be an all-band loop using 450 ladder allowing it to be an all HF band antenna. The reason for little info is few HAMs have the property or methods to install such a big antenna (I've only heard of one person using a 160/80m rhombic)....

I'm installing a square 160m loop with ~75' of 450 ladder. The loop will almost be prefect E/W-N/S square with the ladder line coming off mid-east leg. Nice thing about a loop is no counterpoise needed.

I'd like to know what the pattern will be with the loop 25-35' off the ground for the various bands?

I intend to play/install the Ugly balun to see what affect this may have.

Suggest you do some more reading/research on horizontal loops to discover the advantages.....

--- In loopantennas@yahoogroups.com, "Dale Parfitt" <parinc1@...> wrote:
>
> Is your use for 160M only? Is this for DX or local use?
> If for DX, you're as well off with a dipole as high as you can get it.
> If for NVIS, I guess the full wave loop has some gain compared to a dipole when mounted low. Personally, I can't see the advantage when it requires 2X the wire and 2X the supports, unless you want to also use it on higher bands- as the VSWR excursions are not as great as would be w/ a 160M dipole.
>
> Dale W4OP
>
>
>
> Anyone have a 160m loop up? How high off the ground? How fed?
>
> How does it work? Any pro's, con's methods in using/building?
>
> Anyone model a 160m loop using 450 ladder line feed?
>
>
>
>
>
>
> --
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com

> Version: 9.0.872 / Virus Database: 271.1.1/3453 - Release Date: 02/19/11 02:34:00
>
>
> [Non-text portions of this message have been removed]
>

8288. Re: [loopantennas] Re: 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-20 21:41:31 UTC
From: Steve Ellington
Topic: 8285 Message: 8288

That's a pretty common antenna. I've had several just like it. You can see patterns for each band if you go to cebik.com.
Follow the instructions to set up a free account. Cebik, W4RNL, was a real expert on antenna modeling. Once you get there, look for an article under "Tales and Technical" about large loops. "Horizontally Oriented, Horizontally Polarized Large Wire Loop Antennas"....Basically your radiation on 160m will be NVIS just like a dipole. On higher bands the angle becomes lower and max again favors the side opposite the feedline but with many smaller lobes all around the antenna.
The only real advantage to the antenna is ease of loading. The impedance doesn't become super high on any harmonic. 450 ohm feed is ok. 300 ohm ladder line will have a slightly lower swr on most bands and will be easier to match at the rig end.
Ugly baluns will not do much on 160m but this isn't too critical.
Don't expect miracles. On 20 meters, a 33' dipole at the same height will outperform it in the broadside direction. The horiz. loop is just a good all purpose antenna that takes up a lot of room.
73

Steve
N4LQ
----- Original Message -----
From: DRK45365
To: loopantennas@yahoogroups.com
Sent: Sunday, February 20, 2011 2:48 PM
Subject: [loopantennas] Re: 160m Loop: pro's, con's, model's, build

This will be an all-band loop using 450 ladder allowing it to be an all HF band antenna. The reason for little info is few HAMs have the property or methods to install such a big antenna (I've only heard of one person using a 160/80m rhombic)....

I'm installing a square 160m loop with ~75' of 450 ladder. The loop will almost be prefect E/W-N/S square with the ladder line coming off mid-east leg. Nice thing about a loop is no counterpoise needed.

I'd like to know what the pattern will be with the loop 25-35' off the ground for the various bands?

I intend to play/install the Ugly balun to see what affect this may have.

Suggest you do some more reading/research on horizontal loops to discover the advantages.....

--- In loopantennas@yahoogroups.com, "Dale Parfitt" <parinc1@...> wrote:
>
> Is your use for 160M only? Is this for DX or local use?
> If for DX, you're as well off with a dipole as high as you can get it.
> If for NVIS, I guess the full wave loop has some gain compared to a dipole when mounted low. Personally, I can't see the advantage when it requires 2X the wire and 2X the

supports, unless you want to also use it on higher bands- as the VSWR excursions are not as great as would be w/ a 160M dipole.
>
> Dale W4OP
>
>
>
> Anyone have a 160m loop up? How high off the ground? How fed?
>
> How does it work? Any pro's, con's methods in using/building?
>
> Anyone model a 160m loop using 450 ladder line feed?
>
>
>
>
>
>
> --
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.872 / Virus Database: 271.1.1/3453 - Release Date: 02/19/11 02:34:00
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

8289. New ferrite loop configuration

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-21 03:54:27 UTC
From: Tom McKee
Topic: 8289 Message: 8289

Loop Antenna News and Information ForumI'm fairly new to the group, but thought that this link which appeared in a message on the ultralightdx group might be of interest.

It describes a new ferrite loop configuration that is reported to be vastly superior to anything known in the past.

The loop description starts about 2/3 down the page after the technical discussion.

http://www.gmweb2.net/The%20FS%20Loop.htm

Tom McKee

==========
We Skype -- Visit our web sites:
Inland Marine Radio History Archive
GE Mobile Radio History
Swing Music Broadcasts
Joyce McKee's Art Gallery Page

[Non-text portions of this message have been removed]

8290. Hooking up a capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-21 16:12:59 UTC
From: radiotech750
Topic: 8290 Message: 8290

I made a loop antenna for BCB (AM) It is a X with each side 36in. Question is how do I hook the 365pf cap to the loop?

thanks

Ernie

8291. Re: Hooking up a capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-21 16:24:55 UTC
From: Greg Ella
Topic: 8290 Message: 8291

Hi Ernie,

You will have to have several turns of wire on your frame to tune the broadcast band with that capacitor. I would start with about 7 turns, and experiment from there. The two ends of this winding connect to the two terminals of the capacitor. More turns=lower frequency. To connect this to your radio, make a separate winding of one or two turns of wire on the same frame. This is the pickup winding, and it connects to your radio.

Greg Ella,
Livermore, CA

--- In loopantennas@yahoogroups.com, "radiotech750" <radiotech750@...> wrote:
>
> I made a loop antenna for BCB (AM) It is a X with each side 36in. Question is how do I hook the 365pf cap to the loop?
>
> thanks
>
> Ernie
>

8292. Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-21 16:35:01 UTC
From: Greg Ella
Topic: 8267 Message: 8292

Hi Steve,

A couple of companies, including Terk, make a tunable loop antenna for AM broadcast reception for about $40.00. Radioshack carries the Terk antenna. Put it in a window on the side of your house facing the radio station. Turn it so that the "edge" of the loop is towards the station.

--- In loopantennas@yahoogroups.com, "Steve" <sstevev@...> wrote:
>
> I have just joined the loopantennas. I joined to learn how to make an antenna to be able to receive AM signals out of Chicago. There is a station that broadcast old radio dramas. It is 780 hz. Please be patience as I know nothing of electronics. stevestanfill
>

8293. RE: [loopantennas] Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-21 16:38:05 UTC
From: Pollock,Raphael E
Topic: 8267 Message: 8293

However, for the same amount of money or even less you can build your own loop which will outperform the Terk by a wide margin-there are many plans available-just Google "loop antenna plans"...

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Greg Ella
Sent: Monday, February 21, 2011 10:35 AM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: Intro

Hi Steve,

A couple of companies, including Terk, make a tunable loop antenna for AM broadcast reception for about $40.00. Radioshack carries the Terk antenna. Put it in a window on the side of your house facing the radio station. Turn it so that the "edge" of the loop is towards the station.

--- In loopantennas@yahoogroups.com<mailto:loopantennas%40yahoogroups.com>, "Steve" <sstevev@...> wrote:
>
> I have just joined the loopantennas. I joined to learn how to make an antenna to be able to receive AM signals out of Chicago. There is a station that broadcast old radio dramas. It is 780 hz. Please be patience as I know nothing of electronics. stevestanfill
>

[Non-text portions of this message have been removed]

8294. Re: [loopantennas] Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-21 17:42:51 UTC
From: AC0LK
Topic: 8267 Message: 8294

Greg Ella wrote:
> There is a station that broadcast old radio dramas. It is 780 hz.

I love radio drama--been twisting the dial for years trying to find some. If that station you want is KBBM in Chicago they are a 50kW station and should have a long range. It might be helpful to know where you are and what sort of receiver you have.

I'll second the Terk antenna suggestion. Here's a link:
http://www.ccrane.com/antennas/am-antennas/terk-am-advantage.aspx

That link is to the C. Crane website, who also sells this product (for around $100):
http://www.ccrane.com/antennas/am-antennas/twin-coil-ferrite-am-antenna.aspx

It's possible and fairly easy to make one that will out-perform both but if you have to buy tools (soldering iron, etc) it might not be worth the cost--but searching "MW Loop Antenna", as suggested, will give you some idea of what's required. My DIY loop is similar to this, but using PVC pipe for the structure:

http://thorburn.org/gary/loop/

Making antennas is fun, too, if you like making stuff, and there's lots of information available.

--
Steve Clason
AC0LK
Boulder, Colorado, USA
303-818-8590

8295. Re: [loopantennas] Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-22 05:03:39 UTC
From: Tom Humes
Topic: 8267 Message: 8295

You won't find KBBM in Chicago. You will find WBBM in Chicago, though. Could be disappointing for someone looking for someting that is not there. LOL

--- On Mon, 2/21/11, AC0LK <ac0lk@...> wrote:

From: AC0LK <ac0lk@...>
Subject: Re: [loopantennas] Re: Intro
To: loopantennas@yahoogroups.com
Date: Monday, February 21, 2011, 10:42 AM

Greg Ella wrote:
> There is a station that broadcast old radio dramas. It is 780 hz.

I love radio drama--been twisting the dial for years trying to find some. If that station you want is KBBM in Chicago they are a 50kW station and should have a long range. It might be helpful to know where you are and what sort of receiver you have.

I'll second the Terk antenna suggestion. Here's a link:
http://www.ccrane.com/antennas/am-antennas/terk-am-advantage.aspx

That link is to the C. Crane website, who also sells this product (for around $100):
http://www.ccrane.com/antennas/am-antennas/twin-coil-ferrite-am-antenna.aspx

It's possible and fairly easy to make one that will out-perform both but if you have to buy tools (soldering iron, etc) it might not be worth the cost--but searching "MW Loop Antenna", as suggested, will give you some idea of what's required. My DIY loop is similar to this, but using PVC pipe for the structure:

http://thorburn.org/gary/loop/

Making antennas is fun, too, if you like making stuff, and there's lots of information available.

--
Steve Clason
AC0LK
Boulder, Colorado, USA
303-818-8590

[Non-text portions of this message have been removed]

8296. Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-22 18:50:26 UTC
From: Craig Cochran
Topic: 8267 Message: 8296

Steve,

The thorburn site uses a ciruit with Motorola MC1490 IC and MV109 tuning diode. Where could I buy these parts?

Craig Cochran N5KYF
central Oklahoma

> It's possible and fairly easy to make one that will out-perform both but
> if you have to buy tools (soldering iron, etc) it might not be worth the
> cost--but searching "MW Loop Antenna", as suggested, will give you some
> idea of what's required. My DIY loop is similar to this, but using PVC
> pipe for the structure:
>
> http://thorburn.org/gary/loop/
>
> Making antennas is fun, too, if you like making stuff, and there's lots
> of information available.
>
> --
> Steve Clason
> AC0LK
> Boulder, Colorado, USA
> 303-818-8590
>

8297. Loop Antenna Home Built

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-22 21:52:24 UTC
From: laura.kreiner
Topic: 8297 Message: 8297

I have a Globe Traveler G3,(AM/FM shortwave Radio with SSB and RDS)
and I would like an antenna to compliment the radio. I have limited
knowledge when it comes to electronics and any help would be appreciated
Can anyone help with their knowledge to steer me in the right direction.
dennis

8298. Re: [loopantennas] Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-23 00:01:21 UTC
From: AC0LK
Topic: 8267 Message: 8298

Craig Cochran wrote:

> The thorburn site uses a ciruit with Motorola MC1490 IC and MV109 tuning
> diode. Where could I buy these parts?

> > http://thorburn.org/gary/loop/

I apologize, in my sleepy haste I made a misleading post--antennas are hard enough without some jerk confusing people, right?

Not only did I get a station call sign ridiculously wrong (WBBC, not KBBC in Chicago, sheesh!) but I also linked to the first antenna design that looked slightly like mine without even reading the site.

So--besides the Terk Advantage, for MW I have a simple DIY tuned loop, 36" on a side, using a capacitor--two, actually, one switchable--for tuning, not the diode used in the Thorburn site (though that does look interesting). I can't find where I got the plans but it's more-or-less like the top one on this page:

http://makearadio.com/loops/loops2.php

Sorry for the noise.

--
Steve Clason
AC0LK
Boulder, Colorado, USA
303-818-8590

8299. Re: [loopantennas] Loop Antenna Home Built

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-23 00:38:26 UTC
From: AC0LK
Topic: 8297 Message: 8299

laura.kreiner wrote:
> I have a Globe Traveler G3,(AM/FM shortwave Radio with SSB and RDS)
> and I would like an antenna to compliment the radio. I have limited
> knowledge when it comes to electronics and any help would be appreciated
> Can anyone help with their knowledge to steer me in the right direction.

Hi Dennis (or Laura),

You might want to ask your question of a group with a wider interest,
such as this one:
http://groups.yahoo.com/group/Shortwave-SWL-Antenna/

You probably need several antennas to complement your radio so folks
will tend to ask pointed questions about what it is you want to listen
to, how much space you have, how much money you want to spend, that kind
of stuff.

Keep in mind that to some people you questions sounds something like "I
have a car, what tires should I get?" and to others like "I have some
tires, what car should I get?" I counsel humility and persistence.

--
Steve Clason
AC0LK
Boulder, Colorado, USA
303-818-8590

8300. Re: [loopantennas] Re: Intro

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-23 02:48:44 UTC
From: Steve Ellington
Topic: 8267 Message: 8300

Craig.
Looks like the MC1490 is long gone. I found a site that equates it to the TL701 however you might want to email the author K6QGH. His email address in on QRZ.

Steve
N4LQ
----- Original Message -----
From: Craig Cochran
To: loopantennas@yahoogroups.com
Sent: Tuesday, February 22, 2011 1:50 PM
Subject: [loopantennas] Re: Intro

Steve,

The thorburn site uses a ciruit with Motorola MC1490 IC and MV109 tuning diode. Where could I buy these parts?

Craig Cochran N5KYF
central Oklahoma

> It's possible and fairly easy to make one that will out-perform both but
> if you have to buy tools (soldering iron, etc) it might not be worth the
> cost--but searching "MW Loop Antenna", as suggested, will give you some
> idea of what's required. My DIY loop is similar to this, but using PVC
> pipe for the structure:
>
> http://thorburn.org/gary/loop/
>
> Making antennas is fun, too, if you like making stuff, and there's lots
> of information available.
>
> --
> Steve Clason
> AC0LK
> Boulder, Colorado, USA
> 303-818-8590
>

[Non-text portions of this message have been removed]

8301. Re: Loop Antenna Home Built

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-23 18:31:42 UTC
From: Bruce Carter
Topic: 8297 Message: 8301

> I have a Globe Traveler G3,(AM/FM shortwave Radio with SSB and RDS)
> and I would like an antenna to compliment the radio.

Two antennas at minimum. You can make a loop antenna, but it will involve more construction and electronics expertise than you probably want to deal with. And it would probably only cover one band. A lot of us make them for AM.

The best thing you can do, assuming you have an external antenna terminal, or you can at least attach a wire to the radio's whip antenna (I have no idea what the radio looks like) is to attach a long wire to the radio. Run it away from electrical interference sources such as computers, TV's, those _____ CFL light bulbs, light dimmers, and automatic night lights. Make the wire as long as you can, I used to run one around the perimeter of the fence on my property. That will take care of AM and shortwave.

For FM, you need at least an FM dipole wire antenna. Preferably an outdoor FM antenna (TV antennas will NOT do). But only go to the trouble if you have two screws on the back for external FM antenna. Generally speaking, portables make very poor FM DX units, but I have seen exceptions.

8302. Re: Loop Antenna Home Built

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-23 20:05:53 UTC
From: chuck_rippel
Topic: 8297 Message: 8302

You would do well the check the Ultra-Light group. Although the G3 does not qualify as an Ultra-Light, the antenna information is collateral.

http://groups.yahoo.com/group/ultralightdx/

Chuck Rippel
Chesapeake, VA

--- In loopantennas@yahoogroups.com, "laura.kreiner" <laura.kreiner@...> wrote:
>
> I have a Globe Traveler G3,(AM/FM shortwave Radio with SSB and RDS)
> and I would like an antenna to compliment the radio. I have limited
> knowledge when it comes to electronics and any help would be appreciated
> Can anyone help with their knowledge to steer me in the right direction.
> dennis
>

8303. Re: Pixel Technologies RF PRO-1A Shielded Loop vs Wellbook ALA1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-25 16:48:57 UTC
From: John
Topic: 7910 Message: 8303

A bit dated - but I thought my recent purchase and experience might be of some importance.

My experience with loops goes back to the mid 60's when I experimented with 7" non-descript ferrite rods from Lafayette Radio - and, eventually, TI TIS-34 jFETs. I have built large & small box loops - even remotely tuned. My experience with broadbanded low-Z loops is rather limited. My biggest awakening has been on parts acquisition - CATV transistors seem all but impossible to find these days. I took the simple way out - I spent money - and bought 'someone else's loop'. I considered the Wellbrook - until I heard about the modular Pixel Technolgies RF Pro-1a. Made in USA - like my last receiver - a Palstar R30A was a plus, too.

I tried it in my shack - and it could null some noise sources. I mounted it on a 5ft mast - in turn, I mounted the mast with a wall bracket to the end 2" x 8" plate on my deck, maybe 2 ft off the ground. With the loop parallel to the house - internal noise sources are effectively nulled. Only a faint hint of the aperiodic coronal discharge from a power pole is heard - <S1 in the few empty areas 10-18 MHz I tried. Atmospherics, signals, etc, overshadow the coronal discharge at lower frequencies - early afternoon - evening.

In my case, this loop is a winner - just what I needed. It covers LW quite well - I have never heard even the local 'BH' aeronautical beacon on 224 kHz so clean. Sure, it was a few bucks - you'll have most of half a kilobuck in the antenna and it's installation. Don't skimp on RG-6 - get the good stuff - quad shield - and a crimper for the waterproof connectors, too. DOn't forget a ground rod - recycling old coax (RG-8/11) makes a great ground wire - parallel the inner & outer connections. I am happy!

John

8304. Re: [loopantennas] Re: 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-25 22:45:31 UTC
From: M HOLDEN
Topic: 8285 Message: 8304

Whoa! Any full size horizontal loop will have a feed point impedance of around 110 ohms. If you want to match that to your transmitter, (50 ohms), use a quarter wave of 75 to 80 ohm twin (don't forget the velocity factor) and you will have a low loss and efficient set-up. The use of twin of higher impedance than 75 ohms is to obtain a medium impedance match for multi-band working. As a large loop is used on its harmonics for the higher frequencies, the feed point impedance changes from band to band, but, generally, is in the "medium impedance" range. Your 160 metre loop on 20 metres will produce rather low angles of radiation, and be a horizon kissing loop on 10 metres.The W4RNL Cebik site will provide you with detailed information about radiation patterns, and is the wire antenna bible on line. A common misconception about horizontal wire loops is that they warm the ground beneath them. This is not the truth. The ground beneath will act as a reflector, and the degree of that reflection is all about ground conductivity (soggy soil or desert sand), and spacings between ground and antenna. The ground beneath any antenna will affect the radiation pattern, and why loops are singled out as somehow worse than other types of antennas is beyond me.
Baluns are rf transformers intended to match in ratios of 4:1 or 1:1 in the most common types. If you have a 4:1 balun attached to 110 ohms antenna impedance, then the transformation will be down to around 27 ohms, (not a good idea). Baluns are not intended for multiple impedance use. However, if you need to fry eggs in your shack, they could help. Avoid using coaxial cable, (very singular impedance stuff) and you will not need a balun. Twin feeder into a balanced antenna tuning unit is the obvious solution. Read up on doublet antennas and apply the same tuning practice to loop feeders instead to achieve great results.
Mike G4HOL

From: DRK45365 <n6jsx@...>
To: loopantennas@yahoogroups.com
Cc:
Sent: Sunday, 20 February 2011, 19:48:27
Subject: [loopantennas] Re: 160m Loop: pro's, con's, model's, build

This will be an all-band loop using 450 ladder allowing it to be an all HF band antenna. The reason for little info is few HAMs have the property or methods to install such a big antenna (I've only heard of one person using a 160/80m rhombic)....

I'm installing a square 160m loop with ~75' of 450 ladder. The loop will almost be prefect E/W-N/S square with the ladder line coming off mid-east leg. Nice thing about a loop is no counterpoise needed.

I'd like to know what the pattern will be with the loop 25-35' off the ground for the various bands?

I intend to play/install the Ugly balun to see what affect this may have.

Suggest you do some more reading/research on horizontal loops to discover the advantages.....

--- In loopantennas@yahoogroups.com, "Dale Parfitt" <parinc1@...> wrote:
>
> Is your use for 160M only? Is this for DX or local use?
> If for DX, you're as well off with a dipole as high as you can get it.
> If for NVIS, I guess the full wave loop has some gain compared to a dipole when mounted low. Personally, I can't see the advantage when it requires 2X the wire and 2X the supports, unless you want to also use it on higher bands- as the VSWR excursions are not as great as would be w/ a 160M dipole.
>
> Dale W4OP
>
>
>
> Anyone have a 160m loop up? How high off the ground? How fed?
>
> How does it work? Any pro's, con's methods in using/building?
>
> Anyone model a 160m loop using 450 ladder line feed?
>
>
>
>
>
>
>
> --
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.872 / Virus Database: 271.1.1/3453 - Release Date: 02/19/11 02:34:00
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

8305. stepper control of tuning cap

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-26 18:29:14 UTC
From: chuck
Topic: 8305 Message: 8305

I want to use a bipolar stepper motor to control tuning cap on a loop project. I would like manual control of speed and direction as well as single step use. Could anyone sugest a simple contol option?

Thanks
Ron
VA3RDR

PS
I do not want to use computer control.

8306. Re: [loopantennas] stepper control of tuning cap

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-27 18:17:19 UTC
From: Dale Parfitt
Topic: 8305 Message: 8306

Hi Ron,
A different approach might be to use one of the Chaparrel servo motors used in the C band feedhorns.
This gives you pretty much 1:1 control over the cap from a remote location- 3 wires: (+) (-) and pulse. I would think a good ball bearing cap would have low enough torque to be turned by the servo.
Dale
----- Original Message -----
From: chuck
To: loopantennas@yahoogroups.com
Sent: Saturday, February 26, 2011 1:29 PM
Subject: [loopantennas] stepper control of tuning cap

I want to use a bipolar stepper motor to control tuning cap on a loop project. I would like manual control of speed and direction as well as single step use. Could anyone sugest a simple contol option?

Thanks
Ron
VA3RDR

PS
I do not want to use computer control.

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3471 - Release Date: 02/27/11 02:34:00

[Non-text portions of this message have been removed]

8307. Re: [loopantennas] stepper control of tuning cap

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-27 19:25:02 UTC
From: chuck howell
Topic: 8305 Message: 8307

Thanks Dale I'll look into this.

Ron

From: Dale Parfitt <parinc1@frontier.com>
To: loopantennas@yahoogroups.com
Sent: Sunday, February 27, 2011 1:17 PM
Subject: Re: [loopantennas] stepper control of tuning cap

Hi Ron,
A different approach might be to use one of the Chaparrel servo motors used in the C band feedhorns.
This gives you pretty much 1:1 control over the cap from a remote location- 3 wires: (+) (-) and pulse. I would think a good ball bearing cap would have low enough torque to be turned by the servo.
Dale
----- Original Message -----
From: chuck
To: loopantennas@yahoogroups.com
Sent: Saturday, February 26, 2011 1:29 PM
Subject: [loopantennas] stepper control of tuning cap

Reply to sender | Reply to group | Reply via web post | Start a New Topic Messages in this topic (2)
Recent Activity: * New Members 9 * New Photos 2
Visit Your Group
If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!

Switch to: Text-Only, Daily Digest • Unsubscribe • Terms of Use
.

[Non-text portions of this message have been removed]

8308. Re: stepper control of tuning cap

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-02-28 20:29:58 UTC
From: Bruce Carter
Topic: 8305 Message: 8308

I had a little different approach. I had two good quality motors - very efficient ones, and I hooked them up back to back. Spin one shaft, the other motor shaft spins with a fair amount of torque - one acting as generator and the other as motor. Definitely an "analog" solution to the problem, but also one with infinite resolution. Tuning remotely was pretty easy, but I found that the motor outside got a little sluggish in temperature extremes.

I've since moved on to varactor tuning of the outdoor loop. It sure made the interface box smaller!

--- In loopantennas@yahoogroups.com, "Dale Parfitt" <parinc1@...> wrote:
>
> Hi Ron,
> A different approach might be to use one of the Chaparrel servo motors used in the C band feedhorns.
> This gives you pretty much 1:1 control over the cap from a remote location- 3 wires: (+) (-) and pulse. I would think a good ball bearing cap would have low enough torque to be turned by the servo.
> Dale
> ----- Original Message -----
> From: chuck
> To: loopantennas@yahoogroups.com
> Sent: Saturday, February 26, 2011 1:29 PM
> Subject: [loopantennas] stepper control of tuning cap
>
>
>
> I want to use a bipolar stepper motor to control tuning cap on a loop project. I would like manual control of speed and direction as well as single step use. Could anyone sugest a simple contol option?
>
> Thanks
> Ron
> VA3RDR
>
> PS
> I do not want to use computer control.
>
>
>
>
>
>
> --
>
>

>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.872 / Virus Database: 271.1.1/3471 - Release Date: 02/27/11 02:34:00
>
>
> [Non-text portions of this message have been removed]
>

8309. Re: Pixel Technologies RF PRO-1A Shielded Loop vs Wellbook ALA1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-01 02:04:09 UTC
From: k7uxo
Topic: 7910 Message: 8309

I am a recent owner of the Pixel loop too. My impressions are mixed between excited and disappointed.

I am excited because the thing actually works, and seems to work well. Signal strength is not as good as my 180 foot wire on higher frequencies, but on lower frequencies it does well on siganl strength. The main thing is the noise is gone. All the power line "buzzzzz" is history - which makes for a nice signal to noise and clean readable signals.

What is disappointing is the build. The loop itself is parts from home depot mostly. That in its self is not a problem, because things can be replaced locally and inexpensively. It is how it is put together that is bothersome.

The shielded portion of the loop is aluminum tubing. It is attached at the bottom by pop rivets. This is an electrical connection as well as a mechanical one. The wire inside the loop is very small gauge, about 18 or 20 gauge by the look of it... maybe even as small as 22. What is clear about this design, is they did not do much to minimize resistance like you would in a transmitting loop. There is a heavy reliance on the loops ability to reject noise, and the preamplifier to boost the signal. I wonder how well this loop will work when exposed to weather for some time, and these connections become loose and weathered.

As it is, I feel compelled to rebuild parts of the loop. Increase the wire size to about 6 or 4 gauge, and a more reliable electrical connection at the bottom of the loop.

David McGinnis.

8310. log periodic loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-01 15:03:31 UTC
From: chen_long614
Topic: 8310 Message: 8310

Hi all, I am newbie of antenna fabricate!
I would like to design an log periodic loop antenna. Each dipole element in log periodic array are replace by a full wavelength loop antenna. I am facing some problem in simulate and design the antenna.
I am using the CST software.
Antenna characteristic:
1.50 ohms coaxial cable is use to connect the antenna
2.Frequency range = 840-960 Mhz

Problem:
1. The impedance part. I am not idea how to deal with the impedance matching.
2. How to design a balun for it.

If anyone got idea or experince with this antenna design please share with. I am looking forward for u help.
Thank you
Thank you

8311. unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 00:52:31 UTC
From: Sam
Topic: 8311 Message: 8311

This is to be a receive only direction finding loop, that I plan to use to chase down some local power line rfi, that is interfering with my reception from 160m through about 11mhz. Strangely it's quiet above 12mhz. I think that means it's further away from me than just within a few block area. Perhaps as far out as a mile or so.

I want to build a multi turn loop. I would like to enclose the turns inside a 32" diameter plastic hula hoop. I don't have any of the ribbon wire I have seen used for this. So I was wondering if I just kept feeding a single wire inside the 5/8 diameter hula hoops tubing, would that work OK? I'm sure the wires would end up rather scrambled as opposed to being nicely laid out next to each other like they would be if I used a ribbon wire.

Second question: I hope to be able to use this loop for about 3mhz to 11mhz. Does this seem likely with the 32" loop circumference? I would rather not build this in a larger form, as it would be harder to transport and handle while searching.

TIA,
Sam K5OAI

8312. Re: [loopantennas] unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 03:01:28 UTC
From: Richard (Rick) Karlquist
Topic: 8311 Message: 8312

On 3/1/2011 4:52 PM, Sam wrote:
>
> I want to build a multi turn loop. I would like to enclose the turns
> inside a 32" diameter plastic hula hoop. I don't have any of the ribbon

> TIA,
> Sam K5OAI
>

WHY do you think you need a multi turn loop for 3 to 11 MHz?

Rick N6RK

8313. Re: [loopantennas] unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 03:28:33 UTC
From: Sam Morgan
Topic: 8311 Message: 8313

I built a 24" single turn shielded loop made of RG-214,
and I had to add about 11,000pf to get it to tune to around 3-4mhz
so I decided I needed to up the inductance
so I could reduce the capacitance

I just placed the capacitance across the inner loop ends
then grounded one side of the loop
http://www.k5oai.com/rfi/2011/images/ARRLHB88loop.png

and then tried feeding it with mini coax
but the nulls were not at 90 degrees to the loop axis
instead they were skewed maybe 40 degrees off the loop axis

so I tried feeding it with a 2 turn loop on a FT37-43
and attached the mini coax feed across a 10 turn secondary

still got the skewed pattern
gave up on that part of the problem for now
and decided to try an unshielded loop

P.S.
if anyone is interested in my rfi chase journal
http://www.k5oai.com/rfi/
warning, it's long and frustrating, lol

GB & 73
K5OAI
Sam Morgan

On 3/1/2011 9:01 PM, Richard (Rick) Karlquist wrote:
>
>
> On 3/1/2011 4:52 PM, Sam wrote:
>>
>> I want to build a multi turn loop. I would like to enclose the turns
>> inside a 32" diameter plastic hula hoop. I don't have any of the ribbon
>
>> TIA,
>> Sam K5OAI
>>
>
> WHY do you think you need a multi turn loop for 3 to 11 MHz?
>
> Rick N6RK
>

8314. Re: [loopantennas] unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 03:43:31 UTC
From: Steve Ellington
Topic: 8311 Message: 8314

I think you got that picture from here:
http://www.w8ji.com/magnetic_receiving_loops.htm
The article explains that it's a bad design and goes on to explain one that really works.
There's no way the signal can get in!
Steve
N4LQ
----- Original Message -----
From: Sam Morgan
To: Richard (Rick) Karlquist ; loopantennas@yahoogroups.com
Sent: Tuesday, March 01, 2011 10:28 PM
Subject: Re: [loopantennas] unshielded multi turn loop question

I built a 24" single turn shielded loop made of RG-214,
and I had to add about 11,000pf to get it to tune to around 3-4mhz
so I decided I needed to up the inductance
so I could reduce the capacitance

I just placed the capacitance across the inner loop ends
then grounded one side of the loop
http://www.k5oai.com/rfi/2011/images/ARRLHB88loop.png

and then tried feeding it with mini coax
but the nulls were not at 90 degrees to the loop axis
instead they were skewed maybe 40 degrees off the loop axis

so I tried feeding it with a 2 turn loop on a FT37-43
and attached the mini coax feed across a 10 turn secondary

still got the skewed pattern
gave up on that part of the problem for now
and decided to try an unshielded loop

P.S.
if anyone is interested in my rfi chase journal
http://www.k5oai.com/rfi/
warning, it's long and frustrating, lol

GB & 73
K5OAI
Sam Morgan

On 3/1/2011 9:01 PM, Richard (Rick) Karlquist wrote:
>
>
> On 3/1/2011 4:52 PM, Sam wrote:
>>
>> I want to build a multi turn loop. I would like to enclose the turns

>> inside a 32" diameter plastic hula hoop. I don't have any of the ribbon
>
>> TIA,
>> Sam K5OAI
>>
>
> WHY do you think you need a multi turn loop for 3 to 11 MHz?
>
> Rick N6RK
>

[Non-text portions of this message have been removed]

8315. Re: [loopantennas] unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 04:26:26 UTC
From: Sam Morgan
Topic: 8311 Message: 8315

yes that is correct,
that is where I got the pic
duh, and looking at it again,
I realize that was not the correct picture
this is how the loop and feed on the one I have is made
http://www.w8ji.com/images/Antenna/Loops/K9FD-style-loop.jpg

When he gets into the different ways to do it.....
I am just to stupid
to figure out how to do,
what he says is the "proper way" to do it
so I just started from the basic loop
and was going to work my way through
and see what I might could use that would work for me
even if it was not his 'ultimate' way to do it

As well as, I'm attaching it to the input of a Grundig G3
so impedance matching is not necessarily going to happen
as I am clueless what it is or how I would go about matching it
or if it would matter for 160m - 11mhz

he says the others work,
just not as well as they would if you do it his way

and then if I ever figured
what ever in the heck he is trying to show on that last one:
http://www.w8ji.com/images/Antenna/Loops/magnet9.gif
I might try it

although I think I may eventually end up using an amplifier and
hopefully that will bypass the confusion of what he is doing

if you notice his last image, is an unshielded loop
http://www.w8ji.com/images/Antenna/Loops/magnet11.gif
which is basically what I am asking help with
in my original can I use scrambled multiple turns
or do they have to be like the ones in a ribbon wire cable?

GB & 73
K5OAI
Sam Morgan

On 3/1/2011 9:43 PM, Steve Ellington wrote:
> I think you got that picture from here:
> http://www.w8ji.com/magnetic_receiving_loops.htm The article explains that
> it's a bad design and goes on to explain one that really works. There's no
> way the signal can get in! Steve N4LQ ----- Original Message ----- From: Sam

> Morgan To: Richard (Rick) Karlquist ; loopantennas@yahoogroups.com Sent:
> Tuesday, March 01, 2011 10:28 PM Subject: Re: [loopantennas] unshielded multi
> turn loop question
>
>
>
> I built a 24" single turn shielded loop made of RG-214, and I had to add
> about 11,000pf to get it to tune to around 3-4mhz so I decided I needed to up
> the inductance so I could reduce the capacitance
>
> I just placed the capacitance across the inner loop ends then grounded one
> side of the loop http://www.k5oai.com/rfi/2011/images/ARRLHB88loop.png
>
> and then tried feeding it with mini coax but the nulls were not at 90 degrees
> to the loop axis instead they were skewed maybe 40 degrees off the loop axis
>
> so I tried feeding it with a 2 turn loop on a FT37-43 and attached the mini
> coax feed across a 10 turn secondary
>
> still got the skewed pattern gave up on that part of the problem for now and
> decided to try an unshielded loop
>
> P.S. if anyone is interested in my rfi chase journal
> http://www.k5oai.com/rfi/ warning, it's long and frustrating, lol
>
> GB& 73 K5OAI Sam Morgan
>
> On 3/1/2011 9:01 PM, Richard (Rick) Karlquist wrote:
>>
>>
>> On 3/1/2011 4:52 PM, Sam wrote:
>>>
>>> I want to build a multi turn loop. I would like to enclose the turns
>>> inside a 32" diameter plastic hula hoop. I don't have any of the ribbon
>>
>>> TIA, Sam K5OAI
>>>
>>
>> WHY do you think you need a multi turn loop for 3 to 11 MHz?
>>
>> Rick N6RK
>>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>

> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links
> rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

8316. Re: unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 04:45:28 UTC
From: Sam
Topic: 8311 Message: 8316

correction(s) appear inline with message below

--- In loopantennas@yahoogroups.com, Sam Morgan <k5oai.sam@...> wrote:
>
> I built a 24" single turn shielded loop made of RG-214,
> and I had to add about 11,000pf to get it to tune to around 3-4mhz
> so I decided I needed to up the inductance
> so I could reduce the capacitance
>

the following was wrong:
> I just placed the capacitance across the inner loop ends
> then grounded one side of the loop
> http://www.k5oai.com/rfi/2011/images/ARRLHB88loop.png

it should have said:
grounded both ends of the shield of the loop
then attached the ground side of the coax feed to ground
also grounded one side of the capacitor
then attached the coax center to the other side of the capacitor

as shown here:
http://www.k5oai.com/rfi/2011/images/K9FD-style-loop.png

> and then tried feeding it with mini coax
> but the nulls were not at 90 degrees to the loop axis
> instead they were skewed maybe 40 degrees off the loop axis
>
> so I tried feeding it with a 2 turn loop on a FT37-43
> and attached the mini coax feed across a 10 turn secondary
>
> still got the skewed pattern
> gave up on that part of the problem for now
> and decided to try an unshielded loop
>
> P.S.
> if anyone is interested in my rfi chase journal
> http://www.k5oai.com/rfi/
> warning, it's long and frustrating, lol
>
> GB & 73
> K5OAI
> Sam Morgan
>
> On 3/1/2011 9:01 PM, Richard (Rick) Karlquist wrote:
> >

> >
> > On 3/1/2011 4:52 PM, Sam wrote:
> >>
> >> I want to build a multi turn loop. I would like to enclose the turns
> >> inside a 32" diameter plastic hula hoop. I don't have any of the ribbon
> >
> >> TIA,
> >> Sam K5OAI
> >>
> >
> > WHY do you think you need a multi turn loop for 3 to 11 MHz?
> >
> > Rick N6RK
> >
>

8317. Re: [loopantennas] unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 04:48:19 UTC
From: Steve Ellington
Topic: 8311 Message: 8317

I took about 10 feet of coax, put a plug on one end for my Sangean radio, taped it to a broom handle and stripped back a couple of feet at the end and formed a loop.....Center soldered to shield. Of course it had no gain but it is very directional and just fine for sniffing around the house for noise on any frequency. If you're thinking about DXing then you will need some amplification.
Steve
N4LQ
----- Original Message -----
From: Sam Morgan
To: loopantennas@yahoogroups.com
Cc: Steve Ellington
Sent: Tuesday, March 01, 2011 11:26 PM
Subject: Re: [loopantennas] unshielded multi turn loop question

yes that is correct,
that is where I got the pic
duh, and looking at it again,
I realize that was not the correct picture
this is how the loop and feed on the one I have is made
http://www.w8ji.com/images/Antenna/Loops/K9FD-style-loop.jpg

When he gets into the different ways to do it.....
I am just to stupid
to figure out how to do,
what he says is the "proper way" to do it
so I just started from the basic loop
and was going to work my way through
and see what I might could use that would work for me
even if it was not his 'ultimate' way to do it

As well as, I'm attaching it to the input of a Grundig G3
so impedance matching is not necessarily going to happen
as I am clueless what it is or how I would go about matching it
or if it would matter for 160m - 11mhz

he says the others work,
just not as well as they would if you do it his way

and then if I ever figured
what ever in the heck he is trying to show on that last one:
http://www.w8ji.com/images/Antenna/Loops/magnet9.gif
I might try it

although I think I may eventually end up using an amplifier and
hopefully that will bypass the confusion of what he is doing

if you notice his last image, is an unshielded loop
http://www.w8ji.com/images/Antenna/Loops/magnet11.gif
which is basically what I am asking help with
in my original can I use scrambled multiple turns
or do they have to be like the ones in a ribbon wire cable?

GB & 73
K5OAI
Sam Morgan

On 3/1/2011 9:43 PM, Steve Ellington wrote:
> I think you got that picture from here:
> http://www.w8ji.com/magnetic_receiving_loops.htm The article explains that
> it's a bad design and goes on to explain one that really works. There's no
> way the signal can get in! Steve N4LQ ----- Original Message ----- From: Sam
> Morgan To: Richard (Rick) Karlquist ; loopantennas@yahoogroups.com Sent:
> Tuesday, March 01, 2011 10:28 PM Subject: Re: [loopantennas] unshielded multi
> turn loop question
>
>
>
> I built a 24" single turn shielded loop made of RG-214, and I had to add
> about 11,000pf to get it to tune to around 3-4mhz so I decided I needed to up
> the inductance so I could reduce the capacitance
>
> I just placed the capacitance across the inner loop ends then grounded one
> side of the loop http://www.k5oai.com/rfi/2011/images/ARRLHB88loop.png
>
> and then tried feeding it with mini coax but the nulls were not at 90 degrees
> to the loop axis instead they were skewed maybe 40 degrees off the loop axis
>
> so I tried feeding it with a 2 turn loop on a FT37-43 and attached the mini
> coax feed across a 10 turn secondary
>
> still got the skewed pattern gave up on that part of the problem for now and
> decided to try an unshielded loop
>
> P.S. if anyone is interested in my rfi chase journal
> http://www.k5oai.com/rfi/ warning, it's long and frustrating, lol
>
> GB& 73 K5OAI Sam Morgan
>
> On 3/1/2011 9:01 PM, Richard (Rick) Karlquist wrote:
>>
>>
>> On 3/1/2011 4:52 PM, Sam wrote:
>>>
>>> I want to build a multi turn loop. I would like to enclose the turns
>>> inside a 32" diameter plastic hula hoop. I don't have any of the ribbon
>>
>>> TIA, Sam K5OAI
>>>

>>
>> WHY do you think you need a multi turn loop for 3 to 11 MHz?
>>
>> Rick N6RK
>>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links
> rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>

[Non-text portions of this message have been removed]

8318. Re: [loopantennas] unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 04:55:11 UTC
From: Sam Morgan
Topic: 8311 Message: 8318

question
were the nulls exactly 90 degrees to the loop
and were the peaks directly inline with the loop?

what throws me off is my nulls
were off on an angle like 30-50 degrees
rather than the 90 degrees they should have been
that was what is messing with my head
makes it hard to really determine where the noise source is

GB & 73
K5OAI
Sam Morgan

On 3/1/2011 10:48 PM, Steve Ellington wrote:
> I took about 10 feet of coax, put a plug on one end for my Sangean radio, taped it to a broom handle and stripped back a couple of feet at the end and formed a loop.....Center soldered to shield. Of course it had no gain but it is very directional and just fine for sniffing around the house for noise on any frequency. If you're thinking about DXing then you will need some amplification.
> Steve
> N4LQ
> ----- Original Message -----
> From: Sam Morgan
> To: loopantennas@yahoogroups.com
> Cc: Steve Ellington
> Sent: Tuesday, March 01, 2011 11:26 PM
> Subject: Re: [loopantennas] unshielded multi turn loop question
>
>
>
> yes that is correct,
> that is where I got the pic
> duh, and looking at it again,
> I realize that was not the correct picture
> this is how the loop and feed on the one I have is made
> http://www.w8ji.com/images/Antenna/Loops/K9FD-style-loop.jpg
>
> When he gets into the different ways to do it.....
> I am just to stupid
> to figure out how to do,
> what he says is the "proper way" to do it
> so I just started from the basic loop
> and was going to work my way through
> and see what I might could use that would work for me
> even if it was not his 'ultimate' way to do it

>
> As well as, I'm attaching it to the input of a Grundig G3
> so impedance matching is not necessarily going to happen
> as I am clueless what it is or how I would go about matching it
> or if it would matter for 160m - 11mhz
>
> he says the others work,
> just not as well as they would if you do it his way
>
> and then if I ever figured
> what ever in the heck he is trying to show on that last one:
> http://www.w8ji.com/images/Antenna/Loops/magnet9.gif
> I might try it
>
> although I think I may eventually end up using an amplifier and
> hopefully that will bypass the confusion of what he is doing
>
> if you notice his last image, is an unshielded loop
> http://www.w8ji.com/images/Antenna/Loops/magnet11.gif
> which is basically what I am asking help with
> in my original can I use scrambled multiple turns
> or do they have to be like the ones in a ribbon wire cable?
>
> GB& 73
> K5OAI
> Sam Morgan
>
> On 3/1/2011 9:43 PM, Steve Ellington wrote:
> > I think you got that picture from here:
> > http://www.w8ji.com/magnetic_receiving_loops.htm The article explains that
> > it's a bad design and goes on to explain one that really works. There's no
> > way the signal can get in! Steve N4LQ ----- Original Message ----- From: Sam
> > Morgan To: Richard (Rick) Karlquist ; loopantennas@yahoogroups.com Sent:
> > Tuesday, March 01, 2011 10:28 PM Subject: Re: [loopantennas] unshielded multi
> > turn loop question
> > >
> > >
> > >
> > > I built a 24" single turn shielded loop made of RG-214, and I had to add
> > > about 11,000pf to get it to tune to around 3-4mhz so I decided I needed to up
> > > the inductance so I could reduce the capacitance
> > >
> > > I just placed the capacitance across the inner loop ends then grounded one
> > > side of the loop http://www.k5oai.com/rfi/2011/images/ARRLHB88loop.png
> > >
> > > and then tried feeding it with mini coax but the nulls were not at 90 degrees
> > > to the loop axis instead they were skewed maybe 40 degrees off the loop axis
> > >
> > > so I tried feeding it with a 2 turn loop on a FT37-43 and attached the mini
> > > coax feed across a 10 turn secondary

> >
> > still got the skewed pattern gave up on that part of the problem for now and
> > decided to try an unshielded loop
> >
> > P.S. if anyone is interested in my rfi chase journal
> > http://www.k5oai.com/rfi/ warning, it's long and frustrating, lol
> >
> > GB& 73 K5OAI Sam Morgan
> >
> > On 3/1/2011 9:01 PM, Richard (Rick) Karlquist wrote:
> >>
> >>
> >> On 3/1/2011 4:52 PM, Sam wrote:
> >>>
> >>> I want to build a multi turn loop. I would like to enclose the turns
> >>> inside a 32" diameter plastic hula hoop. I don't have any of the ribbon
> >>
> >>> TIA, Sam K5OAI
> >>>
> >>
> >> WHY do you think you need a multi turn loop for 3 to 11 MHz?
> >>
> >> Rick N6RK
> >>
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links
> > rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF
> > into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
>
>

>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

8319. Re: [loopantennas] unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 13:34:37 UTC
From: Chris Trask
Topic: 8311 Message: 8319

>
> I think you got that picture from here:
> http://www.w8ji.com/magnetic_receiving_loops.htm
> The article explains that it's a bad design and goes on to explain one
that really works.
> There's no way the signal can get in!
>

That's the same fellow who years ago claimed that baluns, transmission
line transformers, and transmission lines did not exist. He then went on to
reinvent the exact same things in his own words. He was thrown out of a
number of lists for that.

Chris

8320. Re: [loopantennas] unshielded multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-02 13:37:01 UTC
From: Chris Trask
Topic: 8311 Message: 8320

>
> question
> were the nulls exactly 90 degrees to the loop
> and were the peaks directly inline with the loop?
>
> what throws me off is my nulls
> were off on an angle like 30-50 degrees
> rather than the 90 degrees they should have been
> that was what is messing with my head
> makes it hard to really determine where the noise source is
>

Did you feed the loop balanced or unbalanced? To get the nulls at 90 degrees you need to feed it balanced. An unbalanced feed will cause the null to vary with frequency.

Chris

8321. Re: [loopantennas] Re: Pixel Technologies RF PRO-1A Shielded Loop vs Wellbook ALA1530

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-03 01:16:56 UTC
From: Jerry Flanders
Topic: 7910 Message: 8321

I saw one of these at the Orlando hamfest a couple of weeks ago, but didn't think to check to see if it could be weatherproofed better. Do you think it be possible to weather-seal the bottom joints with some large heat-shrinkable tubing?

Jerry W4UK

At 09:04 PM 2/28/2011, you wrote:
>I am a recent owner of the Pixel loop too. My impressions are mixed
>between excited and disappointed.
>
>I am excited because the thing actually works, and seems to work
>well. Signal strength is not as good as my 180 foot wire on higher
>frequencies, but on lower frequencies it does well on siganl
>strength. The main thing is the noise is gone. All the power line
>"buzzzzz" is history - which makes for a nice signal to noise and
>clean readable signals.
>
>What is disappointing is the build. The loop itself is parts from
>home depot mostly. That in its self is not a problem, because
>things can be replaced locally and inexpensively. It is how it is
>put together that is bothersome.
>
>The shielded portion of the loop is aluminum tubing. It is attached
>at the bottom by pop rivets. This is an electrical connection as
>well as a mechanical one. The wire inside the loop is very small
>gauge, about 18 or 20 gauge by the look of it... maybe even as small
>as 22. What is clear about this design, is they did not do much to
>minimize resistance like you would in a transmitting loop. There is
>a heavy reliance on the loops ability to reject noise, and the
>preamplifier to boost the signal. I wonder how well this loop will
>work when exposed to weather for some time, and these connections
>become loose and weathered.
>
>As it is, I feel compelled to rebuild parts of the loop. Increase
>the wire size to about 6 or 4 gauge, and a more reliable electrical
>connection at the bottom of the loop.
>
>David McGinnis.
>
>
>
>
>

>
>-----------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>

8322. Building Small Loop for 3 mHz - 6 mHz . . . Seeking Guidance and Comments!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-03 18:17:00 UTC
From: Ralph
Topic: 8322 Message: 8322

Starting out now to build my first shortwave loop in 30 (honestly!) years.

My plans will put 3 turns of wire on a square that is 18" on a side, for a total wire length of about 18', well within the .05 - .1 wavelength guideline.

Picked up a vernier reduction-tuned 365 pfd capacitor which feels like velvet.

The part that has me excited is that I'll build the frame using all 1" PVC parts and tubing, acquired at my friendly local Home Depot.

And the swivel base (including up/down for alti-azimuthal capability) will be thanks to a cheap but good-looking tripod I picked up at Wolf's Camera.

Only open question right now is how I'll mechanically affix the loop frame to the tripod base. Still thinking about this one . . .

ANYONE WANT TO PROVIDE SOME WISDOM before I get going, in earnest? What haven't I thought about? Should I make it 4 turns, and thereby add another 6' of wire, for a total of 24 feet?

8323. Re: [loopantennas] Building Small Loop for 3 mHz - 6 mHz . . . Seeking Guidance and Comments!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-03 23:13:22 UTC
From: Chris Waldrup
Topic: 8322 Message: 8323

Hi Ralph,

What about using a PVC T fitting in the middle of the bottom run of pipe. Then you could run a very short length of pipe down from the T to a flanged fitting. The flanged fitting could be bolted to a piece of wood or metal that either has a t nut or is tapped for the 1/4-20 threads of the tripod.

Chris
KD4PBJ

On Mar 3, 2011, at 12:17 PM, "Ralph" <ralphperry@...> wrote:

> Starting out now to build my first shortwave loop in 30 (honestly!)
> years.
>
> My plans will put 3 turns of wire on a square that is 18" on a side,
> for a total wire length of about 18', well within the .05 - .1
> wavelength guideline.
>
> Picked up a vernier reduction-tuned 365 pfd capacitor which feels
> like velvet.
>
> The part that has me excited is that I'll build the frame using all
> 1" PVC parts and tubing, acquired at my friendly local Home Depot.
>
> And the swivel base (including up/down for alti-azimuthal
> capability) will be thanks to a cheap but good-looking tripod I
> picked up at Wolf's Camera.
>
> Only open question right now is how I'll mechanically affix the loop
> frame to the tripod base. Still thinking about this one . . .
>
> ANYONE WANT TO PROVIDE SOME WISDOM before I get going, in earnest?
> What haven't I thought about? Should I make it 4 turns, and thereby
> add another 6' of wire, for a total of 24 feet?
>
>

[Non-text portions of this message have been removed]

8324. RE: [loopantennas] WELLBROOK DIY or Pixel Technologies RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 08:52:24 UTC
From: Nota Real
Topic: 8151 Message: 8324

Maybe the RH PRO-1A could be easier to reverse engineer ?
According to tests it seems to be working better than Wellbrooks.
If someone who has this antenna could take some photos from inside
the antenna junction box and preamplifier etc ?
How many loop wires is there inside the aluminium tube etc.
BR

> To: loopantennas@yahoogroups.com
> From: skyspeed77@...
> Date: Tue, 18 Jan 2011 04:45:51 +0000
> Subject: [loopantennas] WELLBROOK DIY
>
> Has anyone reverse engineered the Wellbrook Loop and setup a similar
> DIY formula for building your own, perhaps of copper tubing ?
>
> Also a schematic for an amp to match that performance quality, or a
> commercially available one ?
>
> Later I have some questions about wire loops with variable caps, which I've been studying seriously and gathering components.
>
> I'm an SWL with a current interest in the AM band, but will likely go back to shortwave soon.
> My listening location is poor but I haver access to a second story roof. Poor means a building twice the height to the West and main street with lots of visable transformers on the power poles, first floor location, about 100 feet back from the power poles. I'm in L.A.
> and also have some interest in DXing the Tropic Bands.
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links

>
>
>

[Non-text portions of this message have been removed]

8325. multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 11:50:12 UTC
From: Sam Morgan
Topic: 8325 Message: 8325

Well it seems my original question got lost in the static,
so I'm going to try again. I would like to know if

I want to build a multi turn loop. The loops purpose is to be a receive only
direction finding loop.

I would like to enclose the turns inside a 32" diameter plastic hula hoop.
I don't have any of the ribbon wire I have seen used for this.
Can I just keep feeding a single wire inside hula hoops tubing,
until I fill up the 5/8 diameter tube?
The wires would end up rather scrambled,
as opposed to being nicely laid out next to each other,
like they would be if I used a ribbon wire.

Again, my ONLY QUESTION here is.....
will the scrambled method of a multi turn loop work just as well,
as the nice neat ribbon wire one wire next to only the next wire configuration?
Or must the wires all be in an neat side by side layout,
like they are in a ribbon wire?

TIA

--
GB & 73
K5OAI
Sam Morgan

8326. RE: [loopantennas] multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 12:44:53 UTC
From: Nota Real
Topic: 8325 Message: 8326

Hi !
At least I have done a shielded loop described in here:
http://radiomagonline.com/tutorials_tips/engineers_notebook/radio_shieldedloop_am_antenna_2/
and when I compared it to my loop with tradiotional multiturn. design (variable cap. etc) there was no difference. The directivity was even better.
Signal strength needed little amplification.
Easy to build for testing.

BR

> To: loopantennas@yahoogroups.com
> From: k5oai.sam@...
> Date: Fri, 4 Mar 2011 05:50:12 -0600
> Subject: [loopantennas] multi turn loop question
>
> Well it seems my original question got lost in the static,
> so I'm going to try again. I would like to know if
>
>
> I want to build a multi turn loop. The loops purpose is to be a receive only
> direction finding loop.
>
> I would like to enclose the turns inside a 32" diameter plastic hula hoop.
> I don't have any of the ribbon wire I have seen used for this.
> Can I just keep feeding a single wire inside hula hoops tubing,
> until I fill up the 5/8 diameter tube?
> The wires would end up rather scrambled,
> as opposed to being nicely laid out next to each other,
> like they would be if I used a ribbon wire.
>
> Again, my ONLY QUESTION here is.......
> will the scrambled method of a multi turn loop work just as well,
> as the nice neat ribbon wire one wire next to only the next wire configuration?
> Or must the wires all be in an neat side by side layout,
> like they are in a ribbon wire?
>
> TIA
>
> --
> GB & 73
> K5OAI
> Sam Morgan
>
>

> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

8327. Re: [loopantennas] multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 13:09:02 UTC
From: Steve Ellington
Topic: 8325 Message: 8327

Sam
A scramble would coil is what you are describing and it will resonate just like one that is neatly wound however distributed capacitance between the wires would be uneven. In most applications it would not matter but as to how this would affect the directional properties of a loop isn't clear. I haven't seen the matter addressed. I think using multiconductor cable would be a better way to go. At least it won't leave you wondering.
We questioned why you needed more than one turn though. If you use any of the loop antenna calculators (Google on this), you can see that one turn of wire 32" in diameter will resonate across most of the SW band when using a 365 PF capacitor. An extra turn would put you down in the AM BC band. Check out: http://www.angelfire.com/mb/amandx/loop.html

Steve
N4LQ
----- Original Message -----
From: Sam Morgan
To: loopantennas@yahoogroups.com
Sent: Friday, March 04, 2011 6:50 AM
Subject: [loopantennas] multi turn loop question

Well it seems my original question got lost in the static,
so I'm going to try again. I would like to know if

I want to build a multi turn loop. The loops purpose is to be a receive only
direction finding loop.

I would like to enclose the turns inside a 32" diameter plastic hula hoop.
I don't have any of the ribbon wire I have seen used for this.
Can I just keep feeding a single wire inside hula hoops tubing,
until I fill up the 5/8 diameter tube?
The wires would end up rather scrambled,
as opposed to being nicely laid out next to each other,
like they would be if I used a ribbon wire.

Again, my ONLY QUESTION here is.....
will the scrambled method of a multi turn loop work just as well,
as the nice neat ribbon wire one wire next to only the next wire configuration?
Or must the wires all be in an neat side by side layout,
like they are in a ribbon wire?

TIA

--
GB & 73
K5OAI
Sam Morgan

[Non-text portions of this message have been removed]

8328. Re: [loopantennas] multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 13:30:14 UTC
From: Sam Morgan
Topic: 8325 Message: 8328

that calculates for a square loop
not a circular loop, correct?

why I thought I needed more turns was,
that using an MFJ-259B
I found the resonant point
to be higher 5-7mhz
than the 1-7mhz I was wanted in my initial design

guess I'm guilty of believing my test equipment,
on my specific loop as it was built,
rather than what ya'll were telling me,
because it didn't match with the results I am seeing,
does that make it clearer?

perhaps the fact my loop was shielded rather than unshielded
and the capacitance internally of the shield to center
thrown in the mix was causing the difference in resonant frequency...?

GB & 73
K5OAI
Sam Morgan

On 3/4/2011 7:09 AM, Steve Ellington wrote:
> Sam A scramble would coil is what you are describing and it will resonate
> just like one that is neatly wound however distributed capacitance between
> the wires would be uneven. In most applications it would not matter but as to
> how this would affect the directional properties of a loop isn't clear. I
> haven't seen the matter addressed. I think using multiconductor cable would
> be a better way to go. At least it won't leave you wondering. We questioned
> why you needed more than one turn though. If you use any of the loop antenna
> calculators (Google on this), you can see that one turn of wire 32" in
> diameter will resonate across most of the SW band when using a 365 PF
> capacitor. An extra turn would put you down in the AM BC band. Check out:
> http://www.angelfire.com/mb/amandx/loop.html
>

8329. Re: Building Small Loop for 3 mHz - 6 mHz . . . Seeking Guidance and Comments!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 13:31:28 UTC
From: Ralph
Topic: 8322 Message: 8329

Thanks, Chris, that's the general gist of what I'll be trying!
Appreciate the input!!

Ralph

--- In loopantennas@yahoogroups.com, Chris Waldrup <kd4pbj@...> wrote:
>
> Hi Ralph,
>
> What about using a PVC T fitting in the middle of the bottom run of
> pipe. Then you could run a very short length of pipe down from the T
> to a flanged fitting. The flanged fitting could be bolted to a piece
> of wood or metal that either has a t nut or is tapped for the 1/4-20
> threads of the tripod.
>
> Chris
> KD4PBJ
>
>
>
>
> On Mar 3, 2011, at 12:17 PM, "Ralph" <ralphperry@...> wrote:
>
> > Starting out now to build my first shortwave loop in 30 (honestly!)
> > years.
> >
> > My plans will put 3 turns of wire on a square that is 18" on a side,
> > for a total wire length of about 18', well within the .05 - .1
> > wavelength guideline.
> >
> > Picked up a vernier reduction-tuned 365 pfd capacitor which feels
> > like velvet.
> >
> > The part that has me excited is that I'll build the frame using all
> > 1" PVC parts and tubing, acquired at my friendly local Home Depot.
> >
> > And the swivel base (including up/down for alti-azimuthal
> > capability) will be thanks to a cheap but good-looking tripod I
> > picked up at Wolf's Camera.
> >
> > Only open question right now is how I'll mechanically affix the loop
> > frame to the tripod base. Still thinking about this one . . .
> >
> > ANYONE WANT TO PROVIDE SOME WISDOM before I get going, in earnest?

> > What haven't I thought about? Should I make it 4 turns, and thereby
> > add another 6' of wire, for a total of 24 feet?
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

8330. Re: [loopantennas] multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 14:14:55 UTC
From: Steve Ellington
Topic: 8325 Message: 8330

Yes the shield to center capacitance would make a huge difference. Figure 12 to 20 pf per foot or so.

Steve
N4LQ
----- Original Message -----
From: Sam Morgan
To: loopantennas@yahoogroups.com
Cc: Steve Ellington
Sent: Friday, March 04, 2011 8:30 AM
Subject: Re: [loopantennas] multi turn loop question

that calculates for a square loop
not a circular loop, correct?

why I thought I needed more turns was,
that using an MFJ-259B
I found the resonant point
to be higher 5-7mhz
than the 1-7mhz I was wanted in my initial design

guess I'm guilty of believing my test equipment,
on my specific loop as it was built,
rather than what ya'll were telling me,
because it didn't match with the results I am seeing,
does that make it clearer?

perhaps the fact my loop was shielded rather than unshielded
and the capacitance internally of the shield to center
thrown in the mix was causing the difference in resonant frequency...?

GB & 73
K5OAI
Sam Morgan

On 3/4/2011 7:09 AM, Steve Ellington wrote:
> Sam A scramble would coil is what you are describing and it will resonate
> just like one that is neatly wound however distributed capacitance between
> the wires would be uneven. In most applications it would not matter but as to
> how this would affect the directional properties of a loop isn't clear. I
> haven't seen the matter addressed. I think using multiconductor cable would
> be a better way to go. At least it won't leave you wondering. We questioned
> why you needed more than one turn though. If you use any of the loop antenna
> calculators (Google on this), you can see that one turn of wire 32" in
> diameter will resonate across most of the SW band when using a 365 PF
> capacitor. An extra turn would put you down in the AM BC band. Check out:
> http://www.angelfire.com/mb/amandx/loop.html

>

[Non-text portions of this message have been removed]

8331. New video posted by Stealth Telecom. Loops R&D, mfg and tests briefly shown.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 14:17:05 UTC
From: ua6lfj
Topic: 8331 Message: 8331

http://www.youtube.com/watch?v=cXAjIbMr3BY&NR=1

http://www.youtube.com/watch?v=8D9LwhZErao&feature=related

8332. Re: Building Small Loop for 3 mHz - 6 mHz . . . Seeking Guidance and Comments!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 15:07:57 UTC
From: tenorman1952
Topic: 8322 Message: 8332

--- In loopantennas@yahoogroups.com, "Ralph" <ralphperry@...> wrote:
>
> Starting out now to build my first shortwave loop in 30 (honestly!) years.
>
> My plans will put 3 turns of wire on a square that is 18" on a side, for a total wire length of about 18', well within the .05 - .1 wavelength guideline.
>
> Picked up a vernier reduction-tuned 365 pfd capacitor which feels like velvet.
>
> The part that has me excited is that I'll build the frame using all 1" PVC parts and tubing, acquired at my friendly local Home Depot.
>
> And the swivel base (including up/down for alti-azimuthal capability) will be thanks to a cheap but good-looking tripod I picked up at Wolf's Camera.
>
> Only open question right now is how I'll mechanically affix the loop frame to the tripod base. Still thinking about this one . . .
>
> ANYONE WANT TO PROVIDE SOME WISDOM before I get going, in earnest? What haven't I thought about? Should I make it 4 turns, and thereby add another 6' of wire, for a total of 24 feet?
>

Use this calculator. I find it is as accurate as can be expected.

http://www.angelfire.com/mb/amandx/loop.html

Paul C.

8333. RE: [loopantennas] multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-04 23:11:08 UTC
From: Ray Phillips
Topic: 8325 Message: 8333

Sam,

measure the circumference of your hoop and add 3 inches.

Cut straight lengths of your wire to this length. One wire for each turn. Uniquely label each wire at both ends.

Lay the lengths together. Tightly tape the ends into a bundle at each end. Using an electric screwdriver, hand drill or a power drill on s-l-o-w, twist the lengths together until you get about two or three turns per foot. Keeping the bundle straight with a little bit of tension makes for a neat job.

Feed the twisted wires through the hoop. Remove the bundling tape and join the wires end-to-end following the previously added labels to identify each wire. Solder and insulate the connections.
You don't need to follow any sequence of connecting so long as you don't join any wire onto itself. For convenience, you might like to join the end of wire 1 onto the beginning of wire 2, end of wire 2 onto the beginning of wire 3 etc. You will eventually get left with the beginning of wire 1 and the end of wire n; these are your capacitor connect points.

Voila - one twisted, multi-turn loop!

If you want, you can put in more than the estimated number of turns and, if there are too many turns, disconnect them one at a time until the right inductance is reached. Or wire in a fancy switching arrangement to change bands with the one loop.
You can leave the unused wires in the loop - just insulate each end and leave it hanging. If you start joining loose ends together you might create shorted turns and that ain't good for loop performance.

All the best,
Ray vk5ugs

To: loopantennas@yahoogroups.com
From: k5oai.sam@...
Date: Fri, 4 Mar 2011 05:50:12 -0600
Subject: [loopantennas] multi turn loop question

Well it seems my original question got lost in the static,

so I'm going to try again. I would like to know if

I want to build a multi turn loop. The loops purpose is to be a receive only

direction finding loop.

I would like to enclose the turns inside a 32" diameter plastic hula hoop.

I don't have any of the ribbon wire I have seen used for this.

Can I just keep feeding a single wire inside hula hoops tubing,

until I fill up the 5/8 diameter tube?

The wires would end up rather scrambled,

as opposed to being nicely laid out next to each other,

like they would be if I used a ribbon wire.

Again, my ONLY QUESTION here is.....

will the scrambled method of a multi turn loop work just as well,

as the nice neat ribbon wire one wire next to only the next wire configuration?

Or must the wires all be in an neat side by side layout,

like they are in a ribbon wire?

TIA

--

GB & 73

K5OAI

Sam Morgan

[Non-text portions of this message have been removed]

8334. Re: [loopantennas] multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-05 00:40:42 UTC
From: Steve Ellington
Topic: 8325 Message: 8334

Interesting idea Ray. I guess one could just use some CAT5 with its 4 pairs.
Of course I suppose the twisting will add some capacitance.

Steve
N4LQ
----- Original Message -----
From: "Ray Phillips" <uggliozzi@...>
To: <loopantennas@yahoogroups.com>
Sent: Friday, March 04, 2011 6:11 PM
Subject: RE: [loopantennas] multi turn loop question

>
> Sam,
>
> measure the circumference of your hoop and add 3 inches.
>
> Cut straight lengths of your wire to this length. One wire for each turn.
> Uniquely label each wire at both ends.
>
> Lay the lengths together. Tightly tape the ends into a bundle at each
> end. Using an electric screwdriver, hand drill or a power drill on
> s-l-o-w, twist the lengths together until you get about two or three turns
> per foot. Keeping the bundle straight with a little bit of tension makes
> for a neat job.
>
> Feed the twisted wires through the hoop. Remove the bundling tape and
> join the wires end-to-end following the previously added labels to
> identify each wire. Solder and insulate the connections.
> You don't need to follow any sequence of connecting so long as you don't
> join any wire onto itself. For convenience, you might like to join the
> end of wire 1 onto the beginning of wire 2, end of wire 2 onto the
> beginning of wire 3 etc. You will eventually get left with the beginning
> of wire 1 and the end of wire n; these are your capacitor connect points.
>
> Voila - one twisted, multi-turn loop!
>
> If you want, you can put in more than the estimated number of turns and,
> if there are too many turns, disconnect them one at a time until the right
> inductance is reached. Or wire in a fancy switching arrangement to
> change bands with the one loop.
> You can leave the unused wires in the loop - just insulate each end and
> leave it hanging. If you start joining loose ends together you might
> create shorted turns and that ain't good for loop performance.
>
>

> All the best,
> Ray vk5ugs
>
>
>
>
> To: loopantennas@yahoogroups.com
> From: k5oai.sam@...
> Date: Fri, 4 Mar 2011 05:50:12 -0600
> Subject: [loopantennas] multi turn loop question
>
>
>
>

> I would like to enclose the turns inside a 32" diameter plastic hula hoop.
>
> I don't have any of the ribbon wire I have seen used for this.
>
> Can I just keep feeding a single wire inside hula hoops tubing,
>
> until I fill up the 5/8 diameter tube?
>
> The wires would end up rather scrambled,
>
> as opposed to being nicely laid out next to each other,
>
> like they would be if I used a ribbon wire.
>
>
>
> Again, my ONLY QUESTION here is.......
>
> will the scrambled method of a multi turn loop work just as well,
>
> as the nice neat ribbon wire one wire next to only the next wire
> configuration?
>
> Or must the wires all be in an neat side by side layout,
>
> like they are in a ribbon wire?
>
>
>
> TIA
>
>
>
> --
>
> GB & 73
>
> K5OAI
>
> Sam Morgan
>
>
>
>
>
>
>
>
>

>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

8335. Re: [loopantennas] multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-05 00:49:17 UTC
From: John Popelish
Topic: 8325 Message: 8335

On 03/04/2011 07:40 PM, Steve Ellington wrote:
> Interesting idea Ray. I guess one could just use some
> CAT5 with its 4 pairs. Of course I suppose the twisting
> will add some capacitance.

If I was using that wire, I would parallel the twisted strands into a single, two strand conductor. That pair has less capacitance to the neighboring pairs than each of those wires has to the other of the pair. That gives you 4 turns per loop of cable.

--
Regards,

John Popelish

8336. Re: [loopantennas] multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-05 02:01:31 UTC
From: Steve Ellington
Topic: 8325 Message: 8336

Well I don't know about this wire twisting idea.
CAT5 cable has 15pf per foot. If the loop is 8 ft. in circumference and you have just 2 loops you could wind up with 240pf and limit the high frequency tuning. I'm thinking the wires need to be separated considerably more.

Steve
N4LQ
----- Original Message -----
From: John Popelish
To: loopantennas@yahoogroups.com
Sent: Friday, March 04, 2011 7:49 PM
Subject: Re: [loopantennas] multi turn loop question

On 03/04/2011 07:40 PM, Steve Ellington wrote:
> Interesting idea Ray. I guess one could just use some
> CAT5 with its 4 pairs. Of course I suppose the twisting
> will add some capacitance.

If I was using that wire, I would parallel the twisted
strands into a single, two strand conductor. That pair has
less capacitance to the neighboring pairs than each of those
wires has to the other of the pair. That gives you 4 turns
per loop of cable.

--
Regards,

John Popelish

[Non-text portions of this message have been removed]

8337. Re: New video posted by Stealth Telecom. Loops R&D, mfg and tests brief

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-06 01:48:55 UTC
From: Hue Miller
Topic: 8337 Message: 8337

It's interesting to see glimpses of high-tech manufacturing up close, most of us don't know
how such things are done. Also interesting to see a line of apparently, vacuum capacitors
on the production line.
The caffeine-fueled metal rock music soundtrack, on the other hand, is UNintelligent
and annoying. -Hue Miller

8338. Re: multi turn loop question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-06 04:32:47 UTC
From: jpopelish
Topic: 8325 Message: 8338

John Popelish <jpopelish@...> wrote:

> If I was using that wire, I would parallel the twisted
> strands into a single, two strand conductor. That pair has
> less capacitance to the neighboring pairs than each of those
> wires has to the other of the pair. That gives you 4 turns
> per loop of cable.

To put some numbers behind the idea that it matters what strands you choose for successive turns, using Cat 5 cable, I ran a few tests of capacitance per meter, paralleling two groups of 4 strands, each group (assuming you would make a 2 turn loop out of a piece of cable), using a 3 meter length of cable.

The results are:

All striped whites grouped and all solid colors grouped, 188 pF/m

Green and blue pairs grouped, brown and orange pairs grouped, 107 pF/m

Green and Brown pairs grouped, blue and orange pairs grouped, 67.3 pF/m

Green and orange pairs grouped, blue and brown pairs grouped, 67.3 pF/m

Other cable samples may swap the last three results around (because it depends on the order of colors around the bundle), but I think the contrast between the first result and the other 3 would stand pretty well.

The result matrix gets more complex when there are 4 groupings (for 4 turns around the loop), and even more complex hen all 8 strands are connected in series for an 8 turn loop. There is also the problem of what to do with the other strands while you measure the capacitance two subsets that do not make up the total. I suspect the most useful way to perform those tests would be to actually make a rigid loop (say, with a hula hoop) and measure the self resonant frequency of each of the different series combinations in effective free space.

But I am willing to predict that the highest self resonant frequency in the 8 turn case would occur if adjacent turns were made up of the two strands of each twisted pair, so that the highest turn to turn capacitance had the least signal voltage (1/8th of the total loop voltage) across that highest strand ot strand capacitance. The worst case may be connecting all the solid colors in series, then connecting all the striped whites in series, in the same order. But I am not as confident of that result.

--
Regards,

John Popelish

8339. Measuring IMD of a balanced loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-08 20:42:09 UTC
From: John McKee
Topic: 8339 Message: 8339

Has anyone measured IMD of a balanced loop amplifier? The main thing I'm trying to figure out is how to couple the test signals into the balanced amplifier input from a 50 Ohm unbalanced source.
Thanks - John WB4OFT

[Non-text portions of this message have been removed]

8340. Re: [loopantennas] Measuring IMD of a balanced loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-08 20:51:56 UTC
From: Jack Smith
Topic: 8339 Message: 8340

I use a North Hills balun for measurements of balanced amplifiers, but a home brew balun should work as well.

Of course, it should be checked to verify the balun does not contribute to the IMD test floor. This can be a problem when the amplifier has an OIP2 > +100 dBm and OIP3 > +50 dBm.

Jack K8ZOA
www.cliftonlaboratories.com

On 3/8/2011 3:42 PM, John McKee wrote:
>
>
> Has anyone measured IMD of a balanced loop amplifier? The main thing
> I'm trying to figure out is how to couple the test signals into the
> balanced amplifier input from a 50 Ohm unbalanced source.
> Thanks - John WB4OFT
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

8341. Re: [loopantennas] Measuring IMD of a balanced loop amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-08 21:12:26 UTC
From: Chris Trask
Topic: 8339 Message: 8341

>
> Has anyone measured IMD of a balanced loop amplifier? The main thing I'm
> trying to figure out is how to couple the test signals into the balanced
> amplifier input from a 50 Ohm unbalanced source.
>

For a loop amplifier having a very low input impedance and a balanced input, I have a 4:1 BalBal transformer with a balanced L-pad that is tailored to the amplifier input impedance. I use a similar arrangement for making noise figure measurements, except that the transformer is a 4:1 UnBal and I carefully determine the power loss so as to correct the NF measurement.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8342. Re: WELLBROOK DIY or Pixel Technologies RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-09 00:45:12 UTC
From: lexluthor6969
Topic: 8151 Message: 8342

I ve had one of these Pixel beauties for some time and have spent some time looking under the hood. This is definitely not something that is easily reversed engineered and not something I would recommend for a DIY project. First of all the 30 dB preamp is very complex and has many transistors, tuning adjustments and exotic hard to get parts in it that are not readily available off the shelf. It has a very low noise figure and world□class intermod specs (OIP3 near 50 dBm and OIP3 over 110 dBm) that are much better than any receiver I've ever seen. There is nothing like this commercially available at a reasonable price. The one I have also has some very expensive Litz wire inside the tubing that is also hard to get. I would recommend that you search the posts by Chris Trask on this board. He has some schematics posted and some plans for a Moebius loop. While you won't get the "Ferrari" performance of the Pixel loop a "Ford" may get you to the same place.

Initially I saw the Pixel antenna demonstrated at a local Ham show and was quite impressed with it. They had it setup indoors under some arc lights that were in the convention hall that also had a metal roof. This was probably the worst place possible to demonstrate an antenna. They did an A/B comparison against an active dipole antenna that MFJ sells. The results were simply amazing. The loop was able to achieve crystal clear reception while the active dipole was swamped with noise from the nearby arc lamps across most bands.

I purchased one and when I got it setup I was not disappointed. It was much more quite than any antenna I have ever tried. (and I have tried many in my restricted location including a k9ay loop). The local noise from my neighbor's plasma TV and the local power line crude were greatly reduced or completely gone. I'm hearing stations I've never heard before. I'm a very happy camper and for $400 I consider it a great value.

Relative to the build quality and weather resistance, I was actually quite impressed (unlike some others.) I pulled off some of the covers on the preamp and loop and it looks like all of the circuit boards and electrical connections are conformal coated and all of the mechanical joints and fittings were hermetically sealed with silicone or rubber gaskets.

The outdoor preamp is in a nice die cast aluminum enclosure and is painted white to reduce solar heating in hot climates. (A nice touch for my location.) Also all of the required hardware, jumpers, adapters and cables for mounting and installation were included. They use rivets to attach and secure the aluminum tubes, but to me they seem very sturdy, electrically sound and mechanically robust.

Lex

--- In loopantennas@yahoogroups.com, Nota Real <not_a_real@...> wrote:
>
>
> Maybe the RH PRO-1A could be easier to reverse engineer ?
> According to tests it seems to be working better than Wellbrooks.
> If someone who has this antenna could take some photos from inside
> the antenna junction box and preamplifier etc ?
> How many loop wires is there inside the aluminium tube etc.
> BR

>
> > To: loopantennas@yahoogroups.com
> > From: skyspeed77@...
> > Date: Tue, 18 Jan 2011 04:45:51 +0000
> > Subject: [loopantennas] WELLBROOK DIY
> >
> > Has anyone reverse engineered the Wellbrook Loop and setup a similar
> > DIY formula for building your own, perhaps of copper tubing ?
> >
> > Also a schematic for an amp to match that performance quality, or a
> > commercially available one ?
> >
> > Later I have some questions about wire loops with variable caps, which I've been studying seriously and gathering components.
> >
> > I'm an SWL with a current interest in the AM band, but will likely go back to shortwave soon.
> > My listening location is poor but I haver access to a second story roof. Poor means a building twice the height to the West and main street with lots of visable transformers on the power poles, first floor location, about 100 feet back from the power poles. I'm in L.A.
> > and also have some interest in DXing the Tropic Bands.
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

8344. AW: [loopantennas] Re: WELLBROOK DIY or Pixel Technologies RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-09 08:03:32 UTC
From: Stephan Schaa
Topic: 8151 Message: 8344

This test sounds much like an advertisement. Are you working for or at Pixel Technologies??

Stephan

Von: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] Im Auftrag von lexluthor6969
Gesendet: Mittwoch, 9. März 2011 01:45
An: loopantennas@yahoogroups.com
Betreff: [loopantennas] Re: WELLBROOK DIY or Pixel Technologies RF PRO-1A

I ve had one of these Pixel beauties for some time and have spent some time looking under the hood. This is definitely not something that is easily reversed engineered and not something I would recommend for a DIY project. First of all the 30 dB preamp is very complex and has many transistors, tuning adjustments and exotic hard to get parts in it that are not readily available off the shelf. It has a very low noise figure and world□class intermod specs (OIP3 near 50 dBm and OIP3 over 110 dBm) that are much better than any receiver I've ever seen. There is nothing like this commercially available at a reasonable price. The one I have also has some very expensive Litz wire inside the tubing that is also hard to get. I would recommend that you search the posts by Chris Trask on this board. He has some schematics posted and some plans for a Moebius loop. While you won't get the "Ferrari" performance of the Pixel loop a "Ford" may get you to the same place.

Initially I saw the Pixel antenna demonstrated at a local Ham show and was quite impressed with it. They had it setup indoors under some arc lights that were in the convention hall that also had a metal roof. This was probably the worst place possible to demonstrate an antenna. They did an A/B comparison against an active dipole antenna that MFJ sells. The results were simply amazing. The loop was able to achieve crystal clear reception while the active dipole was swamped with noise from the nearby arc lamps across most bands.

I purchased one and when I got it setup I was not disappointed. It was much more quite than any antenna I have ever tried. (and I have tried many in my restricted location including a k9ay loop). The local noise from my neighbor's plasma TV and the local power line crude were greatly reduced or completely gone. I'm hearing stations I've never heard before. I'm a very happy camper and for $400 I consider it a great value.

Relative to the build quality and weather resistance, I was actually quite impressed (unlike some others.) I pulled off some of the covers on the

preamp and loop and it looks like all of the circuit boards and electrical connections are conformal coated and all of the mechanical joints and fittings were hermetically sealed with silicone or rubber gaskets.

The outdoor preamp is in a nice die cast aluminum enclosure and is painted white to reduce solar heating in hot climates. (A nice touch for my location.) Also all of the required hardware, jumpers, adapters and cables for mounting and installation were included. They use rivets to attach and secure the aluminum tubes, but to me they seem very sturdy, electrically sound and mechanically robust.

Lex

--- In loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
, Nota Real <not_a_real@...> wrote:
>
>
> Maybe the RH PRO-1A could be easier to reverse engineer ?
> According to tests it seems to be working better than Wellbrooks.
> If someone who has this antenna could take some photos from inside
> the antenna junction box and preamplifier etc ?
> How many loop wires is there inside the aluminium tube etc.
> BR
>
> > To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>

> > From: skyspeed77@...
> > Date: Tue, 18 Jan 2011 04:45:51 +0000
> > Subject: [loopantennas] WELLBROOK DIY
> >
> > Has anyone reverse engineered the Wellbrook Loop and setup a similar
> > DIY formula for building your own, perhaps of copper tubing ?
> >
> > Also a schematic for an amp to match that performance quality, or a
> > commercially available one ?
> >
> > Later I have some questions about wire loops with variable caps, which
I've been studying seriously and gathering components.
> >
> > I'm an SWL with a current interest in the AM band, but will likely go
back to shortwave soon.
> > My listening location is poor but I haver access to a second story roof.
Poor means a building twice the height to the West and main street with lots
of visable transformers on the power poles, first floor location, about 100
feet back from the power poles. I'm in L.A.
> > and also have some interest in DXing the Tropic Bands.
> >
> >
> >
> > ------------------------------------
> >

> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

---

eMail ist virenfrei.
Von AVG überprüft - www.avg.de
Version: 10.0.1204 / Virendatenbank: 1435/3492 - Ausgabedatum: 08.03.2011

[Non-text portions of this message have been removed]

8345. What to do about spam

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-09 19:25:02 UTC
From: AlienRelics
Topic: 8345 Message: 8345

Sorry about the spam that slipped through.

FYI, I'd prefer that if you see spam on the list, in the files, links, calendar, database, etc. that you NOT post on the list about it. Instead please email the listowner address directly
loopantenna-owner@yahoogroups.com and let me know about it.

That way I can take care of it with the minimum of fuss.

Thanks,
Steve Greenfield AE7HD
Your friendly neighborhood moderator

8346. Re: What to do about spam

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-11 03:22:48 UTC
From: AlienRelics
Topic: 8345 Message: 8346

I was NOT talking about lexluthor. His post is on topic. Sorry for any confusion.

I was talking about a message that was clearly spam, completely off-topic. I've already deleted it and banned the poster.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "AlienRelics" <alienrelics@...> wrote:
>
> Sorry about the spam that slipped through.
>
> FYI, I'd prefer that if you see spam on the list, in the files, links, calendar, database, etc. that you NOT post on the list about it. Instead please email the listowner address directly
> loopantenna-owner@yahoogroups.com and let me know about it.
>
> That way I can take care of it with the minimum of fuss.
>
> Thanks,
> Steve Greenfield AE7HD
> Your friendly neighborhood moderator
>

8347. Re: WELLBROOK DIY or Pixel Technologies RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-11 21:46:23 UTC
From: lexluthor6969
Topic: 8151 Message: 8347

Stephan:
i have no affiliation with Pixel. Just a very happy customer. It solved some problems that I haven't been able to solve with any other antenna. You might want to look at the reviews of this antenna on e-ham.net. Lots of others have found this antenna a great performer as well.

Lex

--- In loopantennas@yahoogroups.com, "Stephan Schaa" <schaa@...> wrote:
>
> This test sounds much like an advertisement. Are you working for or at Pixel
> Technologies??
>
> Stephan
>
>
>
>
> _____
>
> Von: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] Im
> Auftrag von lexluthor6969
> Gesendet: Mittwoch, 9. März 2011 01:45
> An: loopantennas@yahoogroups.com
> Betreff: [loopantennas] Re: WELLBROOK DIY or Pixel Technologies RF PRO-1A
>
>
>
>
> I ve had one of these Pixel beauties for some time and have spent some time
> looking under the hood. This is definitely not something that is easily
> reversed engineered and not something I would recommend for a DIY project.
> First of all the 30 dB preamp is very complex and has many transistors,
> tuning adjustments and exotic hard to get parts in it that are not readily
> available off the shelf. It has a very low noise figure and world□class
> intermod specs (OIP3 near 50 dBm and OIP3 over 110 dBm) that are much better
> than any receiver I've ever seen. There is nothing like this commercially
> available at a reasonable price. The one I have also has some very expensive
> Litz wire inside the tubing that is also hard to get. I would recommend that
> you search the posts by Chris Trask on this board. He has some schematics
> posted and some plans for a Moebius loop. While you won't get the "Ferrari"
> performance of the Pixel loop a "Ford" may get you to the same place.
>
> Initially I saw the Pixel antenna demonstrated at a local Ham show and was
> quite impressed with it. They had it setup indoors under some arc lights

> that were in the convention hall that also had a metal roof. This was
> probably the worst place possible to demonstrate an antenna. They did an A/B
> comparison against an active dipole antenna that MFJ sells. The results were
> simply amazing. The loop was able to achieve crystal clear reception while
> the active dipole was swamped with noise from the nearby arc lamps across
> most bands.
>
> I purchased one and when I got it setup I was not disappointed. It was much
> more quite than any antenna I have ever tried. (and I have tried many in my
> restricted location including a k9ay loop). The local noise from my
> neighbor's plasma TV and the local power line crude were greatly reduced or
> completely gone. I'm hearing stations I've never heard before. I'm a very
> happy camper and for $400 I consider it a great value.
>
> Relative to the build quality and weather resistance, I was actually quite
> impressed (unlike some others.) I pulled off some of the covers on the
> preamp and loop and it looks like all of the circuit boards and electrical
> connections are conformal coated and all of the mechanical joints and
> fittings were hermetically sealed with silicone or rubber gaskets.
>
> The outdoor preamp is in a nice die cast aluminum enclosure and is painted
> white to reduce solar heating in hot climates. (A nice touch for my
> location.) Also all of the required hardware, jumpers, adapters and cables
> for mounting and installation were included. They use rivets to attach and
> secure the aluminum tubes, but to me they seem very sturdy, electrically
> sound and mechanically robust.
>
> Lex
>
> --- In loopantennas@...m <mailto:loopantennas%40yahoogroups.com>
> , Nota Real <not_a_real@> wrote:
> >
> >
> > Maybe the RH PRO-1A could be easier to reverse engineer ?
> > According to tests it seems to be working better than Wellbrooks.
> > If someone who has this antenna could take some photos from inside
> > the antenna junction box and preamplifier etc ?
> > How many loop wires is there inside the aluminium tube etc.
> > BR
> >
> > > To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> >
> > > From: skyspeed77@
> > > Date: Tue, 18 Jan 2011 04:45:51 +0000
> > > Subject: [loopantennas] WELLBROOK DIY
> > >
> > > Has anyone reverse engineered the Wellbrook Loop and setup a similar
> > > DIY formula for building your own, perhaps of copper tubing ?
> > >

> > > Also a schematic for an amp to match that performance quality, or a
> > > commercially available one ?
> > >
> > > Later I have some questions about wire loops with variable caps, which
> I've been studying seriously and gathering components.
> > >
> > > I'm an SWL with a current interest in the AM band, but will likely go
> back to shortwave soon.
> > > My listening location is poor but I haver access to a second story roof.
> Poor means a building twice the height to the West and main street with lots
> of visable transformers on the power poles, first floor location, about 100
> feet back from the power poles. I'm in L.A.
> > > and also have some interest in DXing the Tropic Bands.
> > >
> > >
> > >
> > > ---
> > >
> > > If you've got links, post them in the Links section!
> > > http://groups.yahoo.com/group/loopantennas/links
> > >
> > > Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> > > http://groups.yahoo.com/group/loopantennas/files
> > >
> > > You can now view images at higher resolution in Photos. Upload JPG and
> GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > >
> > > And please trim all this when replying!Yahoo! Groups Links
> > >
> > >
> > >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
>
>
>
> _____
>
>
> eMail ist virenfrei.
> Von AVG überprüft - www.avg.de
> Version: 10.0.1204 / Virendatenbank: 1435/3492 - Ausgabedatum: 08.03.2011
>
>

>
> [Non-text portions of this message have been removed]
>

8348. Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-12 23:56:03 UTC
From: Brian Burns
Topic: 8348 Message: 8348

Hello All,

An antenna analyzer looks like a useful tool, but I wonder if one gets used much after getting an antenna tuned up. I would buy one to use on the big vertical loop that I'm planning, but I figure that it would just sit on the shelf and gather cob-webs after an initial use. Anyone got one to rent?

Cheers,

Brian Burns

See my website: www.lessonsinlutherie.com

[Non-text portions of this message have been removed]

8349. WiMo baby loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-13 16:03:05 UTC
From: stephen_qrp
Topic: 8349 Message: 8349

Hello

Bit of a long shot, but does anybody have any knowledge or experience of the WiMo baby loop.
I am using an MFJ-1786 which is surprisingly good and now want a second TX loop.

Unfortunately I cannot find any meaningful feedback on the WiMo which is puzzlingly me, maybe nobody is buying them.

Regards to all

Stephen

8350. Re: [loopantennas] WiMo baby loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-13 17:07:17 UTC
From: van wd8aam
Topic: 8349 Message: 8350

At 16:03 3/13/2011, you wrote:
>Hello
>Bit of a long shot, but does anybody have any knowledge or
>experience of the WiMo baby loop.
>I am using an MFJ-1786 which is surprisingly good and now want a
>second TX loop.
>Unfortunately I cannot find any meaningful feedback on the WiMo
>which is puzzlingly me,
>maybe nobody is buying them.
>Regards to all
>Stephen

It seems to me that the reason there aren't more review
on the WIMO baby loop is that it's almost $1500.
Try these links below.
wd8aam
Van Lincoln

http://www.eham.net/reviews/detail/6666

http://www.wimo.de/cgi-bin/verteiler.pl?url=antloop_e.htm

http://www.astrosurf.com/luxorion/qsl-portable2.htm

http://www.aa5tb.com/loop.html

http://www.wimo.com/cgi-bin/verteiler.pl?url=topalbum_e.html

http://www.astrosurf.com/luxorion/qsl-antenna3.htm

http://it.narkive.com/2004/10/21/5533168-i3vhf-baby-loop.html

http://www.radiobanter.com/showthread.php?t=71139

>-----------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>

>And please trim all this when replying!Yahoo! Groups Links
>
>
>

8351. Re: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-13 17:08:26 UTC
From: M HOLDEN
Topic: 8348 Message: 8351

Well this is what radio clubs should be all about. Sadly, many appear to fall short. Mike G4HOL

From: Brian Burns <burnsguitar@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, 12 March 2011, 23:56
Subject: [loopantennas] Use antenna analyzer?

Hello All,

An antenna analyzer looks like a useful tool, but I wonder if one gets used much after getting an antenna tuned up. I would buy one to use on the big vertical loop that I'm planning, but I figure that it would just sit on the shelf and gather cob-webs after an initial use. Anyone got one to rent?

Cheers,

Brian Burns

See my website: www.lessonsinlutherie.com

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8352. RE: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-13 23:06:08 UTC
From: Brian Burns
Topic: 8348 Message: 8352

Hello Mike,

“Well this is what radio clubs should be all about. Sadly, many appear to fall short. Mike G4HOL”

Despair thee not my friend. All we have to do is to keep following Steve Ratzlaff’s example of generosity, because what goes around does truly come around. I just this morning took delivery of a complete ham station on permanent loan from Dennis Regan K6ZJU. I helped him get started in ham radio 55 years ago when we were both still in high school!

Dennis and another high school buddy, Wayne Mills N7NG looked me up through the internet, and Dennis offered to outfit me completely with spare equipment if I wanted to get back into ham radio. No Heath AT 1’s and ARC 5’s either—a Kenwood TS-530S, a couple of antenna tuners, G5RV antenna etc., right down to the J-47 straight key! I’m just now opening up the boxes.

Cheers,

Brian Burns….. once and future K6UCD

See my website: www.lessonsinlutherie.com

.

<http://geo.yahoo.com/serv?s=97359714/grpId=12851910/grpspId=1708396379/msgId=8351/stime=1300036119/nc1=1/nc2=2/nc3=3>

[Non-text portions of this message have been removed]

8353. Re: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-13 23:49:39 UTC
From: David Anderson
Topic: 8348 Message: 8353

Brian,

Totally off the subject, but Wayne and I were neighbors and I helped him get started in ham radio way back then. He was just at my house with his wife on January 28th and 28th. I don't recall knowing you, but I was W6TUZ and graduated from Sequoia in '55. I decided to get back in ham radio a couple of years ago and now I am KI6RXY.

73's
David Anderson

From: Brian Burns <burnsguitar@...>
To: loopantennas@yahoogroups.com
Sent: Sun, March 13, 2011 4:06:08 PM
Subject: RE: [loopantennas] Use antenna analyzer?

Hello Mike,

“Well this is what radio clubs should be all about. Sadly, many appear to fall short. Mike G4HOL”

Despair thee not my friend. All we have to do is to keep following Steve Ratzlaff’s example of generosity, because what goes around does truly come around. I just this morning took delivery of a complete ham station on permanent loan from Dennis Regan K6ZJU. I helped him get started in ham radio 55 years ago when we were both still in high school!

Dennis and another high school buddy, Wayne Mills N7NG looked me up through the internet, and Dennis offered to outfit me completely with spare equipment if I wanted to get back into ham radio. No Heath AT 1’s and ARC 5’s either—a Kenwood TS-530S, a couple of antenna tuners, G5RV antenna etc., right down to the J-47 straight key! I’m just now opening up the boxes.

Cheers,

Brian Burns….. once and future K6UCD

See my website: www.lessonsinlutherie.com

.

<http://geo.yahoo.com/serv?s=97359714/grpId=12851910/grpspId=1708396379/msgId=8351/stime=1300036119/nc1=1/nc2=2/nc3=3>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8354. RE: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-14 02:01:36 UTC
From: Brian Burns
Topic: 8348 Message: 8354

Hello David,

Totally off the subject, but Wayne and I were neighbors and I helped him get started in ham radio way back then. He was just at my house with his wife on January 28th and 28th. I don't recall knowing you, but I was W6TUZ and graduated from Sequoia in '55. I decided to get back in ham radio a couple of years ago and now I am KI6RXY.

Well it is a small world isn’t it! Wayne stopped by my place on that trip up to Fort Bragg which must have been about the same time. His wife grew up in Fort Bragg and they were married here about a thousand years ago! They were up here to visit relatives.

I started at Sequoia in the fall of ’55 as a junior, having moved from southern Texas where I was W5BRO. I must have just missed you. I’m the guy that got given the diathermy machine by my foot doctor. I traded the huge power transformer to Wayne for something or other, and he still has it—using it for a door stop I suppose.

Where are you located now?

Cheers,

Brian

[Non-text portions of this message have been removed]

8355. Re: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-14 15:14:37 UTC
From: David Anderson
Topic: 8348 Message: 8355

Wow. Now I remember Wayne talking about visiting a "Brian" on his way up to FB. He was talking about the big transformer he got from you.

I live in Saratoga; where do you live? Are you on the air these days and, if so, what bands do you operate on?

I hope to be visiting Wayne in June as we finish a cross country road trip.

David

From: Brian Burns <burnsguitar@...>
To: loopantennas@yahoogroups.com
Sent: Sun, March 13, 2011 7:01:36 PM
Subject: RE: [loopantennas] Use antenna analyzer?

Hello David,

Totally off the subject, but Wayne and I were neighbors and I helped him get started in ham radio way back then. He was just at my house with his wife on January 28th and 28th. I don't recall knowing you, but I was W6TUZ and graduated

from Sequoia in '55. I decided to get back in ham radio a couple of years ago and now I am KI6RXY.

Well it is a small world isn't it! Wayne stopped by my place on that trip up to Fort Bragg which must have been about the same time. His wife grew up in Fort Bragg and they were married here about a thousand years ago! They were up here to visit relatives.

I started at Sequoia in the fall of '55 as a junior, having moved from southern Texas where I was W5BRO. I must have just missed you. I'm the guy that got given the diathermy machine by my foot doctor. I traded the huge power transformer to Wayne for something or other, and he still has it—using it for a door stop I suppose.

Where are you located now?

Cheers,

Brian

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8356. RE: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-14 16:01:38 UTC
From: Brian Burns
Topic: 8348 Message: 8356

Hello David,

Wow. Now I remember Wayne talking about visiting a "Brian" on his way up to FB.
He was talking about the big transformer he got from you.

I'm in Fort Bragg where we moved 10 years ago after 31 years in Palo Alto. Wayne came by on a Sunday afternoon. We spent a couple of delightful hours talking about old times at Sequoia, and what we had done with our lives, and he gave me some advice about hanging up the big vertical loop that I'm planning.

The big transformer came from a diathermy machine that my podiatrist wasn't using any more. It had what looked like a pair of 813's in an oscillator circuit at around 30 mhz. It had minimal rf shielding and must have put out at least 500 watts. A real monster. I cannibalized it, and traded off parts to the guys that could afford to build high power rigs.

Are you on the air these days and, if so, what bands do you operate on?

I let my license lapse in about 1960, and have to bone up on the latest regulations and technology. I got my general class ticket in Texas when I was 13, and had the call W5BRO. When I moved to Redwood City in '55 I got K6UCD, which Dennis Regan (K6ZJU) tells me is still available, so I will apply to get it again.

I used to work 40 meter cw, though Dennis and I had a delightful time on 15 meter 'phone. We built the $3.96 beam from CQ magazine (aluminum foil wrapped bamboo fishing poles), and borrowed a cathode modulator from somebody to plug into the keying jack of his cw transmitter. We worked stations on the east coast with that pitiful rig, and had a ball.

Cheers,

Brian

See my website: www.lessonsinlutherie.com

[Non-text portions of this message have been removed]

8357. Re: WiMo baby loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-14 17:01:56 UTC
From: iv3zbl
Topic: 8349 Message: 8357

You can fine them at the producer site:

http://www.ciromazzoni.com/English/Loop%20Antenna.htm

They are quite popular in Italy among antenna-restricted hams.

73 de Andy IV3ZBL

--- In loopantennas@yahoogroups.com, "stephen_qrp" <stephen_qrp@...> wrote:
>
> Hello
>
> Bit of a long shot, but does anybody have any knowledge or experience of the WiMo baby loop.
> I am using an MFJ-1786 which is surprisingly good and now want a second TX loop.
>
> Unfortunately I cannot find any meaningful feedback on the WiMo which is puzzlingly me,
> maybe nobody is buying them.
>
> Regards to all
>
> Stephen
>

8358. Re: WiMo baby loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-14 22:01:50 UTC
From: iv3zbl
Topic: 8349 Message: 8358

Ooops, sorry, it should have been written:
"You can find them at the producer's site:"

Andy IV3ZBL

--- In loopantennas@yahoogroups.com, "iv3zbl" <iv3zbl@...> wrote:
>
>
> You can fine them at the producer site:
>
> http://www.ciromazzoni.com/English/Loop%20Antenna.htm
>
> They are quite popular in Italy among antenna-restricted hams.
>
> 73 de Andy IV3ZBL
>
> --- In loopantennas@yahoogroups.com, "stephen_qrp" <stephen_qrp@> wrote:
> >
> > Hello
> >
> > Bit of a long shot, but does anybody have any knowledge or experience of the WiMo baby loop.
> > I am using an MFJ-1786 which is surprisingly good and now want a second TX loop.
> >
> > Unfortunately I cannot find any meaningful feedback on the WiMo which is puzzlingly me,
> > maybe nobody is buying them.
> >
> > Regards to all
> >
> > Stephen
> >
>

8359. Re: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-15 03:42:53 UTC
From: David Anderson
Topic: 8348 Message: 8359

I got a new license two years ago and have spent the entire time setting up a station so that my operation time has been minimal. I am able to get on 40 thru 10 meters. Most of my contacts have been on 20 with only a few on 17 and 15. If we were communicate on the air, I think that 40 would be the best choice. I have a vertical for 40 with a very poor ground system.

What capability do you have on 40? Also, what are the characteristics of the loop you are installing? I plan to put up a 500' loop sometime this year.

From: Brian Burns <burnsguitar@yahoo.com>
To: loopantennas@yahoogroups.com
Sent: Mon, March 14, 2011 9:01:38 AM
Subject: RE: [loopantennas] Use antenna analyzer?

Hello David,

Wow. Now I remember Wayne talking about visiting a "Brian" on his way up to FB. He was talking about the big transformer he got from you.

I’m in Fort Bragg where we moved 10 years ago after 31 years in Palo Alto. Wayne came by on a Sunday afternoon. We spent a couple of delightful hours talking about old times at Sequoia, and what we had done with our lives, and he gave me some advice about hanging up the big vertical loop that I’m planning.

The big transformer came from a diathermy machine that my podiatrist wasn’t using any more. It had what looked like a pair of 813’s in an oscillator circuit at around 30 mhz. It had minimal rf shielding and must have put out at least 500 watts. A real monster. I cannibalized it, and traded off parts to the guys that could afford to build high power rigs.

Are you on the air these days and, if so, what bands do you operate on?

I let my license lapse in about 1960, and have to bone up on the latest regulations and technology. I got my general class ticket in Texas when I was 13, and had the call W5BRO. When I moved to Redwood City in ’55 I got K6UCD, which Dennis Regan (K6ZJU) tells me is still available, so I will apply to get it again.

I used to work 40 meter cw, though Dennis and I had a delightful time on 15 meter ‘phone. We built the $3.96 beam from CQ magazine (aluminum foil wrapped bamboo fishing poles), and borrowed a cathode modulator from somebody to plug into the keying jack of his cw transmitter. We worked stations on the east coast with that pitiful rig, and had a ball.

Cheers,

Brian

See my website: www.lessonsinlutherie.com

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8360. RE: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-15 16:17:08 UTC
From: Brian Burns
Topic: 8348 Message: 8360

Hello David,

What capability do you have on 40? Also, what are the characteristics of the loop you are installing? I plan to put up a 500' loop sometime this year.

Dennis has loaned me a Kenwood TS-530S which does everything on every band with over 100 watts output. I've never operated such a sophisticated piece of equipment—never seen so many knobs! But it will be a while before I get my license renewed.

I've decided to start with a small horizontal loop (180 feet) around the perimeter of my shop. It'll be quick, cheap, and mostly for receiving. I'll see if I can get out with it when I get my new ticket.

The large loop that I'm planning will be around 500 ft also, with a matching stub to get it to resonate on 160. It will have to be vertical, as that is all I have room for at my end of our triangular lot. I'm a bit concerned about the radiation angles being progressively higher on the higher bands, but I'll just see how it works on them.

Cheers,

Brian

From: Brian Burns <burnsguitar@yahoo.com <mailto:burnsguitar%40yahoo.com> >
To: loopantennas@...m <mailto:loopantennas%40yahoogroups.com>
Sent: Mon, March 14, 2011 9:01:38 AM
Subject: RE: [loopantennas] Use antenna analyzer?

Hello David,

Wow. Now I remember Wayne talking about visiting a "Brian" on his way up to FB. He was talking about the big transformer he got from you.

I'm in Fort Bragg where we moved 10 years ago after 31 years in Palo Alto. Wayne came by on a Sunday afternoon. We spent a couple of delightful hours talking about old times at Sequoia, and what we had done with our lives, and he gave me some advice about hanging up the big vertical loop that I'm planning.

The big transformer came from a diathermy machine that my podiatrist wasn't using any more. It had what looked like a pair of 813's in an oscillator circuit at around 30 mhz. It had minimal rf shielding and must have put out at least 500 watts. A real monster. I cannibalized it, and traded off parts to the guys that could afford to build high power rigs.

Are you on the air these days and, if so, what bands do you operate on?

I let my license lapse in about 1960, and have to bone up on the latest regulations and technology. I got my general class ticket in Texas when I was

13, and had the call W5BRO. When I moved to Redwood City in ’55 I got K6UCD, which Dennis Regan (K6ZJU) tells me is still available, so I will apply to get it again.

I used to work 40 meter cw, though Dennis and I had a delightful time on 15 meter ‘phone. We built the $3.96 beam from CQ magazine (aluminum foil wrapped bamboo fishing poles), and borrowed a cathode modulator from somebody to plug into the keying jack of his cw transmitter. We worked stations on the east coast with that pitiful rig, and had a ball.

Cheers,

Brian

See my website: www.lessonsinlutherie.com

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8361. Coupling Loop Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-15 21:05:43 UTC
From: Ralph
Topic: 8361 Message: 8361

This is a real neophyte question -- apologies in advance -- but please confirm how I should connect my coupling loop, which I am using to take the signal off my small (90 meter / 60 meter) shortwave loop antenna.

Do I

(a) solder one end of the coupling loop to the coax inner conductor, and the other end to the ground shielding? or

(b) only solder one end of the loop to the inner coax conductor and leave the other end of the coupling loop unconnected to anything; or

(c) solder both ends of the coupling loop to the inner conductor of the coax.

I want to connect this to coax because I have PL-239 jacks on my antenna tuning unit, so want to use a PL-239 plug on the coax from the small loop.

THANK IN ADVANCE!

8362. Re: [loopantennas] Coupling Loop Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-15 21:38:06 UTC
From: Don
Topic: 8361 Message: 8362

Hi,

The coupling loop does not connect to the main loop. It is a separate loop that couples the RF to your feed line. It should be about 1/5th the size of the main loop
or 1 turn. You may have to experiment with the placement in the main loop for best signal.

Don
Upland, CA

On 15-Mar-11 14:05, Ralph wrote:
> This is a real neophyte question -- apologies in advance -- but please confirm how I should connect my coupling loop, which I am using to take the signal off my small (90 meter / 60 meter) shortwave loop antenna.
>
> Do I
>
> (a) solder one end of the coupling loop to the coax inner conductor, and the other end to the ground shielding? or
>
> (b) only solder one end of the loop to the inner coax conductor and leave the other end of the coupling loop unconnected to anything; or
>
> (c) solder both ends of the coupling loop to the inner conductor of the coax.
>
> I want to connect this to coax because I have PL-239 jacks on my antenna tuning unit, so want to use a PL-239 plug on the coax from the small loop.
>
> THANK IN ADVANCE!
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>

>
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.894 / Virus Database: 271.1.1/3508 - Release Date: 03/15/11 00:34:00
>

8363. Re: Coupling Loop Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-15 22:56:53 UTC
From: Greg Ella
Topic: 8361 Message: 8363

This assumes that your "main loop" is connected to a fixed or variable capacitor that resonates it at some frequency of interest. Your coupling loop then acts as a one turn transformer winding to pick up the signal. One end of the coupling loop can be connected to the shield of your lead in coax, and the other end connects to the center conductor of your lead in coax.

Greg Ella
Livermore, CA

--- In loopantennas@yahoogroups.com, Don <stb55@...> wrote:
>
> Hi,
>
> The coupling loop does not connect to the main loop. It is a separate loop that couples the RF to your feed line. It should be about 1/5th the size of the main loop
> or 1 turn. You may have to experiment with the placement in the main loop for best signal.
>
> Don
> Upland, CA
>
> On 15-Mar-11 14:05, Ralph wrote:
> > This is a real neophyte question -- apologies in advance -- but please confirm how I should connect my coupling loop, which I am using to take the signal off my small (90 meter / 60 meter) shortwave loop antenna.
> >
> > Do I
> >
> > (a) solder one end of the coupling loop to the coax inner conductor, and the other end to the ground shielding? or
> >
> > (b) only solder one end of the loop to the inner coax conductor and leave the other end of the coupling loop unconnected to anything; or
> >
> > (c) solder both ends of the coupling loop to the inner conductor of the coax.
> >
> > I want to connect this to coax because I have PL-239 jacks on my antenna tuning unit, so want to use a PL-239 plug on the coax from the small loop.
> >
> > THANK IN ADVANCE!
> >
> >
> >
> > ------------------------------------
> >

> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> > No virus found in this incoming message.
> > Checked by AVG - www.avg.com
> > Version: 9.0.894 / Virus Database: 271.1.1/3508 - Release Date: 03/15/11 00:34:00
> >
>

8364. Re: Coupling Loop Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-16 12:56:35 UTC
From: Ralph
Topic: 8361 Message: 8364

THANKS GREGG, THAT WAS THE ANSWER I WAS LOOKING FOR! (I thought that was probably the way forward, but wasn't certain.)

The various plans I've been looking at typically don't specify how to attach a plug to the coupling loop, to feed the receiver input . . .

To others, thank you also for taking the time to reply. I didn't word my question very well. Yes, I did already understand that the coupling loop was only inductively linked (not physically connected) to the main resonant/tuned loop.

My main loop is 4 turns, and I am planning a 2 turn coupling loop.

Cheers,

Ralph

--- In loopantennas@yahoogroups.com, "Greg Ella" <gregella@...> wrote:
>
> This assumes that your "main loop" is connected to a fixed or variable capacitor that resonates it at some frequency of interest. Your coupling loop then acts as a one turn transformer winding to pick up the signal. One end of the coupling loop can be connected to the shield of your lead in coax, and the other end connects to the center conductor of your lead in coax.
>
> Greg Ella
> Livermore, CA
>
> --- In loopantennas@yahoogroups.com, Don <stb55@> wrote:
> >
> > Hi,
> >
> > The coupling loop does not connect to the main loop. It is a separate loop that couples the RF to your feed line. It should be about 1/5th the size of the main loop
> > or 1 turn. You may have to experiment with the placement in the main loop for best signal.
> >
> > Don
> > Upland, CA
> >
> > On 15-Mar-11 14:05, Ralph wrote:
> > > This is a real neophyte question -- apologies in advance -- but please confirm how I should connect my coupling loop, which I am using to take the signal off my small (90 meter / 60 meter) shortwave loop antenna.
> > >
> > > Do I
> > >

> > > (a) solder one end of the coupling loop to the coax inner conductor, and the other end to the ground shielding? or
> > >
> > > (b) only solder one end of the loop to the inner coax conductor and leave the other end of the coupling loop unconnected to anything; or
> > >
> > > (c) solder both ends of the coupling loop to the inner conductor of the coax.
> > >
> > > I want to connect this to coax because I have PL-239 jacks on my antenna tuning unit, so want to use a PL-239 plug on the coax from the small loop.
> > >
> > > THANK IN ADVANCE!
> > >
> > >
> > >
> > > ------------------------------------
> > >
> > > If you've got links, post them in the Links section!
> > > http://groups.yahoo.com/group/loopantennas/links
> > >
> > > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > > http://groups.yahoo.com/group/loopantennas/files
> > >
> > > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > >
> > > And please trim all this when replying!Yahoo! Groups Links
> > >
> > >
> > >
> > >
> > >
> > > No virus found in this incoming message.
> > > Checked by AVG - www.avg.com
> > > Version: 9.0.894 / Virus Database: 271.1.1/3508 - Release Date: 03/15/11 00:34:00
> > >
> >
>

8365. Re: Coupling Loop Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-16 15:16:12 UTC
From: lowalacrity
Topic: 8361 Message: 8365

Ralph,
What is the diameter of the main loop? Unless you're looking to use it for specific need or just experimentation, not to decourage you, but you probably won't get much better results than off the whip.
But then, I'm not sure without more info. An amplified loop might be considered? The Degen DE 31 comes to mind. I'm in the process of building a small 8" 20 turn tunable SW loop with taps so as to tune a very broad range. I will be using with my Palomar base amp.

John

--- In loopantennas@yahoogroups.com, "Ralph" <ralphperry@...> wrote:
>
>
> THANKS GREGG, THAT WAS THE ANSWER I WAS LOOKING FOR! (I thought that was probably the way forward, but wasn't certain.)
>
> The various plans I've been looking at typically don't specify how to attach a plug to the coupling loop, to feed the receiver input . . .
>
> To others, thank you also for taking the time to reply. I didn't word my question very well. Yes, I did already understand that the coupling loop was only inductively linked (not physically connected) to the main resonant/tuned loop.
>
> My main loop is 4 turns, and I am planning a 2 turn coupling loop.
>
> Cheers,
>
> Ralph

8366. Re: Coupling Loop Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-16 15:35:55 UTC
From: lowalacrity
Topic: 8361 Message: 8366

Ralph, Oops, sorry, I just noticed noticed the details I missed. (ATU, PL-239) Looks like you got what you needed, so, please disregard my suggestions. Good luck with your mag loop...

--- In loopantennas@yahoogroups.com, "lowalacrity" <jcstumm@...> wrote:
>
> Ralph,
> What is the diameter of the main loop? Unless you're looking to use it for specific need or just experimentation, not to decourage you, but you probably won't get much better results than off the whip.
> But then, I'm not sure without more info. An amplified loop might be considered? The Degen DE 31 comes to mind. I'm in the process of building a small 8" 20 turn tunable SW loop with taps so as to tune a very broad range. I will be using with my Palomar base amp.
>
> John
>
> --- In loopantennas@yahoogroups.com, "Ralph" <ralphperry@> wrote:
> >
> >
> > THANKS GREGG, THAT WAS THE ANSWER I WAS LOOKING FOR! (I thought that was probably the way forward, but wasn't certain.)
> >
> > The various plans I've been looking at typically don't specify how to attach a plug to the coupling loop, to feed the receiver input . . .
> >
> > To others, thank you also for taking the time to reply. I didn't word my question very well. Yes, I did already understand that the coupling loop was only inductively linked (not physically connected) to the main resonant/tuned loop.
> >
> > My main loop is 4 turns, and I am planning a 2 turn coupling loop.
> >
> > Cheers,
> >
> > Ralph
>

8367. Series L/C connection with Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-16 07:47:10 UTC
From: Adam E
Topic: 8367 Message: 8367

I was doing a experiment and surprisingly it worked very well with the KA-35. When I added a series L/C circuit to the loop antenna (L2) and I was able to resonate the loop antenna without connecting the the variable tuning capacitor in parallel. I did this cause I was trying to use a loop antenna without alot of turns to a variable tuning capacitor 265 pF to a 2.5 mH choke, then connected to the 470 pF to the KA-35 RF amplifer.

My results came out very well on LW, but when I was trying to calculate the L/C series circuit with a calculator and I got different readings. Is the loop antenna another inductor that is the unknown inductance that changes the calculator? How do I find the unknown inductance what algebric equation do I need to follow? If I can add that unknown inductance to the existing choke inductance to the calculator then I will know where I am tuning at.

Adam Ebel
Virginia Beach, Virginia
LWL

8368. Re: [loopantennas] Use antenna analyzer?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-16 16:10:07 UTC
From: David Anderson
Topic: 8348 Message: 8368

Well, I also have a Kenwood - it is a TS-570s. I know what you mean by all the knobs, bells and whistles. My old receiver (back in the 50s) was a HallicraftersSX-25. These transceivers are really something aren't they? I also can output 1 KW on 40 into a vertical.

My plan is to erect a 500' horizontal loop and couple it with a balanced tuner that I am building. The feed point 150' away from my shack, so I am designing it to have remote control. That way I can tune it across any band.

I had read a few articles about these loops and they seemed to fit the need I have. I don't have much height (30' oak trees) but we do have lots of horizontal room. Our home is on a sloping hill so I will be lacing it through the oaks.

From: Brian Burns <burnsguitar@...>
To: loopantennas@yahoogroups.com
Sent: Tue, March 15, 2011 9:17:08 AM
Subject: RE: [loopantennas] Use antenna analyzer?

Hello David,

What capability do you have on 40? Also, what are the characteristics of the loop you are installing? I plan to put up a 500' loop sometime this year.

Dennis has loaned me a Kenwood TS-530S which does everything on every band with over 100 watts output. I’ve never operated such a sophisticated piece of equipment—never seen so many knobs! But it will be a while before I get my license renewed.

I’ve decided to start with a small horizontal loop (180 feet) around the perimeter of my shop. It’ll be quick, cheap, and mostly for receiving. I’ll see if I can get out with it when I get my new ticket.

The large loop that I’m planning will be around 500 ft also, with a matching stub to get it to resonate on 160. It will have to be vertical, as that is all I have room for at my end of our triangular lot. I’m a bit concerned about the radiation angles being progressively higher on the higher bands, but I’ll just see how it works on them.

Cheers,

Brian

From: Brian Burns <burnsguitar@... <mailto:burnsguitar%40yahoo.com> >
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Sent: Mon, March 14, 2011 9:01:38 AM
Subject: RE: [loopantennas] Use antenna analyzer?

Hello David,

Wow. Now I remember Wayne talking about visiting a "Brian" on his way up to FB. He was talking about the big transformer he got from you.

I'm in Fort Bragg where we moved 10 years ago after 31 years in Palo Alto. Wayne

came by on a Sunday afternoon. We spent a couple of delightful hours talking about old times at Sequoia, and what we had done with our lives, and he gave me some advice about hanging up the big vertical loop that I'm planning.

The big transformer came from a diathermy machine that my podiatrist wasn't using any more. It had what looked like a pair of 813's in an oscillator circuit

at around 30 mhz. It had minimal rf shielding and must have put out at least 500

watts. A real monster. I cannibalized it, and traded off parts to the guys that could afford to build high power rigs.

Are you on the air these days and, if so, what bands do you operate on?

I let my license lapse in about 1960, and have to bone up on the latest regulations and technology. I got my general class ticket in Texas when I was 13, and had the call W5BRO. When I moved to Redwood City in '55 I got K6UCD, which Dennis Regan (K6ZJU) tells me is still available, so I will apply to get it again.

I used to work 40 meter cw, though Dennis and I had a delightful time on 15 meter 'phone. We built the $3.96 beam from CQ magazine (aluminum foil wrapped bamboo fishing poles), and borrowed a cathode modulator from somebody to plug into the keying jack of his cw transmitter. We worked stations on the east coast

with that pitiful rig, and had a ball.

Cheers,

Brian

See my website: www.lessonsinlutherie.com

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8369. Amplified air loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-18 16:41:54 UTC
From: lowalacrity
Topic: 8369 Message: 8369

I have uploaded some pictures of a couple of new plug-ins for my Palomar base amp. They can be found in a new album called amplified air loops. I was impressed at how well the 4" air loop stacked up against my ferrite core heads so i decided to go big. I tried out my new 8" last night and was pleased to find it was worth the effort. It matched the performance of my best litz wound ferrite. (4 rod bundle) but only tuned down to 700 khz. Noit bad though for initial sizing. Where it really shined was on SW. Initial testing show it to be very quiet and pulled in stations amazingly well for its size. With the taps placed as shown, I was pulling in 80 meter SSB with great signal strength and clairity. Switching to the whip, signals were barely audible through the noise. I stopped a 5 Mhz where WWV was coming in loud and clear!
I'm going to try it into my Yeasu FT-757 that, with the RF gain cranked up, is extremely sensitive but then noise prone. The 8" also has a break in the center for feeding there instead of ends. The ends are then bridged. I have found this improves near field noise. More later!

73
John

8370. Perseus SDR + other items for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-20 15:00:04 UTC
From: stephen_qrp
Topic: 8370 Message: 8370

Hello
Apologies if I am out of order by posting here, but I am selling various items that may be of interest to the group.
Having just obtained my amateur radio licence, I am buying a lot of expensive gear and other items have to go to fund this hobby.
I have no idea at the moment what these items are worth, just trying to see if there is any interest.

Perseus SDR bought ML&S June 2010Tmate USB VFO knob bought ML&S June 2010Wellbrook Active Loop Antenna LFL1010 bought June 2010Wellbrook Active Loop Antenna ALA1530S bought July 2010Heros Software Controlled Radio Preselector see http://www.herostechnology.co.uk/pages/SCR_Preselector.html <http://> bought August 2010

Regards to all
Stephen

[Non-text portions of this message have been removed]

8371. My loop antenna pages:

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-22 21:35:54 UTC
From: Bruce Carter
Topic: 8371 Message: 8371

I have them back up at:

http://earmark.net/gesr/loop/

8372. RE: [loopantennas] My loop antenna pages:

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-23 12:42:14 UTC
From: Pollock,Raphael E
Topic: 8371 Message: 8372

Dear Bruce: Thanks for the revised loop page-your work has been very helpful to me in my own experiments over the past five years-many thanks!

Raph Pollock

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Bruce Carter
Sent: Tuesday, March 22, 2011 4:36 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] My loop antenna pages:

I have them back up at:

http://earmark.net/gesr/loop/

[Non-text portions of this message have been removed]

8373. F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-23 21:51:37 UTC
From: Dale Parfitt
Topic: 8373 Message: 8373

Virtually new Wellbrook loop. On our receive tower for 4 hours and back in its original box and packing. $325 includes shipping UPS CONUS. Saves you $60+.
We'll include the larger aluminum tubing section required to allow the antenna to fit into a rotor.
PayPal or USPS.

Regards,

Dale W4OP

8374. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 07:00:49 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 8374

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Ivan+Board+2.pdf
Uploaded by : longjohn119 <some_oil_with_your_teaparty@...>
Description : Ivan PCB Board

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Ivan%2BBoard%2B2.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

longjohn119 <some_oil_with_your_teaparty@...>

8375. Ivan Board PCB

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 07:25:34 UTC
From: longjohn119
Topic: 8375 Message: 8375

I just uploaded a PDF file for making "Ivan Board" PCB's .... Feel free to pass this around, post to other groups or whatever so long as you don't claim personal credit for it (Whether I get credited is irrelevant to me, just that no one else takes credit for my work is all I ask)

Just print it with a laser printer with no scaling onto a A4 sized sheet of Photo Paper. (It fills most of a sheet) Cut it to the size of desired board and iron it on the copper board. (Detailed instructions for this method can be found in numerous places on the internet)

To make an Ivan Board with a ground plane I use a double sided board, iron on the Ivan Board layout on one side and they spray the other side with any cheap spray paint (Usually whatever I can get for a buck) After etching you can use paint thinner, mineral spirits, etc to remove the paint and the ironed on mask.

The Ivan Board idea came from Chris Trask who picked it up from I don't remember who. I'm building one of his loop designs and probably one of the active monopole or dipole antennas so I needed to make a couple of boards. Then I decided why waste most of a sheet of photo paper on a couple of small boards when I could just fill most of the sheet and cut off whatever I want. I have a feeling I'll be using these for other projects where I'm using a lot of surface mount devices.

JR

8376. Re: Ivan Board PCB

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 12:23:40 UTC
From: AlienRelics
Topic: 8375 Message: 8376

So... what is it?

Could you put a better description in the File description? Look at it this way: if someone finds that file in a year, will they know what it is from your description?

Steve Greenfield AE7HD
moderator loopantennas

--- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@...> wrote:
>
> I just uploaded a PDF file for making "Ivan Board" PCB's .... Feel free to pass this around, post to other groups or whatever so long as you don't claim personal credit for it (Whether I get credited is irrelevant to me, just that no one else takes credit for my work is all I ask)
>
> Just print it with a laser printer with no scaling onto a A4 sized sheet of Photo Paper. (It fills most of a sheet) Cut it to the size of desired board and iron it on the copper board. (Detailed instructions for this method can be found in numerous places on the internet)
>
> To make an Ivan Board with a ground plane I use a double sided board, iron on the Ivan Board layout on one side and they spray the other side with any cheap spray paint (Usually whatever I can get for a buck) After etching you can use paint thinner, mineral spirits, etc to remove the paint and the ironed on mask.
>
> The Ivan Board idea came from Chris Trask who picked it up from I don't remember who. I'm building one of his loop designs and probably one of the active monopole or dipole antennas so I needed to make a couple of boards. Then I decided why waste most of a sheet of photo paper on a couple of small boards when I could just fill most of the sheet and cut off whatever I want. I have a feeling I'll be using these for other projects where I'm using a lot of surface mount devices.
>
> JR
>

8377. RE: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 12:53:35 UTC
From: Bill Riches
Topic: 8373 Message: 8377

Hi Dale,

Just curious why you did no like it - I am using a 1010 and it works fine for beacons.

73,

Bill WA2DVU

Cape May, NJ

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Dale Parfitt
Sent: Wednesday, March 23, 2011 5:52 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Virtually new Wellbrook loop. On our receive tower for 4 hours and back in its original box and packing. $325 includes shipping UPS CONUS. Saves you $60+.
We'll include the larger aluminum tubing section required to allow the antenna to fit into a rotor.
PayPal or USPS.

Regards,

Dale W4OP

[Non-text portions of this message have been removed]

8378. Re: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 13:01:05 UTC
From: Dale Parfitt
Topic: 8373 Message: 8378

Hi Bill,
I bought it soley to compare to my own broadband active loops. I saw either the same null depth or greater null depth on my loops. Likely mine don't have as good an IP3, but I have never observed any IM- even on my 7' loop.
The Wellbrook loop is very well built and well designed. But at over 10X the cost- I'll stick with my own.
The real winner on S/N so far (not counting my Beverages) is the half sized active Flag antenna
(RDF=7.4 vs 4 for a loop).

Dale W4OP

Hi Dale,

Just curious why you did no like it - I am using a 1010 and it works fine
for beacons.

73,

Bill WA2DVU

Cape May, NJ

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Dale Parfitt
Sent: Wednesday, March 23, 2011 5:52 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Virtually new Wellbrook loop. On our receive tower for 4 hours and back in its original box and packing. $325 includes shipping UPS CONUS. Saves you $60+.
We'll include the larger aluminum tubing section required to allow the antenna to fit into a rotor.
PayPal or USPS.

Regards,

Dale W4OP

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3524 - Release Date: 03/23/11 03:34:00

[Non-text portions of this message have been removed]

8379. Re: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 13:25:43 UTC
From: Chris Trask
Topic: 8373 Message: 8379

>
> I bought it soley to compare to my own broadband active
> loops. I saw either the same null depth or greater null
> depth on my loops. Likely mine don't have as good an IP3,
> but I have never observed any IM- even on my 7' loop.
> The Wellbrook loop is very well built and well designed.
> But at over 10X the cost- I'll stick with my own.
> The real winner on S/N so far (not counting my Beverages)
> is the half sized active Flag antenna
> (RDF=7.4 vs 4 for a loop).
>

What are you using for the amplifier? I posted my own design in the files section some time ago that is at least comparable to the Pixel and Wellbrook products, and a whole lot cheaper to boot.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8380. Re: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 13:49:24 UTC
From: Dale Parfitt
Topic: 8373 Message: 8380

Hi Chris,
I believe this is a Burhans design from some years back. It uses a transformer up front to realize the low Z balanced input. I made up a dozen or so 2X PCB's and have distributed them around for guys to play with- all have had good results. Nulls appear to be of equal depth and at right angles to the plane of the loop.

It just proves- there is no magic, just good designs that can be built very inexpensively.

Dale W4OP

----- Original Message -----
From: Chris Trask
To: loopantennas@yahoogroups.com ; loopantennas@yahoogroups.com
Sent: Thursday, March 24, 2011 9:25 AM
Subject: Re: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

>
> I bought it soley to compare to my own broadband active
> loops. I saw either the same null depth or greater null
> depth on my loops. Likely mine don't have as good an IP3,
> but I have never observed any IM- even on my 7' loop.
> The Wellbrook loop is very well built and well designed.
> But at over 10X the cost- I'll stick with my own.
> The real winner on S/N so far (not counting my Beverages)
> is the half sized active Flag antenna
> (RDF=7.4 vs 4 for a loop).
>

What are you using for the amplifier? I posted my own design in the files section some time ago that is at least comparable to the Pixel and Wellbrook products, and a whole lot cheaper to boot.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3524 - Release Date: 03/23/11 03:34:00

[Non-text portions of this message have been removed]

8381. Re: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 14:05:57 UTC
From: Chris Trask
Topic: 8373 Message: 8381

>
> > What are you using for the amplifier? I posted my own
> > design in the files section some time ago that is at
> > least comparable to the Pixel and Wellbrook products,
> > and a whole lot cheaper to boot.
>
> I believe this is a Burhans design from some years back. It
> uses a transformer up front to realize the low Z balanced
> input. I made up a dozen or so 2X PCB's and have distributed
> them around for guys to play with- all have had good results.
> Nulls appear to be of equal depth and at right angles to the
> plane of the loop.
>

Yes, I've seen that Burhans amplifier here and there. Nice, simple design. I have a 2-part article being published this summer on transformer feedback amplifiers, introducing a new topology in the second part.

>
> It just proves- there is no magic, just good designs that can
> be built very inexpensively.
>

Yes, all sorts of good, simple designs that can get the job done just as well as those for which you need to take out a loan.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8382. Re: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-24 14:31:50 UTC
From: Dale Parfitt
Topic: 8373 Message: 8382

Great Chris,
I look forward to seeing your work. I spend a lot of time on your site learning.

Dale W4OP

> > What are you using for the amplifier? I posted my own
> > design in the files section some time ago that is at
> > least comparable to the Pixel and Wellbrook products,
> > and a whole lot cheaper to boot.
>
> I believe this is a Burhans design from some years back. It
> uses a transformer up front to realize the low Z balanced
> input. I made up a dozen or so 2X PCB's and have distributed
> them around for guys to play with- all have had good results.
> Nulls appear to be of equal depth and at right angles to the
> plane of the loop.
>

Yes, I've seen that Burhans amplifier here and there. Nice, simple design. I have a 2-part article being published this summer on transformer feedback amplifiers, introducing a new topology in the second part.

>
> It just proves- there is no magic, just good designs that can
> be built very inexpensively.
>

Yes, all sorts of good, simple designs that can get the job done just as well as those for which you need to take out a loan.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3526 - Release Date: 03/24/11 03:34:00

[Non-text portions of this message have been removed]

8383. Re: F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 11:08:11 UTC
From: longjohn119
Topic: 8373 Message: 8383

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:

> What are you using for the amplifier? I posted my own design in the files section some time ago that is at least comparable to the Pixel and Wellbrook products, and a whole lot cheaper to boot.
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

I just happen to be building that design right now. Hopefully I'll have it up on the roof in about a week when it warms ups a bit again. I won't be able to say how it works compared to a Wellbrook since I don't have one.

BTW what is the best way to interface a DDS signal generator/step attenuator to the input of the amp? Maybe a balun wound on one of those large 61 mix bino cores? Maybe one like the last one in the circuit hooked backwards?

I'm not really concerned about IP3 or other measurements, my spectrum analyzer is going through some rework and isn't available for use anyway. I just want to make sure it's working and I didn't make a wiring mistake before I haul it up on the roof.

JR

8384. RE: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 12:01:57 UTC
From: Bill Riches
Topic: 8373 Message: 8384

Hi Dale,,

Thanks for your info. I have not had much luck building loops! Disasters! Other loop that I have is a Kiwa for broadcast use which works fine if you don't have aluminum siding on your home.

73,

Bill, WA2DVU

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Dale Parfitt
Sent: Thursday, March 24, 2011 9:01 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Hi Bill,
I bought it soley to compare to my own broadband active loops. I saw either the same null depth or greater null depth on my loops. Likely mine don't have as good an IP3, but I have never observed any IM- even on my 7' loop. The Wellbrook loop is very well built and well designed. But at over 10X the cost- I'll stick with my own.
The real winner on S/N so far (not counting my Beverages) is the half sized active Flag antenna
(RDF=7.4 vs 4 for a loop).

Dale W4OP

Hi Dale,

Just curious why you did no like it - I am using a 1010 and it works fine for beacons.

73,

Bill WA2DVU

Cape May, NJ

From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com> [mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>] On Behalf Of Dale Parfitt
Sent: Wednesday, March 23, 2011 5:52 PM
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Subject: [loopantennas] F.S. AS NEW WELLBROOK ALA1530L-2

Virtually new Wellbrook loop. On our receive tower for 4 hours and back in its original box and packing. $325 includes shipping UPS CONUS. Saves you $60+.
We'll include the larger aluminum tubing section required to allow the antenna to fit into a rotor.
PayPal or USPS.

Regards,

Dale W4OP

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3524 - Release Date: 03/23/11 03:34:00

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8385. Re: [loopantennas] Re: F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 13:45:33 UTC
From: Chris Trask
Topic: 8373 Message: 8385

>
> > What are you using for the amplifier? I posted my
> > own design in the files section some time ago that is at
> > least comparable to the Pixel and Wellbrook products,
> > and a whole lot cheaper to boot.
>
>
> I just happen to be building that design right now. Hopefully
> I'll have it up on the roof in about a week when it warms ups
> a bit again. I won't be able to say how it works compared to
> a Wellbrook since I don't have one.
>
> BTW what is the best way to interface a DDS signal generator/
> step attenuator to the input of the amp? Maybe a balun wound
> on one of those large 61 mix bino cores? Maybe one like the
> last one in the circuit hooked backwards?
>

Yes, very much like that though you may need to use more than one since the input impedance of the amp is just a few ohms. Do a quick check with the generator/step attenuator disconnected and then connected, from that determine the input impedance. You can easily make a 9:4, 4:1, or 9:1 UnUn to improve the match.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8386. How does the Hermes loop compare...

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 14:18:53 UTC
From: Editor (Kevin)
Topic: 8386 Message: 8386

Hi:

I am curious to know how the Hermes Active loops compare to the Wellbrook or other SWL type of active antennas. I know the price point is way off so that is not a point to consider.

I was wondering just about performance. The Hermes were a Canadian company that was then sold to US Antenna in Maryland.

I know the construction of the Hermes is about the most solid (rugged) I have ever seen. I was more interested in the overall system performance however. I have seen them on eBay at times.

Thanks.

Kevin

8387. Re: [loopantennas] Re: F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 14:58:56 UTC
From: Jerry Flanders
Topic: 8373 Message: 8387

Would one of the little monolithic amps from
mini-circuits work as a rx loop amp? Down East
Microwave sells an inexpensive barebones kit (
MMICKGALI) with a GALI-74: http://www.downeastmicrowave.com/cat-frame.htm -

GALI-74 specs (
http://www.minicircuits.com/pdfs/GALI-74+.pdf)
look tempting to my untrained eye:
☐ Frequency range, DC to 1 GHz
☐ High gain, 25.1 dB typ. at 0.1 GHz
☐ Internally Matched to 50 Ohms
☐ +19.2 dBm typ. output power at 0.1 GHz
☐ High IP3, +38 dBm at 0.1 GHz
☐ Low noise figure, 2.7 dB typ.
☐ Unconditionally stable

What could be expected, performance-wise, after
matching this amp's input to the loop?

Jerry W4UK

At 09:45 AM 3/25/2011, Chris Trask wrote:
> >
> > > What are you using for the amplifier? I posted my
> > > own design in the files section some time ago that is at
> > > least comparable to the Pixel and Wellbrook products,
> > > and a whole lot cheaper to boot.
> >
> >
> > I just happen to be building that design right now. Hopefully
> > I'll have it up on the roof in about a week when it warms ups
> > a bit again. I won't be able to say how it works compared to
> > a Wellbrook since I don't have one.
> >
> > BTW what is the best way to interface a DDS signal generator/
> > step attenuator to the input of the amp? Maybe a balun wound
> > on one of those large 61 mix bino cores? Maybe one like the
> > last one in the circuit hooked backwards?
> >
>
> Yes, very much like that though you may
> need to use more than one since the input
> impedance of the amp is just a few ohms. Do a
> quick check with the generator/step attenuator
> disconnected and then connected, from that
> determine the input impedance. You can easily

> make a 9:4, 4:1, or 9:1 UnUn to improve the match.
>
>
>Chris Trask
>N7ZWY / WDX3HLB
>Senior Member IEEE
>http://www.home.earthlink.net/~christrask/

8388. Re: [loopantennas] Re: F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 15:16:50 UTC
From: Jack Smith
Topic: 8373 Message: 8388

They have mediocre IP2 and are relative fragile with respect to RF overload. And because they are such broadband devices, careful PCB layout is required to avoid parasitic oscillation.

Jack K8ZOA

On 3/25/2011 10:58 AM, Jerry Flanders wrote:
>
> Would one of the little monolithic amps from
> mini-circuits work as a rx loop amp? Down East
> Microwave sells an inexpensive barebones kit (
> MMICKGALI) with a GALI-74:
> http://www.downeastmicrowave.com/cat-frame.htm -
>
> GALI-74 specs (
> http://www.minicircuits.com/pdfs/GALI-74+.pdf)
> look tempting to my untrained eye:
> . Frequency range, DC to 1 GHz
> . High gain, 25.1 dB typ. at 0.1 GHz
> . Internally Matched to 50 Ohms
> . +19.2 dBm typ. output power at 0.1 GHz
> . High IP3, +38 dBm at 0.1 GHz
> . Low noise figure, 2.7 dB typ.
> . Unconditionally stable
>
> What could be expected, performance-wise, after
> matching this amp's input to the loop?
>
> Jerry W4UK
>
> At 09:45 AM 3/25/2011, Chris Trask wrote:
> > >
> > > > What are you using for the amplifier? I posted my
> > > > own design in the files section some time ago that is at
> > > > least comparable to the Pixel and Wellbrook products,
> > > > and a whole lot cheaper to boot.
> > >
> > >
> > > I just happen to be building that design right now. Hopefully
> > > I'll have it up on the roof in about a week when it warms ups
> > > a bit again. I won't be able to say how it works compared to
> > > a Wellbrook since I don't have one.
> > >
> > > BTW what is the best way to interface a DDS signal generator/
> > > step attenuator to the input of the amp? Maybe a balun wound

> > > on one of those large 61 mix bino cores? Maybe one like the
> > > last one in the circuit hooked backwards?
> > >
> >
> > Yes, very much like that though you may
> > need to use more than one since the input
> > impedance of the amp is just a few ohms. Do a
> > quick check with the generator/step attenuator
> > disconnected and then connected, from that
> > determine the input impedance. You can easily
> > make a 9:4, 4:1, or 9:1 UnUn to improve the match.
> >
> >
> >Chris Trask
> >N7ZWY / WDX3HLB
> >Senior Member IEEE
> >http://www.home.earthlink.net/~christrask/
> <http://www.home.earthlink.net/%7Echristrask/>
>
>

[Non-text portions of this message have been removed]

8389. Re: [loopantennas] Re: F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 15:22:21 UTC
From: Chris Trask
Topic: 8373 Message: 8389

>
> Would one of the little monolithic amps from
> mini-circuits work as a rx loop amp? Down East
> Microwave sells an inexpensive barebones kit
>

<<SNIP>>

>
> What could be expected, performance-wise, after
> matching this amp's input to the loop?
>

Not sure. I tried doing a wideband match to loops some time ago, and the results were pretty disappointing as you're trying to match a high-Q inductor to a resistive load. The leakage inductances of wideband transformers at very low impedances are the primary culprits, and using series tuni ng overcame that problem. Induced resistive losses were also a problem, but using powdered iron cores instead of ferrite cores took care of that. My thoughts recently have been to match the real part of the loop impedance and then add a series-resonant tuner so that the match at resonance is uniform.

Viewing the loop as a current source results in a wideband antenna if and only if (iff) the amplifier has a very low input impedance. I might approach the use of monolithic amps as a compromise, using an augmented common-base input stage as I did in that amp design and then using the monolithic amp in place of the output stage.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8390. Re: F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 17:10:12 UTC
From: vbifyz
Topic: 8373 Message: 8390

Chris,

Have you or somebody you know of tried the Norton amplifier configuration, only with a different turns ratio, so that it has low input impedance instead of 50 Ohm?

Mike

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:

> Viewing the loop as a current source results in a wideband antenna if and only if (iff) the amplifier has a very low input impedance. I might approach the use of monolithic amps as a compromise, using an augmented common-base input stage as I did in that amp design and then using the monolithic amp in place of the output stage.

8391. Re: [loopantennas] How does the Hermes loop compare...

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 17:15:06 UTC
From: brian nsl
Topic: 8386 Message: 8391

Kevin,
Hermes was a new loop name to me so I looked it up.
a..
a.. Stoddart 92200-3 Multiband loop antenna, from 150 kHz to 32 MHz in 8 b, IT. ETS - LINDGREN / EMCO 6502 10KHZ - 30MHZ ACTIVE LOOP ANTENNA, US, $2100. Hermes ...
www.used-line.com > Test & Measurement > Antennas - Cached - Similar

Are they gold plated hi!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Editor (Kevin)
To: loopantennas@yahoogroups.com
Sent: Friday, March 25, 2011 2:18 PM
Subject: [loopantennas] How does the Hermes loop compare...

[Non-text portions of this message have been removed]

8392. Re: [loopantennas] Re: F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 17:46:13 UTC
From: Chris Trask
Topic: 8373 Message: 8392

>
> Have you or somebody you know of tried the Norton amplifier configuration,
> only with a different turns ratio, so that it has low input impedance
> instead of 50 Ohm?
>

I know that it's entirely practical, but I've never tried it myself, nor do I know of anyone else who has. For instance, if the transformer turns rations were to be 1:1:4 (input:N:M) and the load is 50 ohms, the input impedance would be 18.75 ohms. The transformer would be made with a pair of trifilar bundles in a 1:1 turns ratio, the various wires connected in series as needed. By adjusting the turns ratio of the two bundles, you can adjust the input impedance, though there are practical limitations. You would need to make that transformer on a toroid to achieve the needed coupling between the two bundles, and you need to stick to integer ratios between the two bundles so as to have good, uniform coupling. I touched on this briefly in a 2-part series in Electronics World a year or two ago.

Making the transformer this way has interesting benefits. Since the coupling is primarily TEM m?de between the wires in the bundles and not flux coupling through the core, you improve the IMD performance of the amplifier as you are not subject to the hysteresis nonlinearities of the core material. The core provides the coupling needed for the voltage relationship between the two bundles, plus it extends the low frequency cutoff by way of the magnetization inductance.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8393. Re: [loopantennas] How does the Hermes loop compare...

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 21:36:13 UTC
From: Andy Ikin
Topic: 8386 Message: 8393

Hello Kevin,

The Hermes loop system dates back to the sixties, when it was E M I Canada. See Wireless World May 1970 for description. Looking the US antenna website the performance doesn't seemed to have changed much!

The IMD of the these loops are about 30 to 40dB higher than the current Wellbrook ALA1530 and Pixel Sat loops under the same F S conditions of two signals at 100mV/m (web site says 10mV/m; Typo ?)

I don't have any other information.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

8394. RE: [loopantennas] How does the Hermes loop compare...

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-25 21:49:33 UTC
From: KF5FEO
Topic: 8386 Message: 8394

I find the Hermes loop a very interest design for portable use, just one , not set up as they show them on their website both to use for transmitting and receiving.

73 Tom kf5feo

From: Andy Ikin [mailto:andrew.ikin@...]
Sent: Friday, March 25, 2011 4:36 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] How does the Hermes loop compare...

Hello Kevin,

The Hermes loop system dates back to the sixties, when it was E M I Canada. See Wireless World May 1970 for description. Looking the US antenna website the performance doesn't seemed to have changed much!

The IMD of the these loops are about 30 to 40dB higher than the current Wellbrook ALA1530 and Pixel Sat loops under the same F S conditions of two signals at 100mV/m (web site says 10mV/m; Typo ?)

I don't have any other information.

Kind regards

Andrew Ikin

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8395. Re: F.S. AS NEW WELLBROOK ALA1530L-2

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-26 00:31:44 UTC
From: longjohn119
Topic: 8373 Message: 8395

The problem with that is the output impedance of a Norton Common Base amp is whatever the input is set to (and visa versa more or less) They are great when you need/have 50 ohm in and out and Reverse Isolation (high return loss) isn't a necessary factor. I have a push pull version as the RF preamp in my SDR but I have a Common Emitter noiseless feedback amp between the filter board and the input to the QSD where I needed stellar return loss performance

There is a Common Emitter noiseless (transformer) feedback balanced circuit in the Photo section by Steve Ratz AA7U that doesn't work too awfully bad, especially for it's simplicity. The IP2/IP3 wasn't as good as my Lankford Complimentary Push Pull Active Whip but it did have a nice null so I could null out the offending AM transmitters 4.2 miles away so it worked as well or better in most cases. It's also a little noisier than I'd like, probably because the input isn't matched as good as it should be and it's biased for high IP2/IP3 and not NF. It was stable even with a 3ft diameter 3/4 OD copper tubing loop hooked up to it. (I'm a Commercial HVAC tech so I have access to tons of old refrigeration copper tubing) I had the WL1030 high speed op amp loop circuit hooked to it originally and I never good get it to be stable. Now it's the output amp for my IQ Pro DDS for a R2 Pro receiver I'm building. It's very stable there where the input is 50 ohms rather than 2-3 ohms from my loop which it didn't like at all

JR

--- In loopantennas@yahoogroups.com, "vbifyz" <3ym3ym@...> wrote:
>
> Chris,
>
> Have you or somebody you know of tried the Norton amplifier configuration, only with a different turns ratio, so that it has low input impedance instead of 50 Ohm?
>
> Mike
>

8396. Tecsun PL-660 Review

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-27 16:43:30 UTC
From: renaldoswl
Topic: 8396 Message: 8396

I just posted my review of the PL-660/comparison to the PL-600 here:
http://www.thehobbylife.net/

8397. Help? Calculation of Coax Shielded Loop Size for 3 mHz to 6 mHz

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-30 20:55:03 UTC
From: Ralph
Topic: 8397 Message: 8397

Gathering all my parts now and getting ready to try my second experimental loop.

Planning to build a small shielded loop using coax and a metal tuning box.

The question is what diameter to make this SINGLE TURN coax loop, if I want it to resonate from 3 mHz to 6 mHz (basically I want to use this to tune the tropical shortwave bands).

I read somewhere that a good MAX length for the loop (circumferance) would be .04 wavelength, no longer. So, if my largest wavelength is 90 meters, which sounds like 3.6 meters of wire. I'll be stuffing the coax into a hula hoop for support, so I believe the diameter of my hula hoop would then be 3.6 meters divided by pi, 3.6 meters / 3.1416 = 44 inches (3 feet 8 inches).

Questions:

1. Can some forum gurus confirm the above is going to work?
2. If I cut the coax to a length that accommodates 90 meters, how do I know it will still resonate at a higher fqy (shorter wavelength) like 6 mhz / 49 meters.

Cheers,

Ralph

8398. Re: [loopantennas] Help? Calculation of Coax Shielded Loop Size for 3 mHz to 6 mHz

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-30 22:31:36 UTC
From: Rick Karlquist
Topic: 8397 Message: 8398

See my article at:

http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf

In the article, a 20 foot circumference loop made with foam
RG6 coax tuned with a pair of AM radio varactors is good for
about 1.6 to 5 MHz. It might go a little higher with just one
varactor, but you should probably cut back to 15 feet. Note
that 20 feet is 0.1 wavelength (in free space) at 5 MHz. I
think I remember that with no varactors at all, it resonated
at 8 MHz.

I still have some PC boards left if you want to use my circuit.
With my connectorized design, it is easy to make up different
lengths of coax and just plug them into the box and try them.
There are also provisions to jumper in different numbers of
varactors.

I also made a 40 foot version for 160 meters only, and it
had something like 9 dB more signal out.

Rick N6RK

Ralph wrote:
> Gathering all my parts now and getting ready to try my second experimental
> loop.
>
> Planning to build a small shielded loop using coax and a metal tuning box.
>
> The question is what diameter to make this SINGLE TURN coax loop, if I
> want it to resonate from 3 mHz to 6 mHz (basically I want to use this to
> tune the tropical shortwave bands).
>
> I read somewhere that a good MAX length for the loop (circumferance) would
> be .04 wavelength, no longer. So, if my largest wavelength is 90 meters,
> which sounds like 3.6 meters of wire. I'll be stuffing the coax into a
> hula hoop for support, so I believe the diameter of my hula hoop would
> then be 3.6 meters divided by pi, 3.6 meters / 3.1416 = 44 inches (3 feet
> 8 inches).
>
> Questions:
>
> 1. Can some forum gurus confirm the above is going to work?
> 2. If I cut the coax to a length that accommodates 90 meters, how do I
> know it will still resonate at a higher fqy (shorter wavelength) like 6

> mhz / 49 meters.
>
> Cheers,
>
> Ralph
>
>

8399. Re: Help? Calculation of Coax Shielded Loop Size for 3 mHz to 6 mHz

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 17:31:24 UTC
From: vbifyz
Topic: 8397 Message: 8399

If your location is noisy, you don't really need the big circumference. In my case, a hula-hoop about 1m diameter with a 18AWG speaker wire inside works very well on 3.5-14MHz frequencies. The noise at my location is strong, so it makes no sense to improve the efficiency. The tuning capacitor is 2 sections air variable, 400 pF each. I have a little switch that connects the second section for frequencies below 5MHz and disconnects it for frequencies above 10MHz.

73, Mike

--- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>
> See my article at:
>
> http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf
>
> In the article, a 20 foot circumference loop made with foam
> RG6 coax tuned with a pair of AM radio varactors is good for
> about 1.6 to 5 MHz. It might go a little higher with just one
> varactor, but you should probably cut back to 15 feet. Note
> that 20 feet is 0.1 wavelength (in free space) at 5 MHz. I
> think I remember that with no varactors at all, it resonated
> at 8 MHz.

8400. How do you find the resonant frequency?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-30 23:24:03 UTC
From: mowypt
Topic: 8400 Message: 8400

I guess this has been asked a hundred times. I am trying to tune a receiver coil and I have used the formula to calculate the resonant frequency but is there any way to actually measure it? Thanks.

8401. What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 18:20:33 UTC
From: mowypt
Topic: 8401 Message: 8401

I am trying to build a tuned loop receiving antenna and I need about a 6uf capacitor. I bought a starting capacitor and tried it but I could not get resonance. What type capacitor do I need to use?

8402. Re: [loopantennas] How do you find the resonant frequency?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 19:59:22 UTC
From: kevin asato
Topic: 8400 Message: 8402

grid dip meter, noise bridge
73, kevinkc6pob

--- On Wed, 3/30/11, mowypt <mowypt@...> wrote:

From: mowypt <mowypt@...>
Subject: [loopantennas] How do you find the resonant frequency?
To: loopantennas@yahoogroups.com
Date: Wednesday, March 30, 2011, 4:24 PM

I guess this has been asked a hundred times. I am trying to tune a receiver coil and I have used the formula to calculate the resonant frequency but is there any way to actually measure it? Thanks.

[Non-text portions of this message have been removed]

8403. Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 21:12:09 UTC
From: vbifyz
Topic: 8401 Message: 8403

Are you sure your calculations are correct?
A typical capacitor for a loop antenna looks like this:
http://www.midnightscience.com/catalog5.html

Mike

--- In loopantennas@yahoogroups.com, "mowypt" <mowypt@...> wrote:
>
> I am trying to build a tuned loop receiving antenna and I need about a 6uf capacitor. I bought a starting capacitor and tried it but I could not get resonance. What type capacitor do I need to use?
>

8404. Re: [loopantennas] Re: Help? Calculation of Coax Shielded Loop Size for 3 mHz to 6 mHz

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 21:15:19 UTC
From: Sam Morgan
Topic: 8397 Message: 8404

where did you buy that capacitor?
sounds like what I need

GB & 73
K5OAI
Sam Morgan

On 3/31/2011 12:31 PM, vbifyz wrote:
> If your location is noisy, you don't really need the big circumference. In my case, a hula-hoop about 1m diameter with a 18AWG speaker wire inside works very well on 3.5-14MHz frequencies. The noise at my location is strong, so it makes no sense to improve the efficiency. The tuning capacitor is 2 sections air variable, 400 pF each. I have a little switch that connects the second section for frequencies below 5MHz and disconnects it for frequencies above 10MHz.
>
> 73, Mike
>
> --- In loopantennas@yahoogroups.com, "Rick Karlquist"<richard@...> wrote:
>>
>> See my article at:
>>
>> http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf
>>
>> In the article, a 20 foot circumference loop made with foam
>> RG6 coax tuned with a pair of AM radio varactors is good for
>> about 1.6 to 5 MHz. It might go a little higher with just one
>> varactor, but you should probably cut back to 15 feet. Note
>> that 20 feet is 0.1 wavelength (in free space) at 5 MHz. I
>> think I remember that with no varactors at all, it resonated
>> at 8 MHz.
>

8405. Re: [loopantennas] What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 21:24:02 UTC
From: Steve Ellington
Topic: 8401 Message: 8405

A starting capacitor? You mean like one for a motor? 6uf is way too high. How did you get that number? 365 PF would be more typical.
Steve
N4LQ
----- Original Message -----
From: mowypt
To: loopantennas@yahoogroups.com
Sent: Thursday, March 31, 2011 2:20 PM
Subject: [loopantennas] What type of capacitor is used for loop antenna?

I am trying to build a tuned loop receiving antenna and I need about a 6uf capacitor. I bought a starting capacitor and tried it but I could not get resonance. What type capacitor do I need to use?

[Non-text portions of this message have been removed]

8406. (no subject)

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 21:43:06 UTC
From: Ralph Perry
Topic: 8406 Message: 8406

Rick, staying with the 20' circumference, single-turn loop: if I use a 365 pfd variable capacitor, instead of varactors, will this resonate in that desired range of 3-6 mhz? (Am not sure what the specs were for the varactors you used . . .)

Also, general question: Is use of a shielded loop still popular, esp if there is a lot of electrical noise in the local area? One forum member recommends dropping the idea on shielding and just use the coax outer shield, instead, for a better conductor and more gain.

[Non-text portions of this message have been removed]

8407. Re: [loopantennas] (unknown)

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 22:34:13 UTC
From: Rick Karlquist
Topic: 8406 Message: 8407

Ralph Perry wrote:
> Rick, staying with the 20' circumference, single-turn loop: if I use a
> 365 pfd
> variable capacitor, instead of varactors, will this resonate in that
> desired
> range of 3-6 mhz? (Am not sure what the specs were for the varactors you
> used .
> . .)

The varactors I bought from Mouser are shown here:

http://www.nteinc.com/specs/600to699/pdf/nte618.pdf

They basically replace a 365 pF capacitor (no big surprise here).
So you should be in fairly good shape. If you can't make it to
6 MHz, you can always shorten the loop a little. Be sure to use
75 ohm FOAM coax, for maximum tuning range. Using solid coax
or 50 ohm coax will reduce the tuning range substantially.

>
> Also, general question: Is use of a shielded loop still popular, esp if
> there
> is a lot of electrical noise in the local area? One forum member
> recommends
> dropping the idea on shielding and just use the coax outer shield,
> instead, for
> a better conductor and more gain.
>

Yes that eternal debate. A non shielded loop, implemented perfectly,
will be as good as a shielded loop, and will have the advantage of
greater tuning range. A shielded loop is much less critical to
implement.

Rick N6RK

8408. Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-03-31 23:48:29 UTC
From: mowypt
Topic: 8401 Message: 8408

With the loop I have, 6uf is what I need for below 1KHz and I don't know enough about capacitors. The one I have I guess it's called a "run" capacitor. It says 6uf 450 volts AC. I assume I need a different type of capacitor. Well thanks for your replies.

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> A starting capacitor? You mean like one for a motor? 6uf is way too high. How did you get that number? 365 PF would be more typical.
> Steve
> N4LQ
> ----- Original Message -----
> From: mowypt
> To: loopantennas@yahoogroups.com
> Sent: Thursday, March 31, 2011 2:20 PM
> Subject: [loopantennas] What type of capacitor is used for loop antenna?
>
>
>
> I am trying to build a tuned loop receiving antenna and I need about a 6uf capacitor. I bought a starting capacitor and tried it but I could not get resonance. What type capacitor do I need to use?
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8409. Re: [loopantennas] Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 00:05:34 UTC
From: Dale Parfitt
Topic: 8401 Message: 8409

What are you going to listen to below 1KHz?
Dale W4OP

----- Original Message -----
From: mowypt
To: loopantennas@yahoogroups.com
Sent: Thursday, March 31, 2011 7:48 PM
Subject: [loopantennas] Re: What type of capacitor is used for loop antenna?

With the loop I have, 6uf is what I need for below 1KHz and I don't know enough about capacitors. The one I have I guess it's called a "run" capacitor. It says 6uf 450 volts AC. I assume I need a different type of capacitor. Well thanks for your replies.

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> A starting capacitor? You mean like one for a motor? 6uf is way too high. How did you get that number? 365 PF would be more typical.
> Steve
> N4LQ
> ----- Original Message -----
> From: mowypt
> To: loopantennas@yahoogroups.com
> Sent: Thursday, March 31, 2011 2:20 PM
> Subject: [loopantennas] What type of capacitor is used for loop antenna?
>
>
>
> I am trying to build a tuned loop receiving antenna and I need about a 6uf capacitor. I bought a starting capacitor and tried it but I could not get resonance. What type capacitor do I need to use?
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3543 - Release Date: 03/31/11 14:34:00

[Non-text portions of this message have been removed]

8410. Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 00:38:15 UTC
From: mowypt
Topic: 8401 Message: 8410

I think I am trying to squeeze too much out of this loop, and yes, I don't know what I am doing. It was originally built for about 60KHz when using a tuning cap 365pf. So I guess I will just give up on this one.

--- In loopantennas@yahoogroups.com, "Dale Parfitt" <parinc1@...> wrote:
>
> What are you going to listen to below 1KHz?
> Dale W4OP
>
>
> ----- Original Message -----
> From: mowypt
> To: loopantennas@yahoogroups.com
> Sent: Thursday, March 31, 2011 7:48 PM
> Subject: [loopantennas] Re: What type of capacitor is used for loop antenna?
>
>
>
> With the loop I have, 6uf is what I need for below 1KHz and I don't know enough about capacitors. The one I have I guess it's called a "run" capacitor. It says 6uf 450 volts AC. I assume I need a different type of capacitor. Well thanks for your replies.
>
> --- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@> wrote:
> >
> > A starting capacitor? You mean like one for a motor? 6uf is way too high. How did you get that number? 365 PF would be more typical.
> > Steve
> > N4LQ
> > ----- Original Message -----
> > From: mowypt
> > To: loopantennas@yahoogroups.com
> > Sent: Thursday, March 31, 2011 2:20 PM
> > Subject: [loopantennas] What type of capacitor is used for loop antenna?
> >
> >
> >
> > I am trying to build a tuned loop receiving antenna and I need about a 6uf capacitor. I bought a starting capacitor and tried it but I could not get resonance. What type capacitor do I need to use?
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]

> >
>
>
>
>
>
>
> ---
>
>
>
> No virus found in this incoming message.
> Checked by AVG - www.avg.com
> Version: 9.0.894 / Virus Database: 271.1.1/3543 - Release Date: 03/31/11 14:34:00
>
>
> [Non-text portions of this message have been removed]
>

8411. Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 08:24:53 UTC
From: longjohn119
Topic: 8401 Message: 8411

--- In loopantennas@yahoogroups.com, "mowypt" <mowypt@...> wrote:
>
> With the loop I have, 6uf is what I need for below 1KHz and I don't know enough about capacitors. The one I have I guess it's called a "run" capacitor. It says 6uf 450 volts AC. I assume I need a different type of capacitor. Well thanks for your replies.
>

You need a loop with more windings/inductance not a big cap. Having a way to measure the actual inductance is very helpful also ....

Those run caps do make excellent bipolar caps in speaker crossovers (The + and - marks are for phasing not DC polarity), especially for high power sound reinforcement speakers .... Otherwise not much use for them other than AC motors, if it's got a plastic case it's a start cap limited duty cycle, if it's got a metal case it's a run cap 100% duty cycle. Only the run caps make good crossover (Or AC coupling) caps although their size limits their applications mainly to speakers although I do have a circuit similar to this one by Dallas Lankford only using coil values (Crossover coils oversized that I took windings off of until I reach the desired inductance) tweaked to work with available start cap values. Mine will work on any amp up to 50 watts, you just plug it into a Speaker Out and then plug an external speaker into the filter.

Elliptic Low Pass Audio Filters (Used to counter fading distortion on AM)
http://www.kongsfjord.no/dl/Audio/ELPAFs.pdf

JR

8412. Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 13:25:46 UTC
From: mowypt
Topic: 8401 Message: 8412

Thanks for your reply. Yes, I figured that I need more coil. I don't know, I read somewhere "just add more capacitance" but obviously that only works to a point.

--- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@...> wrote:
>
>
>
>
>
> --- In loopantennas@yahoogroups.com, "mowypt" <mowypt@> wrote:
> >
> > With the loop I have, 6uf is what I need for below 1KHz and I don't know enough about capacitors. The one I have I guess it's called a "run" capacitor. It says 6uf 450 volts AC. I assume I need a different type of capacitor. Well thanks for your replies.
> >
>
> You need a loop with more windings/inductance not a big cap. Having a way to measure the actual inductance is very helpful also ....
>
> Those run caps do make excellent bipolar caps in speaker crossovers (The + and - marks are for phasing not DC polarity), especially for high power sound reinforcement speakers .... Otherwise not much use for them other than AC motors, if it's got a plastic case it's a start cap limited duty cycle, if it's got a metal case it's a run cap 100% duty cycle. Only the run caps make good crossover (Or AC coupling) caps although their size limits their applications mainly to speakers although I do have a circuit similar to this one by Dallas Lankford only using coil values (Crossover coils oversized that I took windings off of until I reach the desired inductance) tweaked to work with available start cap values. Mine will work on any amp up to 50 watts, you just plug it into a Speaker Out and then plug an external speaker into the filter.
>
> Elliptic Low Pass Audio Filters (Used to counter fading distortion on AM)
> http://www.kongsfjord.no/dl/Audio/ELPAFs.pdf
>
> JR
>

8413. Large loop polarization

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 15:30:16 UTC
From: Brian Burns
Topic: 8406 Message: 8413

Hello All,

If you feed a large vertical rectangular loop at the center of a side leg, you get vertical polarization. If you feed it at the center of its bottom leg, you get horizontal polarization. It would seem that feeding it at some intermediate point (a corner?) would give you some of each polarization. But, as Gilbert and Sullivan wrote in HMS Pinafore, "Things are seldom what they seem".

The reason that this is an interesting question is that receiving fade, and perhaps transmitting fade as well, are supposedly caused by the ionosphere's messing around with polarization during skip. Claims are that the Carolina Windom succeeds as an antenna because it has some of both polarizations, and limits fade.

Whaddaya think?

Cheers,

Brian Burns

[Non-text portions of this message have been removed]

8414. Re: [loopantennas] Large loop polarization

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 15:41:50 UTC
From: Dale Parfitt
Topic: 8406 Message: 8414

While you may indeed have some combination of horizontal and vertical polarity- it is still linear from a vector viewpoint- so let's say it is linear at 45 degrees- i.e. half way between H and V. This does not help with fading because there is still the possibility that the incoming wave will be orthogonal to that 45 degrees. The solution then is to employ circular polarity.

The issue of feeding so that the antenna will have this 45 degree position is complicated by the fact that if broken down into its vector components- i.e. H and V- the takeoff/arrival angle for the vertical components will be different than the H components. The solution then is far from trivial.
Dale W4OP

Hello All,

If you feed a large vertical rectangular loop at the center of a side leg, you get vertical polarization. If you feed it at the center of its bottom leg, you get horizontal polarization. It would seem that feeding it at some intermediate point (a corner?) would give you some of each polarization. But, as Gilbert and Sullivan wrote in HMS Pinafore, "Things are seldom what they seem".

The reason that this is an interesting question is that receiving fade, and perhaps transmitting fade as well, are supposedly caused by the ionosphere's messing around with polarization during skip. Claims are that the Carolina Windom succeeds as an antenna because it has some of both polarizations, and limits fade.

Whaddaya think?

Cheers,

Brian Burns

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3544 - Release Date: 04/01/11 02:36:00

[Non-text portions of this message have been removed]

8415. RE: [loopantennas] Large loop polarization

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 15:56:21 UTC
From: Brian Burns
Topic: 8406 Message: 8415

Hello Dale,

Thanks for the speedy reply!

I figured that it couldn't be that easy. Can circular polarity be achieved in at least some sort of practical receiving antenna, if not in both transmitting and receiving?

Part of my interest in loops is their low noise pickup-I live in a particularly noisy location.

Cheers,

Brian

While you may indeed have some combination of horizontal and vertical polarity- it is still linear from a vector viewpoint- so let's say it is linear at 45 degrees- i.e. half way between H and V. This does not help with fading because there is still the possibility that the incoming wave will be orthogonal to that 45 degrees. The solution then is to employ circular polarity.

The issue of feeding so that the antenna will have this 45 degree position is complicated by the fact that if broken down into its vector components- i.e. H and V- the takeoff/arrival angle for the vertical components will be different than the H components. The solution then is far from trivial.
Dale W4OP

Hello All,

If you feed a large vertical rectangular loop at the center of a side leg, you get vertical polarization. If you feed it at the center of its bottom leg, you get horizontal polarization. It would seem that feeding it at some intermediate point (a corner?) would give you some of each polarization. But, as Gilbert and Sullivan wrote in HMS Pinafore, "Things are seldom what they seem".

The reason that this is an interesting question is that receiving fade, and perhaps transmitting fade as well, are supposedly caused by the ionosphere's messing around with polarization during skip. Claims are that the Carolina Windom succeeds as an antenna because it has some of both polarizations, and limits fade.

Whaddaya think?

Cheers,

Brian Burns

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3544 - Release Date: 04/01/11
02:36:00

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8416. Re: Large loop polarization

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 22:20:52 UTC
From: vbifyz
Topic: 8406 Message: 8416

Quick googling result:
http://www.bruhns.us/CP_on_HF/CP_on_HF.html
Unfortunately, this approach only works on one band, because a 90 degree phase shift is achieved by a piece of coax (i.e. on one frequency). But it can be done and is said to yield good results.

73, Mike

--- In loopantennas@yahoogroups.com, "Brian Burns" <burnsguitar@...> wrote:
>
> Hello Dale,
>
>
>
> Thanks for the speedy reply!
>
>
>
> I figured that it couldn't be that easy. Can circular polarity be achieved
> in at least some sort of practical receiving antenna, if not in both
> transmitting and receiving?
>
>

8417. Unusual 7 inch ferrite bar

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 16:10:00 UTC
From: logically_spock
Topic: 8417 Message: 8417

I have an unusual 7 inch ferrite bar with three separate coils on it. Two coils on the ends and one with just a few turns almost dead center on the bar.

I ripped this out of an old Sony muliti-band radio that covered medium wave, marine/weather band (around 4Mhz), AND long wave that went down to about 100Khz.

The bar has three wires - green, gold, and black, coming off the inside of each of the two end coils and what looks like a regular copper or white wire coming off the outside of each of the two end coils on the bar. I also have the circuit board that these wires are soldered to which has a varactor type tuning cap with a yellow, a black, and a white wire coming off the varactor. I also have a typical MFJ type antenna tuner with switchable coils and a 360pF variable air cap.

I know this isn't going to be easy, but I'm trying to figure out how to hook this up to my Palstar R30CC/and tuner box for some AM and long-wave reception.

This radio is very quiet. With out any antenna hooked up, I tuned it 1340 where a big powerful and troublesome station is (ESPN) and NOT A SOUND! It has both high impeadence/long wire clips and 50 ohm Coax antenna connections.

I hate to throw this thing away and was wondering how I should proceed to try and match and connect this to the radio?

Thanks.

8418. Re: [loopantennas] Large loop polarization

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-01 16:15:40 UTC
From: aa2id@aol.com
Topic: 8406 Message: 8418

is that loop vertical or laying flat?
signal in flat position????

Hal

-----Original Message-----
From: Brian Burns <burnsguitar@...>
To: loopantennas <loopantennas@yahoogroups.com>
Sent: Fri, Apr 1, 2011 7:30 am
Subject: [loopantennas] Large loop polarization

Hello All,

If you feed a large vertical rectangular loop at the center of a side leg, you get vertical polarization. If you feed it at the center of its bottom leg, you get horizontal polarization. It would seem that feeding it at some intermediate point (a corner?) would give you some of each polarization. But, as Gilbert and Sullivan wrote in HMS Pinafore, "Things are seldom what they seem".

The reason that this is an interesting question is that receiving fade, and perhaps transmitting fade as well, are supposedly caused by the ionosphere's messing around with polarization during skip. Claims are that the Carolina Windom succeeds as an antenna because it has some of both polarizations, and limits fade.

Whaddaya think?

Cheers,

Brian Burns

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8419. RE: [loopantennas] Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-02 00:41:44 UTC
From: Ray Phillips
Topic: 8401 Message: 8419

Is it possible that you are confusing MHZ (millions of cycles per second) with KHz (thousands of cycles per second)? If you are trying to build a loop to receive MHz transmissions but plugging KHz figures into formulas, then your calculations will be wildly inaccurate.

As frequencies fall below 500KHz (0.5MHz) the amount of man-made signals reduce. At 1KHz I would expect all signals to be either natural or man-made noise rather than coherent signals. At 1KHz I, personally, would be using audio techniques not radio techniques. At 1MHz, however, I would definitely use radio techniques such as a loop and capacitor.

Don't give up. Let the forum know what signals you are looking for and I am sure you will get help aplenty. If you are definitely looking for VLF signals then there are websites devoted to that pursuit. Take a look at http://www.vlf.it/harald/strangerec.htm or http://abelian.org/vlfrx/ for starters.

Ray, vk5ugs

To: loopantennas@yahoogroups.com
From: mowypt@...
Date: Fri, 1 Apr 2011 13:25:46 +0000
Subject: [loopantennas] Re: What type of capacitor is used for loop antenna?

Thanks for your reply. Yes, I figured that I need more coil. I don't know, I read somewhere "just add more capacitance" but obviously that only works to a point.

--- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@...> wrote:

>

>

>

>

>

> --- In loopantennas@yahoogroups.com, "mowypt" <mowypt@> wrote:

> >

> > With the loop I have, 6uf is what I need for below 1KHz and I don't know enough about capacitors. The one I have I guess it's called a "run" capacitor. It says 6uf 450 volts AC. I assume I need a different type of capacitor. Well thanks for your replies.

> >

>

> You need a loop with more windings/inductance not a big cap. Having a way to measure the actual inductance is very helpful also ....

>

> Those run caps do make excellent bipolar caps in speaker crossovers (The + and - marks are for phasing not DC polarity), especially for high power sound reinforcement speakers .... Otherwise not much use for them other than AC motors, if it's got a plastic case it's a start cap limited duty cycle, if it's got a metal case it's a run cap 100% duty cycle. Only the run caps make good crossover (Or AC coupling) caps although their size limits their applications mainly to speakers although I do have a circuit similar to this one by Dallas Lankford only using coil values (Crossover coils oversized that I took windings off of until I reach the desired inductance) tweaked to work with available start cap values. Mine will work on any amp up to 50 watts, you just plug it into a Speaker Out and then plug an external speaker into the filter.

>

> Elliptic Low Pass Audio Filters (Used to counter fading distortion on AM)

> http://www.kongsfjord.no/dl/Audio/ELPAFs.pdf

>

> JR

>

[Non-text portions of this message have been removed]

8420. RE: [loopantennas] Large loop polarization

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-02 01:05:38 UTC
From: Brian Burns
Topic: 8406 Message: 8420

Hello Hal,

is that loop vertical or laying flat?
signal in flat position????

It will be a vertically hung rectangular loop, probably a full wave at 80 meters, as that is all I have room for at this narrow end of my property. I’m planning to feed it at the center of the bottom leg, which should give me horizontal polarization.

Cheers,

Brian

[Non-text portions of this message have been removed]

8421. Re: [loopantennas] Unusual 7 inch ferrite bar

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-02 01:29:02 UTC
From: Chris Trask
Topic: 8417 Message: 8421

>
> I have an unusual 7 inch ferrite bar with three separate coils on it. Two
> coils on the ends and one with just a few turns almost dead center on the
bar.
>
> I ripped this out of an old Sony muliti-band radio that covered medium
wave,
> marine/weather band (around 4Mhz), AND long wave that went down to about
100Khz.
>
> The bar has three wires - green, gold, and black, coming off the inside of
each
> of the two end coils and what looks like a regular copper or white wire
coming
> off the outside of each of the two end coils on the bar. I also have the
circuit
> board that these wires are soldered to which has a varactor type tuning
cap with
> a yellow, a black, and a white wire coming off the varactor. I also have a
> typical MFJ type antenna tuner with switchable coils and a 360pF variable
air
> cap.
>
> I know this isn't going to be easy, but I'm trying to figure out how to
hook
> this up to my Palstar R30CC/and tuner box for some AM and long-wave
reception.
>
> This radio is very quiet. With out any antenna hooked up, I tuned it 1340
where
> a big powerful and troublesome station is (ESPN) and NOT A SOUND! It has
both
> high impeadence/long wire clips and 50 ohm Coax antenna connections.
>
> I hate to throw this thing away and was wondering how I should proceed to
try
> and match and connect this to the radio?
>

If those two end coils are equal in size, I would hook them in series
using the innermost wires first and connect a variable capacitor across the
far ends. Then use the coil in the centre as a coupling loop to go to the
receiver. See how that works, then play with those (assumed) tap wires,
using the same colour of each end and use those for the earlier series
connection. I'd be very interested in learning what you end up with.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8422. Re: Unusual 7 inch ferrite bar

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-02 15:31:41 UTC
From: logically_spock
Topic: 8417 Message: 8422

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > I have an unusual 7 inch ferrite bar with three separate coils on it. Two
> > coils on the ends and one with just a few turns almost dead center on the
> bar.
> >
> > I ripped this out of an old Sony muliti-band radio that covered medium
> wave,
> > marine/weather band (around 4Mhz), AND long wave that went down to about
> 100Khz.
> >
> > The bar has three wires - green, gold, and black, coming off the inside of
> each
> > of the two end coils and what looks like a regular copper or white wire
> coming
> > off the outside of each of the two end coils on the bar. I also have the
> circuit
> > board that these wires are soldered to which has a varactor type tuning
> cap with
> > a yellow, a black, and a white wire coming off the varactor. I also have a
> > typical MFJ type antenna tuner with switchable coils and a 360pF variable
> air
> > cap.
> >
> > I know this isn't going to be easy, but I'm trying to figure out how to
> hook
> > this up to my Palstar R30CC/and tuner box for some AM and long-wave
> reception.
> >
> > This radio is very quiet. With out any antenna hooked up, I tuned it 1340
> where
> > a big powerful and troublesome station is (ESPN) and NOT A SOUND! It has
> both
> > high impeadence/long wire clips and 50 ohm Coax antenna connections.
> >
> > I hate to throw this thing away and was wondering how I should proceed to
> try
> > and match and connect this to the radio?
> >
>
> If those two end coils are equal in size, I would hook them in series
> using the innermost wires first and connect a variable capacitor across the
> far ends. Then use the coil in the centre as a coupling loop to go to the
> receiver. See how that works, then play with those (assumed) tap wires,

> using the same colour of each end and use those for the earlier series
> connection. I'd be very interested in learning what you end up with.
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>
The coil on the right end of the bar is equal to the one on the left in size as far as length is concerned, but the windings look like some kind of braiding of wires with I assume, more inductance. I'll try what you say.

Thanks.

8423. Re: [loopantennas] Re: Unusual 7 inch ferrite bar

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-02 15:35:48 UTC
From: Chris Trask
Topic: 8417 Message: 8423

>
> The coil on the right end of the bar is equal to the one on
> the left in size as far as length is concerned, but the
> windings look like some kind of braiding of wires with I
> assume, more inductance. I'll try what you say.
>

That sounds much like what is called a "universal winding", which has the appearance of being braided. Can't recall what the benefits of that form of construction are.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8424. Re: [loopantennas] Re: Large loop polarization

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 01:37:29 UTC
From: Tim Hills
Topic: 8406 Message: 8424

Nostalgic side-note on this topic.

TV and FM broadcasters use what's basically 2 dipoles at 90 deg. fed 90 deg. out of phase to get an omnidirectional reception pattern.

Our local TV station on chan 11 put up the world's first 2000' tower in 1967. To help pay the costs they leased space and shared construction costs with the chan 13 station. Each TV transmitting antenna weighs about 4 tons and with the associated equipment two antennas would have exceeded the safe load limit for a tower that tall.

The Chief Engineer at the time (and my Mentor) Lester Froke designed an antenna and phasing network that would give a good omni pattern on both channels with no crosstalk and SWR that most Hams could only wish for and it was 300# lighter than a commercially produced unit for a single channel.

3 of those antennas were built. The tower collapsed less than a year later when a DC3 clipped one of the guy wires and again in 1975 after a freak ice storm with very high winds. I did get to see the 3rd and final antenna. Looked something like the love-child of a Dalek and a cactus. The fine wires were for static dissipation and according to Les were not on the first unit. I'm still kicking myself for not getting Les to tell me the details of the innards.

At least I got him to reveal the secret of "Franklinizing" an antenna. KELO 1320 still uses the towers he built in the 1950s and as far as I know they're still unmodified from his design. If anyone picks up KELO let me know date/time and I can give you the email of who was on air or on duty at the time for a QSL.

On 4/1/2011 17:20, vbifyz wrote:
>
> Quick googling result:
> http://www.bruhns.us/CP_on_HF/CP_on_HF.html
> Unfortunately, this approach only works on one band, because a 90
> degree phase shift is achieved by a piece of coax (i.e. on one
> frequency). But it can be done and is said to yield good results.
>
> 73, Mike
>
> --- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, "Brian Burns"
> <burnsguitar@...> wrote:
> >
> > Hello Dale,

> >
> >
> >
> > Thanks for the speedy reply!
> >
> >
> >
> > I figured that it couldn't be that easy. Can circular polarity be
> achieved
> > in at least some sort of practical receiving antenna, if not in both
> > transmitting and receiving?
> >
> >
>
>

[Non-text portions of this message have been removed]

8425. Re: [loopantennas] Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 02:08:07 UTC
From: Tim Hills
Topic: 8401 Message: 8425

I did some work with VLF/ELF years ago, 60KHz and down to 6.8 Hz. What I found was that below about 20KHz forget about tuned loops. They can be built but to get any directional gain they would have to be huge and heavy. The more wire used the larger the gauge needed to gain any benefit from it. Look up the resistance/Q formulas. Very large capacitors (Relative to RF) and electrolytics don't work very well either because of the low EMF involved. The best results I got were with Tantalum Caps. with a 3V
bias applied.

Other than man-made noise there really isn't much in the 1KHz range other than produced by thunderstorms and Solar flares. From 70 to 200 HZ there's submarine coms. with very slow CW or FSK 5 letter groups, my main interest at the time. 6.8Hz is the resonance of the Earth's magnetic field, vertical with a capacitance hat, or a big loop laying on the ground with low noise audio/instrumentation optimized op-amps with filtering/amplification and you can watch it on a scope but it takes DAYS to see changes in signal.

Then again you could mix the 1KHz signal with a 13KHz then use WinRad......

That Grumpy Old Man..

On 4/1/2011 19:41, Ray Phillips wrote:
> Is it possible that you are confusing MHZ (millions of cycles per second) with KHz (thousands of cycles per second)? If you are trying to build a loop to receive MHz transmissions but plugging KHz figures into formulas, then your calculations will be wildly inaccurate.
>
> As frequencies fall below 500KHz (0.5MHz) the amount of man-made signals reduce. At 1KHz I would expect all signals to be either natural or man-made noise rather than coherent signals. At 1KHz I, personally, would be using audio techniques not radio techniques. At 1MHz, however, I would definitely use radio techniques such as a loop and capacitor.
>
> Don't give up. Let the forum know what signals you are looking for and I am sure you will get help aplenty. If you are definitely looking for VLF signals then there are websites devoted to that pursuit. Take a look at http://www.vlf.it/harald/strangerec.htm or http://abelian.org/vlfrx/ for starters.
>
> Ray, vk5ugs
>
>
>
>

8426. Re: 735 coax usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 00:24:05 UTC
From: xtemporize
Topic: 8426 Message: 8426

I want to ask the list members comments about some coax I can scrounge. It is 73506 type which is 6 bundled 75R coaxes. I like that it's double shielded wit both a foil and then a braid over the foil. With the thin sheath over the individual coax and the small 26 ga. center conductor I don't think this would last a real long time outside in the weather, but the price is right, zero, but for my time in the tedious work of splitting and pulling off the outer overall cover of the 6 coaxes. I wonder if this still would make a good low-noise pickup leadin for receive purposes? I had also thought about making a kind of home-made twinax by doubling up these coaxes, with each conductor still double shielded. I don't know if the extra shielding would make a notable decrease in leadin noise pickup in a noisy local environ.

Some of the specs:

The cable has two shielding layers, one of an aluminum-polyester tape, and the other of braided, tinned copper. The exterior insulation layer is typically made of polyvinyl chloride (PVC). The total cross-section of the cable measures from 0.135 inch (for a single coax)....735 coaxial should offer an impedance of 75 Ohms and a capacitance of about 7.7 power factor (pF) per foot from conductor to shield. Nominal signal delay should be around 1.34 nanoseconds per foot. There should be a 30 decibels (dB) minimum structural return loss at signal frequencies between 15 and 95 megahertz (MHz). It should have a maximum operating voltage of 300 volts root mean square (RMS). It should have a maximum pulling tension of about 50 lbs.

(The "power factor" item is copied direct from the website...not my mistake, ha ha! For non-USA readers, "scrounge" = find something usable for low cost or free, especially of something discarded or junked, or from another purpose!)

Thanks- Hue Miller / Newport, Oregon, USA

8427. Re: Unusual 7 inch ferrite bar

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 00:59:04 UTC
From: ebkeller5
Topic: 8417 Message: 8427

I have a ferrite rod from a grundig YB700 with windings
of similar make-up you describe.one end coil is the
MW coil ,~240uH,the other end coil is the LW coil,~3mH,
and the center coil,of 4 turns is for an external antenna
connection.This is a very common arrangement.
Eb.

8428. Re: [loopantennas] Re: 735 coax usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 01:06:44 UTC
From: Jack Smith
Topic: 8426 Message: 8428

Main problem with CATV type cables is that some are made with copper clad steel center conductor. These have greater loss at low frequencies (below a MHz or so) than cables with solid copper center conductor. They also have greater DC resistance which can be a concern if powering a remote amplifier over the coax cable.

That being said, the increased loss isn't that great and the cable is certainly usable.

Jack K8ZOA

On 4/2/2011 8:24 PM, xtemporize wrote:
>
> I want to ask the list members comments about some coax I can
> scrounge. It is 73506 type which is 6 bundled 75R coaxes. I like that
> it's double shielded wit both a foil
> and then a braid over the foil. With the thin sheath over the
> individual coax and the small 26 ga. center conductor I don't think
> this would last a real long time outside
> in the weather, but the price is right, zero, but for my time in the
> tedious work of splitting and pulling off the outer overall cover of
> the 6 coaxes. I wonder if this still
> would make a good low-noise pickup leadin for receive purposes? I had
> also thought about making a kind of home-made twinax by doubling up
> these coaxes, with
> each conductor still double shielded. I don't know if the extra
> shielding would make a notable decrease in leadin noise pickup in a
> noisy local environ.
> Some of the specs:
> The cable has two shielding layers, one of an aluminum-polyester tape,
> and the other of braided, tinned copper. The exterior insulation layer
> is typically made of polyvinyl chloride (PVC). The total cross-section
> of the cable measures from 0.135 inch (for a single coax)....735
> coaxial should offer an impedance of 75 Ohms and a capacitance of
> about 7.7 power factor (pF) per foot from conductor to shield. Nominal
> signal delay should be around 1.34 nanoseconds per foot. There should
> be a 30 decibels (dB) minimum structural return loss at signal
> frequencies between 15 and 95 megahertz (MHz). It should have a
> maximum operating voltage of 300 volts root mean square (RMS). It
> should have a maximum pulling tension of about 50 lbs.
> (The "power factor" item is copied direct from the website...not my
> mistake, ha ha! For non-USA readers, "scrounge" = find something
> usable for low cost or free, especially of
> something discarded or junked, or from another purpose!)
> Thanks- Hue Miller / Newport, Oregon, USA
>

>

[Non-text portions of this message have been removed]

8429. Re: [loopantennas] Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 01:19:27 UTC
From: Jerry Flanders
Topic: 8401 Message: 8429

At 10:08 PM 4/2/2011, you wrote:
>I did some work with VLF/ELF years ago, 60KHz and down to 6.8 Hz.
><SNIP> 6.8Hz is the resonance of the Earth's
>magnetic field, vertical with a capacitance hat, or a big loop laying on
>the ground with low noise audio/instrumentation optimized op-amps with
>filtering/amplification and you can watch it on a scope but it takes
>DAYS to see changes in signal.

You can actually see an "earth resonance" signal?

What causes it?

What changes did you see in it - freq?

Jerry W4UK

8430. Re: 735 coax usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 01:39:59 UTC
From: xtemporize
Topic: 8426 Message: 8430

Well, this is from the description: The central conductor of type 735 coaxial is solid copper coated with silver... So that's not an issue.
One strange thing tho, when the outer bundle sheath is pulled off, the
coax gives off a pretty strong "chemical" smell which is very unpleasant and i seem to remember it maybe even making me feel unwell
but i don't know for sure, maybe it was just a long day. -Hue

8431. Re: [loopantennas] Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-04 03:06:22 UTC
From: Tim Hills
Topic: 8401 Message: 8431

Yes, there is a weak signal at 7.83 Hz that's caused by the resonance of the Earth's magnetic field. It's been a while since I've done any reading on it but if I recall it's thought to be powered by the Solar Wind. Some New-Age types refer to it as "Gaia's Heartbeat" and I recall seeing portable recievers marketed to the "Earth Change" people in the 1990s. I see the 2012 true believers have decided to adopt it as a sign now too, not to mention the Zero point energy protagonists.

I misremembered the exact frequency, I thought it was 6.8 so I looked it up. Hey, after 20+ years a 1Hz drift isn't bad for an old analog unit like myself ;) It's called the "Schumann Resonance" if you want to read up on it on the WWW. Note that most of the search results point to what I consider Kook-n-Quack sites. PDF from Scientific source <http://www.hese-project.org/hese-uk/en/papers/schlegel_schumann.pdf> is the best I found on a quick search.

Submarine coms use multiples of that resonance, I think the FSK I picked up was the 11th and 13th harmonics. Kinda like coupling to a spherical resonance cavity at odd multiples

I wasn't paying much attention to any frequency shift but the amplitude varied over about a 2:1 range over a 2 or 3 month period. Never looked into it as far as being affected by Solar storms or flux density. It's not something I spent a lot of time on, just wanted to see if I could pick up EMF at that low a frequency, there was no attempt made at calibration and things like dew on the ground may have affected my measurements.

I recall seeing something about local disturbances in the signal right before earthquakes and the harmonics used for lightning detection, there may be other applications.

On 4/2/2011 20:19, Jerry Flanders wrote:
>
> At 10:08 PM 4/2/2011, you wrote:
> >I did some work with VLF/ELF years ago, 60KHz and down to 6.8 Hz.
> ><SNIP> 6.8Hz is the resonance of the Earth's
> >magnetic field, vertical with a capacitance hat, or a big loop laying on
> >the ground with low noise audio/instrumentation optimized op-amps with
> >filtering/amplification and you can watch it on a scope but it takes
> >DAYS to see changes in signal.
>
> You can actually see an "earth resonance" signal?
>
> What causes it?
>

> What changes did you see in it - freq?
>
> Jerry W4UK
>

[Non-text portions of this message have been removed]

8432. Re: [loopantennas] Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 03:35:35 UTC
From: Jerry Flanders
Topic: 8401 Message: 8432

Cool! I had not heard of this, and found the paper very interesting.

Thanks for sharing the link.

Jerry W4UK

At 11:06 PM 4/3/2011, you wrote:

>Yes, there is a weak signal at 7.83 Hz that's caused by the resonance of
>the Earth's magnetic field. It's been a while since I've done any
>reading on it but if I recall it's thought to be powered by the Solar
>Wind. Some New-Age types refer to it as "Gaia's Heartbeat" and I recall
>seeing portable recievers marketed to the "Earth Change" people in the
>1990s. I see the 2012 true believers have decided to adopt it as a sign
>now too, not to mention the Zero point energy protagonists.
>
>I misremembered the exact frequency, I thought it was 6.8 so I looked it
>up. Hey, after 20+ years a 1Hz drift isn't bad for an old analog unit
>like myself ;) It's called the "Schumann Resonance" if you want to read
>up on it on the WWW. Note that most of the search results point to what
>I consider Kook-n-Quack sites. PDF from Scientific source
><http://www.hese-project.org/hese-uk/en/papers/schlegel_schumann.pdf> is
>the best I found on a quick search.
>
>Submarine coms use multiples of that resonance, I think the FSK I picked
>up was the 11th and 13th harmonics. Kinda like coupling to a spherical
>resonance cavity at odd multiples
>
>I wasn't paying much attention to any frequency shift but the amplitude
>varied over about a 2:1 range over a 2 or 3 month period. Never looked
>into it as far as being affected by Solar storms or flux density. It's
>not something I spent a lot of time on, just wanted to see if I could
>pick up EMF at that low a frequency, there was no attempt made at
>calibration and things like dew on the ground may have affected my
>measurements.
>
>I recall seeing something about local disturbances in the signal right
>before earthquakes and the harmonics used for lightning detection, there
>may be other applications.
>
>On 4/2/2011 20:19, Jerry Flanders wrote:
> >
> > At 10:08 PM 4/2/2011, you wrote:
> > >I did some work with VLF/ELF years ago, 60KHz and down to 6.8 Hz.
> > ><SNIP> 6.8Hz is the resonance of the Earth's
> > >magnetic field, vertical with a capacitance hat, or a big loop laying on

> > >the ground with low noise audio/instrumentation optimized op-amps with
> > >filtering/amplification and you can watch it on a scope but it takes
> > >DAYS to see changes in signal.
> >
> > You can actually see an "earth resonance" signal?
> >
> > What causes it?
> >
> > What changes did you see in it - freq?
> >
> > Jerry W4UK
> >
>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>

8433. Re: [loopantennas] Re: 735 coax usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 04:18:38 UTC
From: kevin asato
Topic: 8426 Message: 8433

Sounds like cable for 3 full duplex DS3 circuits which has a maximum clock rate of 45MHz on the line. I see similar cable as this in mobile and "wireline" phone company offices. Much of this is being replaced by high density fiber transports and electronic switches (vs. manual patch panels).

Would probably work well for receivers.The double shielding around a single conductor and the lack of a (predefined) twist between pairs would not make this a good candidate for twinax cable.

73,
kevin
kc6pob

--- On Sat, 4/2/11, xtemporize <kargo_cult@...> wrote:

From: xtemporize <kargo_cult@...m>
Subject: [loopantennas] Re: 735 coax usable?
To: loopantennas@yahoogroups.com
Date: Saturday, April 2, 2011, 5:24 PM

I want to ask the list members comments about some coax I can scrounge. It is 73506 type which is 6 bundled 75R coaxes. I like that it's double shielded wit both a foil

and then a braid over the foil. With the thin sheath over the individual coax and the small 26 ga. center conductor I don't think this would last a real long time outside

in the weather, but the price is right, zero, but for my time in the tedious work of splitting and pulling off the outer overall cover of the 6 coaxes. I wonder if this still

would make a good low-noise pickup leadin for receive purposes? I had also thought about making a kind of home-made twinax by doubling up these coaxes, with

each conductor still double shielded. I don't know if the extra shielding would make a notable decrease in leadin noise pickup in a noisy local environ.

Some of the specs:

The cable has two shielding layers, one of an aluminum-polyester tape, and the other of braided, tinned copper. The exterior insulation layer is typically made of polyvinyl chloride (PVC). The total cross-section of the cable measures from 0.135 inch (for a single coax)....735 coaxial should offer an impedance of 75 Ohms and a capacitance of about 7.7 power factor (pF) per foot from conductor to shield. Nominal signal delay should be around 1.34 nanoseconds per foot. There should be a 30 decibels (dB) minimum structural return loss at signal frequencies between 15 and 95 megahertz (MHz). It should have a maximum operating voltage of 300 volts root mean square (RMS). It should have a maximum pulling tension of about 50 lbs.

(The "power factor" item is copied direct from the website...not my mistake, ha ha! For non-USA readers, "scrounge" = find something usable for low cost or free, especially of

something discarded or junked, or from another purpose!)

Thanks- Hue Miller / Newport, Oregon, USA

[Non-text portions of this message have been removed]

8434. Re: [loopantennas] Re: What type of capacitor is used for loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 08:17:47 UTC
From: Steve, g4vbd
Topic: 8401 Message: 8434

Hi Jerry
there is also a Yahoo group for ELF and ULF who talk obout the Schumann,
take a look at

http://tech.groups.yahoo.com/group/ulfelf/
There are plenty of papers, designs and results here

regards
Steve, g4vbd

On Sun, Apr 3, 2011 at 4:35 AM, Jerry Flanders <jeflanders@...>wrote:

>
>
> Cool! I had not heard of this, and found the paper very interesting.
>
> Thanks for sharing the link.
>
> Jerry W4UK
>
>
> At 11:06 PM 4/3/2011, you wrote:
>
> >Yes, there is a weak signal at 7.83 Hz that's caused by the resonance of
> >the Earth's magnetic field. It's been a while since I've done any
> >reading on it but if I recall it's thought to be powered by the Solar
> >Wind. Some New-Age types refer to it as "Gaia's Heartbeat" and I recall
> >seeing portable recievers marketed to the "Earth Change" people in the
> >1990s. I see the 2012 true believers have decided to adopt it as a sign
> >now too, not to mention the Zero point energy protagonists.
> >
> >I misremembered the exact frequency, I thought it was 6.8 so I looked it
> >up. Hey, after 20+ years a 1Hz drift isn't bad for an old analog unit
> >like myself ;) It's called the "Schumann Resonance" if you want to read
> >up on it on the WWW. Note that most of the search results point to what
> >I consider Kook-n-Quack sites. PDF from Scientific source
> ><http://www.hese-project.org/hese-uk/en/papers/schlegel_schumann.pdf> is
> >the best I found on a quick search.
> >
> >Submarine coms use multiples of that resonance, I think the FSK I picked
> >up was the 11th and 13th harmonics. Kinda like coupling to a spherical
> >resonance cavity at odd multiples
> >
> >I wasn't paying much attention to any frequency shift but the amplitude
> >varied over about a 2:1 range over a 2 or 3 month period. Never looked
> >into it as far as being affected by Solar storms or flux density. It's

> >not something I spent a lot of time on, just wanted to see if I could
> >pick up EMF at that low a frequency, there was no attempt made at
> >calibration and things like dew on the ground may have affected my
> >measurements.
> >
> >I recall seeing something about local disturbances in the signal right
> >before earthquakes and the harmonics used for lightning detection, there
> >may be other applications.
> >
> >On 4/2/2011 20:19, Jerry Flanders wrote:
> > >
> > > At 10:08 PM 4/2/2011, you wrote:
> > > >I did some work with VLF/ELF years ago, 60KHz and down to 6.8 Hz.
> > > ><SNIP> 6.8Hz is the resonance of the Earth's
> > > >magnetic field, vertical with a capacitance hat, or a big loop laying
> on
> > > >the ground with low noise audio/instrumentation optimized op-amps with
> > > >filtering/amplification and you can watch it on a scope but it takes
> > > >DAYS to see changes in signal.
> > >
> > > You can actually see an "earth resonance" signal?
> > >
> > > What causes it?
> > >
> > > What changes did you see in it - freq?
> > >
> > > Jerry W4UK
> > >
> >
> >
> >
> >[Non-text portions of this message have been removed]
> >
> >
> >
> >------------------------------------
>
> >
> >If you've got links, post them in the Links section!
> >http://groups.yahoo.com/group/loopantennas/links
> >
> >Post files here. If the file comes from a website, please put it in
> >the Links rather than uploading the file.
> >http://groups.yahoo.com/group/loopantennas/files
> >
> >You can now view images at higher resolution in Photos. Upload JPG
> >and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
> uploading.
> >http://ph.groups.yahoo.com/group/loopantennas/photos
> >

> >And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
>
>
>

[Non-text portions of this message have been removed]

8435. Re: Unusual 7 inch ferrite bar

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 15:49:00 UTC
From: logically_spock
Topic: 8417 Message: 8435

OK I made a mistake, there's actually four coils total. I had it taped to the pc board and the taped covered up one of the inner coils.

It looks like the two outer coils are for MW and LW with two lesser turn coils in the center. All are about evenly spaced. The two center coils have a common black wire connected end to end, I assume a common ground.

There was a double black and white wire coming out the back of the radio for an external antenna connect I assume. And there's a black and white wire connected to the ends of the center pick up coil on the right. That must be pick up for a external antenna?

The other center pick up coil on the left next to what looks like the MW wrapping has a blue wire coming off and that common black wire connected to the other pick up coil on the right (common ground).

Now coming off the *inside* of both of the two outer(MW-LW)coils are three wires - gold, green, and black going to the pc board. This is what has me confused. Why three wires? Is there some kind of center-tap here?

Thanks, Gary.

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > The coil on the right end of the bar is equal to the one on
> > the left in size as far as length is concerned, but the
> > windings look like some kind of braiding of wires with I
> > assume, more inductance. I'll try what you say.
> >
>
> That sounds much like what is called a "universal winding", which has the appearance of being braided. Can't recall what the benefits of that form of construction are.
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

8436. Re: Unusual 7 inch ferrite bar/Picture in Album - "Gary's Pics"

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 16:48:22 UTC
From: logically_spock
Topic: 8417 Message: 8436

A picture's worth a thousand words:
I created a photo album "Gary's Pics" and stuck a photo of the Ferrite antenna sitting inside a cigar box.

--- In loopantennas@yahoogroups.com, "logically_spock" <dxdxer@...> wrote:
>
> OK I made a mistake, there's actually four coils total. I had it taped to the pc board and the taped covered up one of the inner coils.
>
> It looks like the two outer coils are for MW and LW with two lesser turn coils in the center. All are about evenly spaced. The two center coils have a common black wire connected end to end, I assume a common ground.
>
> There was a double black and white wire coming out the back of the radio for an external antenna connect I assume. And there's a black and white wire connected to the ends of the center pick up coil on the right. That must be pick up for a external antenna?
>
> The other center pick up coil on the left next to what looks like the MW wrapping has a blue wire coming off and that common black wire connected to the other pick up coil on the right (common ground).
>
> Now coming off the *inside* of both of the two outer(MW-LW)coils are three wires - gold, green, and black going to the pc board. This is what has me confused. Why three wires? Is there some kind of center-tap here?
>
> Thanks, Gary.
>
> --- In loopantennas@yahoogroups.com, Chris Trask <christrask@> wrote:
> >
> > >
> > > The coil on the right end of the bar is equal to the one on
> > > the left in size as far as length is concerned, but the
> > > windings look like some kind of braiding of wires with I
> > > assume, more inductance. I'll try what you say.
> > >
> >
> > That sounds much like what is called a "universal winding", which has the appearance of being braided. Can't recall what the benefits of that form of construction are.
> >
> >
> > Chris Trask
> > N7ZWY / WDX3HLB
> > Senior Member IEEE
> > http://www.home.earthlink.net/~christrask/
> >

>

8437. Re: [loopantennas] Re: Unusual 7 inch ferrite bar/Picture in Album -

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-03 16:56:50 UTC
From: Chris Trask
Topic: 8437 Message: 8437

>
> A picture's worth a thousand words:
> I created a photo album "Gary's Pics" and stuck a photo of
> the Ferrite antenna sitting inside a cigar box.
>

Yes, that certainly does help. It's somewhat obvious from that photo that the windings at the rod ends are not identical, but that might not prevent you from connecting the two together as I suggested earlier. However, those two windings and the tuning capacitor probably should not be connected to ground at any point.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8438. Loop antenna for AM DXing

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-04 18:04:44 UTC
From: John McKee
Topic: 8438 Message: 8438

I need an antenna for some MW/AM DXing but also need one with a deep null off the backside. I was listening for some DX but had trouble with stations 180 degrees from the ones I wanted to hear. I'm thinking maybe a flag or pennant with a nice preamp but would also like to hear about any other options. Needs to fit within the backyard. Thanks - John M

[Non-text portions of this message have been removed]

8439. Re: [loopantennas] Loop antenna for AM DXing

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-04 18:22:49 UTC
From: Dale Parfitt
Topic: 8438 Message: 8439

Hi John,
I use a 1/2 sized rotatable Flag with a balanced input preamp- I typically see 16-24dB nulls off the rear on AM broadcast. The Flag is 6.5' X 13' from memory. Half sized flag has the same RDF as a full sized- just lower gain.

Dale W4OP

I need an antenna for some MW/AM DXing but also need one with a deep null off the backside. I was listening for some DX but had trouble with stations 180 degrees from the ones I wanted to hear. I'm thinking maybe a flag or pennant with a nice preamp but would also like to hear about any other options. Needs to fit within the backyard. Thanks - John M

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3549 - Release Date: 04/04/11 02:35:00

[Non-text portions of this message have been removed]

8440. Re: 735 coax usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-05 23:49:57 UTC
From: bm40g
Topic: 8426 Message: 8440

--- In loopantennas@yahoogroups.com, "xtemporize" <kargo_cult@...> wrote:
>
> Well, this is from the description: The central conductor of type 735 coaxial is solid copper coated with silver... So that's not an issue.
> One strange thing tho, when the outer bundle sheath is pulled off, the
> coax gives off a pretty strong "chemical" smell which is very unpleasant and i seem to remember it maybe even making me feel unwell
> but i don't know for sure, maybe it was just a long day. -Hue
>

Hi xtemporize,

If the metal foil is on the outside of the film, next to the braid, it should be OK. Did I get thet right, its a metal foil on plastic film ?

But if the foil is on the inside of the film, next to the dielectric, there is usually some loss asociated with the connector connection. As there is no direct DC path from the braid (which is attached to the connector) and the ID of the film/foil.

8441. Re: [loopantennas] Re: 735 coax usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-06 20:54:27 UTC
From: M HOLDEN
Topic: 8426 Message: 8441

The odd smell could be chemical termite proofing which was fairly common back in the 60s and 70s, but I believe it was withdrawn from use in the UK at least, for reasons of health and safety (to humans !). Mike G4HOL

From: bm40g <donver@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, 6 April 2011, 0:49
Subject: [loopantennas] Re: 735 coax usable?

--- In loopantennas@yahoogroups.com, "xtemporize" <kargo_cult@...> wrote:
>
> Well, this is from the description: The central conductor of type 735 coaxial is solid copper coated with silver... So that's not an issue.
> One strange thing tho, when the outer bundle sheath is pulled off, the
> coax gives off a pretty strong "chemical" smell which is very unpleasant and i seem to remember it maybe even making me feel unwell
> but i don't know for sure, maybe it was just a long day. -Hue
>

Hi xtemporize,

If the metal foil is on the outside of the film, next to the braid, it should be OK. Did I get thet right, its a metal foil on plastic film ?

But if the foil is on the inside of the film, next to the dielectric, there is usually some loss asociated with the connector connection. As there is no direct DC path from the braid (which is attached to the connector) and the ID of the film/foil.

[Non-text portions of this message have been removed]

8442. Small transmitting loop 30m-10m

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-07 14:01:00 UTC
From: Ken
Topic: 8442 Message: 8442

I have uploaded my finished 30m-10m small transmitting loop project to the files section "wa4mnt transmitting loop antenna project". It also can be viewed at http://www.qrpbuilder.com/downloads/loop%20antenna%20110310.pdf . I have been very impressed with the performance, and it has given me the opportunity to work many other bands for which I had no antennas. I continue to amazed at the overlooked potential of these devices. I'll be taking it north to Canada this summer as my only antenna, and hope to get in some good contacts.

73, ken - wa4mnt

8443. Transmitting loop tuning device

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-07 14:57:32 UTC
From: Ken
Topic: 8443 Message: 8443

I do some chassis design work for Doug Hendricks of Hendricks QRP Kits, and I was fortunate enough to get to build up one of the beta versions of Steve Weber's (KD1JV) Deluxe Tenna Dipper kit. I find it great to find the resonant spot tuning my small magnetic loop without using a transmitter. It covers 80m - 10m, and you set your frequency on the digital readout of the Tenna Dipper that you wish to operate at, and tune the antenna until the led goes out, and you are at resonance. You can really see the sharp dip of a magnetic loop. It's not an interactive looped-back motor driven device, but it sure makes tuning easier on my loop. It's powered by AA's and fits in my shirt pocket.

ken - wa4mnt

8444. RE: [loopantennas] Transmitting loop tuning device

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-08 11:59:24 UTC
From: Collins, Graham
Topic: 8443 Message: 8444

Very nice Ken, well thought out and constructed; thanks for posting your design.

I recently saw the listing for Hendricks Tenna Dipper. Your method to tune this antenna is a pretty application of this device.

Cheers, Graham ve3gtc

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Ken
Sent: April 7, 2011 10:58
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Transmitting loop tuning device

I do some chassis design work for Doug Hendricks of Hendricks QRP Kits, and I was fortunate enough to get to build up one of the beta versions of Steve Weber's (KD1JV) Deluxe Tenna Dipper kit. I find it great to find the resonant spot tuning my small magnetic loop without using a transmitter. It covers 80m - 10m, and you set your frequency on the digital readout of the Tenna Dipper that you wish to operate at, and tune the antenna until the led goes out, and you are at resonance. You can really see the sharp dip of a magnetic loop. It's not an interactive looped-back motor driven device, but it sure makes tuning easier on my loop. It's powered by AA's and fits in my shirt pocket.

ken - wa4mnt

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

8445. 10 meter antenna EASY

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-08 12:07:17 UTC
From: SWL - CE
Topic: 8445 Message: 8445

GOOD AFTERNOON;

SOME OF THESE FRIENDS, MEET SOME DIRECTIONAL ANTENNA SCHEME FOR 2 OR 3 ELEMENTS, OF EASY CONSTRUCTION.

THANK YOU FOR ALL

Hector Frias J.
CE2C

April 8, 2011

8446. 40 meter Transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-10 18:03:56 UTC
From: Brian Burns
Topic: 8443 Message: 8446

Hello All,

Well, I'm about googled out. I've been trying to find info on a two turn, single element loop for 40 meters, and no luck so far.

I figure it would be about 1/8th wavelength on a side if square (approx. 17'), and could be rotated to give me some propagation in an easterly direction. With a tilting mast I could lay it down out of sight behind my shop when I'm not on the air. Anyone have any experience with such an animal, or have links to info?

Thanks a bunch,

Brian Burns

[Non-text portions of this message have been removed]

8447. Re: [loopantennas] 40 meter Transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-10 18:42:22 UTC
From: Chris Trask
Topic: 8443 Message: 8447

>
> Well, I'm about googled out. I've been trying to find info on a two turn,
> single element loop for 40 meters, and no luck so far.
>
> I figure it would be about 1/8th wavelength on a side if square (approx.
> 17'), and could be rotated to give me some propagation in an easterly
> direction. With a tilting mast I could lay it down out of sight behind my
> shop when I'm not on the air. Anyone have any experience with such an
> animal, or have links to info?
>

http://www.home.earthlink.net/~christrask/Paper012.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8448. RE: [loopantennas] 40 meter Transmitting loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-10 23:52:39 UTC
From: Steve Roberts
Topic: 8443 Message: 8448

Hello Brian,
I know how you feel. Maybe the attached sent to me by a friend in Portland Origan will help you.

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
Cell 416-786-7485

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Brian Burns
Sent: April 10, 2011 2:04 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] 40 meter Transmitting loop

Hello All,

Well, I'm about googled out. I've been trying to find info on a two turn, single element loop for 40 meters, and no luck so far.

I figure it would be about 1/8th wavelength on a side if square (approx. 17'), and could be rotated to give me some propagation in an easterly direction. With a tilting mast I could lay it down out of sight behind my shop when I'm not on the air. Anyone have any experience with such an animal, or have links to info?

Thanks a bunch,

Brian Burns

[Non-text portions of this message have been removed]

A TWO-TURN 40-80 METER STL ANTENNA
Augie "Gus" Hansen, KB0YH

INTRODUCTION

This article describes a two-turn small transmitting/receiving loop (STL) antenna that covers 4080
meters. The article compares and contrasts single-vs. multi-turn loops from design and construction perspectives, and evaluates actual performance via field testing.

Small transmitting/receiving loop antennas, commonly called magnetic loop antennas, have fascinated me ever since I saw one in the late 1970s. It was a one meter wide octagonal copper
loop that had been abandoned after what I was told was a ?short and frustrating period of testing

? OK for receiving but a poor performer on transmit.? At the time the thought of a small antenna appealed to me because my wife and I were renting a home and putting up big antennas
was out of the question. But that loop had been lying on the ground for several years and revealed its age and neglect by heavy oxidation and corroded joints. At the time I opted instead
to hide a multi-band vertical in the back yard. It would be several years and a move into a purchased home before I got back to the task of building my own antennas, including several STL antennas.
Having since built and used a large number of STL antennas for the ham bands in the 10-54MHz
range, I know how effective such small antennas can be if designed and constructed correctly.
STL antennas have been an integral part of my modest antenna farm, ARRL Field Day activities,
and emergency ?go? kit for more than 20 years. Several years ago at the urging of my friend Don, W0ZN (X-KB2Z, and now SK), I undertook the task of building some STL antennas for use on the lower frequency bands. Although there are no significant antenna restrictions at my
current location, several of my ham friends suffer oppressive antenna restrictions and need something small and effective for 40-160 meters. I'll address the 80-160 meter STL that I have
been field testing during the 2008-2009 Winter season in a future article. This article focuses on a
4.5-foot (1.37m) diameter, two-turn STL for 40-80 meters that can be easily hidden in a yard
(garden) or an unoccupied interior space such as an attic or garage.

ONE GOOD TURN DESERVES ANOTHER

Until about a year ago my STL antennas were all single-turn types, none larger than two meters
in diameter. Compared to a single-turn STL, using two turns for the same loop conductor length
shrinks the antenna size dramatically without significant reduction in performance. Photo

1
shows a single-turn STL that is about nine feet (2.75 meters) in diameter that covers 40-80 meters with a suitably large tuning capacitor. In this design, with the loop supported vertically,
the feed point is at the bottom of the loop opposite the gap at the top where the tuning capacitor
is located. This test antenna was manually tuned, so a tall ladder was used to reach the tuning
capacitor while observing the VSWR on an MFJ-269 Antenna Analyzer.

Photo 1: A one-turn STL that covers 40-80 meters.

Photo 2 shows the two-turn version of an antenna that covers the same set of bands, but is only

4.5 feet (1.37 meters) in diameter. Note that the feed point and the tuning capacitor are both at
the bottom of the loop. The feed point and the tuning capacitor are still electrically 180 degrees
apart, but physically adjacent. This arrangement simplifies hanging the antenna from above. If
the antenna is supported by a post or pole from below, the feed point and capacitor could be
positioned at the top instead.
For its intended use the antenna had to be small and easily constructed in an attic that is accessible only via a small hatch that is 2 feet square. That requirement alone meant that the
antenna had to be brought into the attic in pieces and assembled in place. A piece of scrap Heliax
for the conductor and a PVC frame nicely met the in situ assembly challenge. The remaining components include a coupling loop and a remotely controlled tuning capacitor, each small enough to easily pass through the hatch.

Photo 2: Another version of the 40-80 meter STL that uses the same loop conductor length, but formed into a two-turn wide-spaced coil.

For tuning the loop I have used both air-variable and vacuum variable capacitors, the choice
determined by the intended power level. A good air variable capacitor of either split-stator or
butterfly construction can easily handle up to 200 watts if correctly sized (wide plate spacing)
and welded to minimize losses. A vacuum variable capacitor with 15KV and 60 ampere ratings can handle up to about 500 watts.

BANDWIDTH VALUES

There are differing types of bandwidth to consider when describing STL antennas. The instantaneous bandwidth for transmitting can be taken to mean the frequency range over which the VSWR is 2:1 or less. Some transmitters, especially those that uses tube (valve) finals, can output full power within this limit. However, most modern transmitters automatically reduce power output when the VSWR rises above a predetermined safe value, often as low as 1.5:1 or so. Using an Icom IC-765 transceiver at minimum power (about 10 watts) for the VSWR tests there was no measured power cut back until the VSWR exceeded 5:1.

The instantaneous bandwidth for receiving is generally taken to mean the 3dB (half-power) bandwidth. It correlates to a slightly wider range of frequencies as determined by about a 2.6:1 VSWR bandwidth. It is critical that the VSWR obtained at resonance be 1:1 so that the high and low 3dB frequencies can be determined accurately and the difference calculated. Then the antenna Q can be calculated as the center (near resonant) frequency divided by the difference. In practice the transmit bandwidth is slightly better than one third the receive bandwidth.

Operational bandwidth is a term that describes the useful range over which the antenna can be tuned and used successfully. In my view this range leads to a loop perimeter from 0.1 wavelength at the low-frequency end of the range to 0.3 wavelength at the high-frequency end. Loops with a perimeter shorter than 0.1 wavelength exhibit very narrow instantaneous bandwidths that can't pass SSB signals with full fidelity, never mind AM or FM. Those having a perimeter longer than 1/3 wavelength do not qualify as small. According to John Kraus [KRAUS] the condition of constant loop current is met to within 1% for a perimeter length of 1/3 wavelength. In addition, small loops become self-resonant near this length given the values of loop inductance and stray capacitance. Therefore, I use a high-frequency perimeter length goal of 0.3 wavelength in my designs to provide some margin.

Tuning range is the range of frequencies over which a given loop conductor can be tuned by a given capacitor. A large maximum capacitor value can be used to resonate the loop well below the low frequency end of the operational bandwidth, but the loop efficiency would be very low. Also, the instantaneous bandwidth becomes impractically narrow. In effect the extra range obtainable by using larger-than-necessary capacitance values would be ineffective and wasteful in a practical STL design. As a practical matter, I use what is available that covers the desired range at reasonable cost.

MATERIAL AND COMPONENT SELECTION

The loop conductor for this 40-80 meter STL is made from recycled 7/8-inch hard line. Only the outer surface of the copper shield is used, so you can use any sufficiently long piece, such as ?cut-ends? or ?pulls? that can be obtained inexpensively or even for free from cable and wireless companies. I prefer this type of loop conductor because it is continuous, is protected from environmental elements by a sheath, and is fairly light weight. The lightest hard line seems to be the type that has foamed insulation and a tubular center conductor. Some hard line uses a plastic spiral wrap to support a solid rod center conductor (typically copper-coated aluminum) inside the shield, providing an air dielectric. This type tends to be a bit heavier. Either will work well electrically, but the lighter hard line makes STLs that are easier to handle.

The end cap treatment that I use for my loops makes it possible to have low-loss connections to the tuning capacitor without having to solder or weld directly to the capacitor. As long as the connections are tight and have large enough surface areas the resulting antenna will have low loss resistance (assuming the capacitor itself has low series resistance).

Photo 3 shows the end treatment of the loop conductor. It consists of a short copper tube secured to the hard-line shield mechanically with several brass screws, and then electrically with silver-bearing solder. Use rosin core solder, not acid core for this purpose. The overlap is about 4-6 inches, which is enough to provide stress relief and crush resistance for the hard-line shield at the attachment points, where some form of clamping is usually needed. A copper end cap is fitted with a 3/8-inch diameter, 1-1/2-inch long brass bolt, brass lock washers inside and out and a brass nut. These components are soldered both inside and outside the end cap before it is soldered to the short copper tube. A pair of brass flat washers and a stainless steel lock nut for securing jumpers or capacitor leads complete the assembly.

Photo 3: The loop conductor end treatment provides weather protection and a way to make solid electrical connections.

After the end assemblies cool to near ambient temperature, to protect the copper surfaces and preclude water entrainment between the hard-line shield and the plastic sheath, I apply a layer of

coax seal or equivalent followed by several layers of vinyl tape or heat shrink tubing.

antenneX Issue No. 145 ? May 2009 Page 5

The loop frame is made of structural PVC tubes and connectors, elbows, and end caps. This material is UV protected and is typically used to construct patio furniture and storage racks. I
purchased my PVC parts at a local hardware store. It is also available from several on-line vendors, for example ACF Greenhouses (
http://www.littlegreenhouse.com/accessory/pvc.shtml).
Do an on-line search for ?structural PVC? for a list of vendors. I use screws to hold the pieces
together rather than PVC cement because the parts are often reused for other antenna experiments. For initial testing my loops are usually suspended from a tree branch using a pulley
system, hence the eye-hook at the top of the loop. This technique facilitates testing the antennas
at various heights above ground.

To obtain test data that is not adversely affected by losses in the tuning capacitor I use a vacuum
variable capacitor (VVC). In addition to offering very low loss a VVC provides excellent immunity to environmental factors. Other capacitors that I have used in the past, such as air
variables and homemade trombone-style capacitors, suffer from drift caused by temperature variations and peak voltage reduction due to high humidity. VVCs also can provide low minimum and high maximum capacity values in rather small packages. They're expensive, but well worth the cost in the long run.

Photo 4: The vacuum variable capacitor is remotely controlled over the coax. A 12-volt DC gear-head motor and belt/pulley system provide satisfactory tuning rates.

antenneX Issue No. 145 ? May 2009 Page 6

The tuning unit pictured in Photo 4 consists of a VVC controlled by a surplus 30 RPM gear-head
DC motor and belt/pulley system. A set of micro-switches limit travel to prevent damage to the
capacitor at the tuning extremes. NOTE: This tuning unit provides smooth tuning over the range
of about 5-9 MHz using a 6-110 pF VVC, a Jennings UCSV-110-15S. The tuning unit that permits coverage down to about 3 MHz with this two-turn loop uses a 12-500 pF VVC, a Jennings CSVF-500-0315. It is being used with a three-turn STL for 80-160 meters that is under
test at the time of this writing. My source for vacuum variable capacitors is Max-Gain Systems,
Inc. (MGS, http://www.mgs4u.com). The pulley and belt components were obtained from Small Parts (http://www.smallparts.com/). I had to drill and tap the pulleys and add set screws to obtain
sufficient holding force. They are ?pressure fit? pulleys as supplied. The micro switches were
obtained from a model train hobby shop. They are very small and called ?power directors?,

with
extension arms that can be bent to provide easy adjustment of the limit points. A small plastic
block, tapped and drilled to slide freely on a threaded plastic rod, provides the activator for the
limit switches (normally closed) and reverse diodes provide the current path when the tuning
direction is initially reversed after having reached a limit.

The shack end of the feed line has a control unit that is simply a variable voltage power supply
(3-12 volts DC) with a momentary DPDT-center-off switch. 12 volts provides a reasonably fast
slewing rate for band-to-band movement and 3 volts provides a fine-tuning rate. Each end of the
feed line has a DC blocking capacitor of 0.1 uF at 2 KV in series to the connected device (rig,
antenna) and a 100 uH inductor to block RF and provide the DC path for the motor control
voltage. Articles published in antenneX and elsewhere show several remote control systems
including some interesting auto tuners that work over the coax feed line.

FEED SYSTEM CONSIDERATIONS

Because the loop conductor is coated (PVC jacket), the most practical method of driving the loop
is via a separate coupling loop. The other often used method is an autotransformer, but this
method would require exposing portions of the conductor surface to facilitate adjustment of the
tap point, inviting problems caused by surface oxidation and possible water entrainment.

The primary factors that affect the success of this method are the relative sizes the loops, the
position and shape of the coupling loop, and the proximity of the antenna to other objects and RF
ground with which the coupling loop interacts. My tests of multi-turn STLs show that the
impedance transformation is a function of the relative areas of the coupling loop and the main
loop regardless of the number of turns. The recommended 1:5 ratio of loop diameters for single-
turn loops is a reasonable starting point for multi-turn loops as well.

The treatment of small transmitting loop antennas in the ARRL Antenna Book [ARRL] gives an
approximation of the radiation resistance as being proportional to the square of the product of the
number of turns and the loop area. Because the overall loop conductor length is the same for both
the one-and two-turn loops, there is no increase in radiation resistance. Indeed, it is cut in half
when going from one turn to two turns, emphasizing the need for high quality components
(conductor and capacitor) and connections.

Much has been made of the purported noise suppression characteristics of shielded loops. I haven't found the extra effort to build them justifiable. The primary benefit is actually a reduction

of feed line radiation, but only if the loop structures can be made well balanced, which is usually
difficult in practice. You can see in Photo 1 that the one-turn antenna uses a simple insulated
wire (#10 AWG) for its coupling loop, with a line isolator (choke) at the feed point. Without the
choke there was a small but detectable current on the feed line. The two-turn loop is driven by a
balanced shielded coupling loop. Balance is good enough that little or no current can be detected
on the coax feed line.

MEASUREMENTS

To assess the quality and performance of an STL the first order of business is a transmit bandwidth test. A check of the 2:1 VSWR is a good indication of the health of the antenna because it reveals antenna losses, with lower loss values resulting in narrower bandwidths. If test
results reveal a broader than expected bandwidth, this is a sure sign that there are excessive
losses in the system. Such losses are usually caused by bad connections, the use of poor quality
components (loop conductor and/or capacitor), and RF absorbing objects in the near field of the
antenna.

With the two-turn STL suspended about two meters above physical ground as measured to the bottom of the loop, the transmit bandwidth values on 40 and 80 meters were obtained and compared to expected values. I used values predicted by magloop4, an excellent program written by R. J. Edwards, G4FGQ. It deals with only single-turn loops, but provides a reasonable
guide to expected values. (I will attempt to write a program that works for multi-turn loops after
collecting additional experimental data.) On 40 meters the instantaneous bandwidth was measured as 11 kHz, which is a little bit wider than the predicted 9 kHz. This indicates some
losses in the system, most likely in the short #6 AWG jumper wires and connections to the vacuum variable capacitor, plus some possible interaction between loop turns. Similarly, on 80
meters the bandwidth was approximately 3.6 kHz versus the predicted value of 2.5 kHz. (These
measurements were made with the 500 pF VVC installed.)

To make meaningful field strength and pattern measurements, the loops will need to be taken out
to a suitable test range. However, the relative signal strengths and patterns for the multi-turn and

one-turn STLs have been nearly identical when measured at one mile from my back yard location. On-air performance of both loops has been quite acceptable when compared to other antennas, such as inverted vees and verticals, in both contests and occasional casual operation
over a period of six months

CONCLUSIONS

A multi-turn STL antenna provides acceptable performance in a small package. It was well worth
the effort to build the two-turn STL for 40-80 meters described in this article. I have been
convinced by the experience that similar STLs with even more turns can be effective on 160 meters, permitting radio operators with limited space and/or legal antenna restrictions to have fun
on the low-frequency bands. -30

REFERENCES

[KRAUS] Antennas, Second Edition, John D. Kraus, McGraw-Hill, Inc., 1988. Chapter 6, pages 249-250.

[ARRL] The ARRL Antenna Book, ARRL, 2003. Chapter 5, page 5-11.

BRIEF BIOGRAPHY OF AUTHOR
Augie "Gus" Hansen, KB0YH

1962-1966 Broadcast engineering, on-air
work and station management
1966-1970 Electronics Technician at General

Dynamics, Electric Boat Division
1970 BSEE, University of Rhode Island
1970-1973 Design Engineer & Project

Manager, Raytheon SSD, Portsmouth, RI

1973-1977 Engineering management (Waltham, MA), then Business Unit
Management (Denver, CO) at EG&G Environmental Consultants

1977-1982 Tech Writer, Publication Supervisor at AT&T, Bell Telephone Labs and
1982-1984 Member of Technical Staff at AT&T, Bell Telephone Labs

1984-present Computer systems consultant, Technical Trainer and Freelance
Writer (DBA Omniware)

1998-2002 Took a "temporary" job as Technical Trainer for New Era of Networks
(bought by Sybase) that became a long-term assignment

Currently writing firmware for micro-controller based systems

Author of five books about computer operating systems and various programming languages, including "Learn C Now" (Microsoft Press)

Wrote 200+ technical articles for PC Tech Journal, Turbo Technix, Microsoft Systems Journal, and Unix World magazines

Radio Telephone First Class, 1963.
Amateur Radio License WD0GAF, 1978, and changed call to KB0YH in 1981
Member ACM

I use the name "Gus" for Ham Radio-related activities

antenneX Online Issue No. 145 ? May 2009
Send mail to webmaster@... with questions or comments.
Copyright ? 1988-2009 All rights reserved -antenneX?

[Non-text portions of this message have been removed]

8449. Does shape matters?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-14 20:41:23 UTC
From: vaclav_sal
Topic: 8449 Message: 8449

I am busy copying Ken's WA4MNT transmitting antenna design and bugging him with silly questions.
So I decided to bug y'all for a change.

Found very math oriented article on small loop where the author repeatedly states that "the shape does not matter (in far field)".
So - I am trying to find a compromise between expensive ½ inch soft copper tubing, mechanical rigidity (what a awful word) and lowest possible resistance (minimal number of solder joints).

I am "leaning " towards 3/4 or 1 inch "hard " copper in rectangular shape.
I think "standard" copper pipe comes in 10 ft or 6 ft.
I feel ½ inch would be too flimsy if soldered. (Anybody remember Ike ☐ I want this to be an outdoor antenna in Texas)

Now for the questions.:
Would square (1:1) shape be mechanically preferable?
How far can I "squish" the vertical sides.
How would it affect upper frequency (30 MHz desired)?

Would I face a challenge forming the "pickup" loop - can it still be circular?

Years ago I used some magic liquid (chemistry was my least favorable subject) to put silver on PCB traces. I wonder if anybody ever used it on small loop copper stuff. If I recall , it would tarnish quickly, and that was using it indoor.

Thanks for reading
73 Vaclav AA7EJ

8450. Re: Does shape matters?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-15 23:37:10 UTC
From: Andrew
Topic: 8449 Message: 8450

Hello vaclav_sal,
On my loop adventures and experimentation I've found the loops aperture is a direct function of the available efficiency. Otherwise I would of ended up with a loop like a dipole made from twin feed capacitively shortened to frequency.

If its big or you have issues with bending then make it octagonal or square. Don't worry too much about out and out efficiency unless its too small. I would have the feed on a 90 and the cap on the opposite end. Good way to find centre and give close coupling to the coax.

If you can have the joints brazed (silver soldered) then it will be as good as continuous.

Where possible. I kept the current end where I required most transmission strength. Never had the Feed at the bottom.

My loops have been
22mm on a 3m length
10mm over 6 m length
3x3m lengths on 22mm
Assume 22mm OD is 3/4" and 100mm as 1/2"?

My upper frequency limit has always been no more than 1/3 wavelength which is its most efficient size but not tightest bandwidth.

I've only been happy matching with a Faraday loop and best placed mounted in a triangle shape opposite the tuning cap onto the major current point where the coax feeds to; gives best signal.

If you have an air spaced cap. It's good to have the vanes balanced to 0V. ie. twin gang. So touching it to tune, weather etc. will not affect it.

I've always rough tuned the loop visually by having a few turns of wire with an LED soldered to the ends. Put out say, 5W and tune up until you get the best glow. Its strapped to the loop. After fine tuning, I've had no issues with the LED on 100W.

I have considered making a (deaf) pll to sense voltage and current phase to auto tune the loop.. Anyone done this? here's my inspiration:
http://www.carc.org.uk/pdf/Archive_010.pdf

All the best guys. May the noise never be with you.
Andy.

--- In loopantennas@yahoogroups.com, "vaclav_sal" <vaclav_sal@...> wrote:
>
> I am busy copying Ken's WA4MNT transmitting antenna design and bugging him with silly questions.
> So I decided to bug y'all for a change.
>

> Found very math oriented article on small loop where the author repeatedly states that "the shape does not matter (in far field)".
> So - I am trying to find a compromise between expensive ½ inch soft copper tubing, mechanical rigidity (what a awful word) and lowest possible resistance (minimal number of solder joints).
>
> I am "leaning " towards 3/4 or 1 inch "hard " copper in rectangular shape.
> I think "standard" copper pipe comes in 10 ft or 6 ft.
> I feel ½ inch would be too flimsy if soldered. (Anybody remember Ike ☐ I want this to be an outdoor antenna in Texas)
>
> Now for the questions.:
> Would square (1:1) shape be mechanically preferable?
> How far can I "squish" the vertical sides.
> How would it affect upper frequency (30 MHz desired)?
>
> Would I face a challenge forming the "pickup" loop - can it still be circular?
>
> Years ago I used some magic liquid (chemistry was my least favorable subject) to put silver on PCB traces. I wonder if anybody ever used it on small loop copper stuff. If I recall , it would tarnish quickly, and that was using it indoor.
>
>
> Thanks for reading
> 73 Vaclav AA7EJ
>

8451. Re: [loopantennas] Does shape matters?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-16 05:29:04 UTC
From: Andy
Topic: 8449 Message: 8451

For what it's worth, most things I've read say that shape doesn't matter MUCH ... but it can.

I think the objective is area, so squashing a loop so that it is a flat rectangle with no area, definitely hurts.

But once you get close to a square (maybe even a triangle), the differences between one shape and another, with roughly the same enclosed area, become minor. Hence, reasonably open rectangles are OK if that's the available space you have to work within.

> Years ago I used some magic liquid (chemistry was my least
> favorable subject) to put silver on PCB traces.

I remember using a powder: "Cool-amp". Neat stuff. You'd clean the PCB, wet it, sprinkle on the powder, rub it in, and wipe clean. It seemed like magic.

> I wonder if anybody ever used it on small loop copper stuff. If I
> recall , it would tarnish quickly, and that was using it indoor.

A friend at a radio station where I worked ... also where we made PC boards and plated them with this powder ... tried using it on a coaxial low-pass filter on the output of the FM transmitter. The unexpected result was a lot of arcing, causing pops, drop-outs, and shutdowns for the next few months.

He guessed that maybe the plating had increased the Q or something.

About the tarnish: Silver does tarnish, and so does copper. As I recall, we found that the silver-plated boards tarnished less, which is why we used the stuff. YMMV.

Andy

8452. Small Shielded Loop Antenna - Inside the Shielded Metal Box . . .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-16 14:06:56 UTC
From: Ralph
Topic: 8452 Message: 8452

Question:

Joe Carr's diagrams in this Forum's Antenna Toolkit shows the coax loop's center conductor coming to a metal box, on both sides, with the shield joining the metal box body on both sides. Within the box, the center conductor on both sides runs thru a variable capacitor. If I am understanding the schematic correctly, this means one end of the loop connects to one of the 365 pfd variable cap's solder lugs while the other connects to the v-cap's body (ground). Then, a connection with the center conductor (non-grounded side) runs to the receiver.

Question: why doesn't this antenna just ground out? Am I understanding the set-up correctly?

If someone can confirm my understanding, or else can correct my understanding in clear instructions, would be much appreciated!

8453. Re: [loopantennas] Small Shielded Loop Antenna - Inside the Shielded Metal Box . . .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-16 15:09:26 UTC
From: Jerry Flanders
Topic: 8452 Message: 8453

If you post this question again, you might want to include a link to
the book along with the page number and illustration figure.

Jerry W4UK

At 10:06 AM 4/16/2011, you wrote:
>Question:
>
>Joe Carr's diagrams in this Forum's Antenna Toolkit shows the coax
>loop's center conductor coming to a metal box, on both sides, with
>the shield joining the metal box body on both sides. Within the
>box, the center conductor on both sides runs thru a variable
>capacitor. If I am understanding the schematic correctly, this means
>one end of the loop connects to one of the 365 pfd variable cap's
>solder lugs while the other connects to the v-cap's body
>(ground). Then, a connection with the center conductor
>(non-grounded side) runs to the receiver.
>
>Question: why doesn't this antenna just ground out? Am I
>understanding the set-up correctly?
>
>If someone can confirm my understanding, or else can correct my
>understanding in clear instructions, would be much appreciated!
>

8454. Ferrite rod transmitting antenna for 40m QRP CW?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-17 00:40:45 UTC
From: qrp.gaijin
Topic: 8454 Message: 8454

Hello people,

I just found this group and have had an interest in loop antennas for some time. I'm studying for my amateur radio license and would like to use a small transmitting loop for QRP CW use on 7MHz and higher frequencies, with output power between 1W and 10W. I'm already using a coax loop for receive on my homebrew regenerative receiver, with good results.

My question is: can a ferrite rod antenna (also called a loopstick - the kind you see in AM radios) be used effectively as a transmitting antenna at 7MHz with QRP power levels?

I saw a very intriguing design for a transmitting ferrite rod antenna for 3.5MHz here: http://www.zs6wr.co.za/anode/AnodeSeptember2009.pdf . I was wondering if anyone here has experience with this kind of antenna for transmitting. I think it would be nothing short of incredible if a tiny, lightweight, ferrite bar antenna could be used as an efficient QRP antenna, and perhaps even work some DX if propagation is good. Could efficiency of a ferrite rod antenna approach that of a traditional, larger magnetic loop antenna made of copper tubing?

Thanks for any comments or insight. I've raised this question in other forums with little response, so I'm glad I found this group dedicated to these interesting loop antennas.

8455. Re: [loopantennas] Small Shielded Loop Antenna - Inside the Shielded Metal Box . . .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-17 04:31:34 UTC
From: kevin asato
Topic: 8452 Message: 8455

Figure 9.11 - Yes the center conductor is connected to ground. However, you will have to think of grounds two ways, AC/RF grounds and DC grounds. DC grounds are what appear as a short circuit if you were to connect a battery to the coax. This is exactly what is shown in the Figure. From an AC perspective, however, the loop is part of a resonant structure (coil/inductance) which is tuned to a range of resonant frequencies with the variable capacitor. There is some interplay between the antenna and the fact that the center conductor is routed to ground. A variation would be to use a small value variable capacitor in place of the capacitor/center conductor to ground connection to decouple the shield from the antenna.

73,
kevin
kc6pob

--- On Sat, 4/16/11, Ralph <ralphperry@...> wrote:

From: Ralph <ralphperry@...>
Subject: [loopantennas] Small Shielded Loop Antenna - Inside the Shielded Metal Box . . .
To: loopantennas@yahoogroups.com
Date: Saturday, April 16, 2011, 7:06 AM

Question:

Joe Carr's diagrams in this Forum's Antenna Toolkit shows the coax loop's center conductor coming to a metal box, on both sides, with the shield joining the metal box body on both sides. Within the box, the center conductor on both sides runs thru a variable capacitor. If I am understanding the schematic correctly, this means one end of the loop connects to one of the 365 pfd variable cap's solder lugs while the other connects to the v-cap's body (ground). Then, a connection with the center conductor (non-grounded side) runs to the receiver.

Question: why doesn't this antenna just ground out? Am I understanding the set-up correctly?

If someone can confirm my understanding, or else can correct my understanding in clear instructions, would be much appreciated!

[Non-text portions of this message have been removed]

8456. Re: [loopantennas] Ferrite rod transmitting antenna for 40m QRP CW?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-17 13:49:03 UTC
From: Chris Trask
Topic: 8454 Message: 8456

>
> I just found this group and have had an interest in loop
> antennas for some time. I'm studying for my amateur radio
> license and would like to use a small transmitting loop
> for QRP CW use on 7MHz and higher frequencies, with
> output power between 1W and 10W. I'm already using a coax
> loop for receive on my homebrew regenerative receiver,
> with good results.
>
> My question is: can a ferrite rod antenna (also called a
> loopstick - the kind you see in AM radios) be used
> effectively as a transmitting antenna at 7MHz with QRP
> power levels?
>

It would be interesting to see such a design made available. In the meantime, here's a simpler and less expensive approach to a transmitting loop for 40M:

http://www.home.earthlink.net/~christrask/Paper012.html

It does away with the typical vacuum variable capacitor and/or Faraday coupling look, and reduces the mechanical complexity.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8457. Re: Small Shielded Loop Antenna - Inside the Shielded Metal Box . . .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-17 18:25:50 UTC
From: Ralph
Topic: 8452 Message: 8457

Thanks, Kevin, all is claro!

Jerry, sorry . . . I tried to do just that, but couldn't figure out how to copy a single page from the PDF that I found online, and which didn't allow one to take screenshots . . .

Ralph

--- In loopantennas@yahoogroups.com, kevin asato <kc6pob@...> wrote:
>
> Figure 9.11 - Yes the center conductor is connected to ground. However, you will have to think of grounds two ways, AC/RF grounds and DC grounds. DC grounds are what appear as a short circuit if you were to connect a battery to the coax. This is exactly what is shown in the Figure. From an AC perspective, however, the loop is part of a resonant structure (coil/inductance) which is tuned to a range of resonant frequencies with the variable capacitor. There is some interplay between the antenna and the fact that the center conductor is routed to ground. A variation would be to use a small value variable capacitor in place of the capacitor/center conductor to ground connection to decouple the shield from the antenna.
>
> 73,
> kevin
> kc6pob
>
>
>
> --- On Sat, 4/16/11, Ralph <ralphperry@...> wrote:
>
> From: Ralph <ralphperry@...>
> Subject: [loopantennas] Small Shielded Loop Antenna - Inside the Shielded Metal Box . . .
> To: loopantennas@yahoogroups.com
> Date: Saturday, April 16, 2011, 7:06 AM
>
>
>
>
>
>
>
>
> Â
>
>
>
>
>
>
>
>

>
>
> Question:
>
>
>
> Joe Carr's diagrams in this Forum's Antenna Toolkit shows the coax loop's center conductor coming to a metal box, on both sides, with the shield joining the metal box body on both sides. Within the box, the center conductor on both sides runs thru a variable capacitor. If I am understanding the schematic correctly, this means one end of the loop connects to one of the 365 pfd variable cap's solder lugs while the other connects to the v-cap's body (ground). Then, a connection with the center conductor (non-grounded side) runs to the receiver.
>
>
>
> Question: why doesn't this antenna just ground out? Am I understanding the set-up correctly?
>
>
>
> If someone can confirm my understanding, or else can correct my understanding in clear instructions, would be much appreciated!
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8458. AOR LA-320 Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-18 16:59:34 UTC
From: AlfredR
Topic: 8458 Message: 8458

Am downsizing some items and I have an AOR LA-320 Loop Antenna with three loops.....(1) 320M covering .540---1.6 Mhz.....(2) 320S covering 1.6---5.0 Mhz.....(3) 320 H covering 5.0---15.0 Mhz. The unit is in perfect cosmetic and electrical condition. Works great! Included is AOR connecting cable and new 9 Volt battery. Photograph available. $225.00 Postal Money Order. Shipping charges to lower 48 included.

8459. Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-18 13:58:00 UTC
From: Scott Yost
Topic: 8459 Message: 8459

New member here.

Does anyone have experience with the Pixel Technologies Magnetic Loop RF PRO 1A?

I'd appreciate comments or thoughts about the antenna specifically focused on its use in the LF and VLF range. I am presently using an active whip antenna, but the ever rising urban noise level has me looking at other alternatives.

Thanks,

Scott
NM8R
Michigan

[Non-text portions of this message have been removed]

8460. Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-18 22:52:56 UTC
From: Dean Wayman
Topic: 8459 Message: 8460

--- In loopantennas@yahoogroups.com, Scott Yost <nm8rmedic@...> wrote:
>
> New member here.
>
> Does anyone have experience with the Pixel Technologies Magnetic Loop RF PRO
> 1A?
>
Hi Scott :

I have had this loop for about 8 months ,I'll try to help if i can however i dont DX LW,and im not sure what you meen by VLF?

I use mine for AM and SW Dxing ,i do know i can hear several beacons on LW with it ,stations i never heard before getting the loop.

What i can do is record a station if you like,or several, and send you a clip ,if that helps?

Let me know

Dean_0

8461. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-18 23:12:33 UTC
From: Tom Humes
Topic: 8459 Message: 8461

VLF is Very Low Frequency, which is below the radio beacons.

--- On Mon, 4/18/11, Dean Wayman <dean_0_way@...> wrote:

From: Dean Wayman <dean_0_way@...>
Subject: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A
To: loopantennas@yahoogroups.com
Date: Monday, April 18, 2011, 3:52 PM

--- In loopantennas@yahoogroups.com, Scott Yost <nm8rmedic@...> wrote:
>
> New member here.
>
> Does anyone have experience with the Pixel Technologies Magnetic Loop RF PRO
> 1A?
>
Hi Scott :

I have had this loop for about 8 months ,I'll try to help if i can however i dont DX LW,and im not sure what you meen by VLF?

I use mine for AM and SW Dxing ,i do know i can hear several beacons on LW with it ,stations i never heard before getting the loop.

What i can do is record a station if you like,or several, and send you a clip ,if that helps?

Let me know

Dean_0

[Non-text portions of this message have been removed]

8462. Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-18 23:13:41 UTC
From: Dean Wayman
Topic: 8459 Message: 8462

--- In loopantennas@yahoogroups.com, Tom Humes <tomhumes3050@...> wrote:
>
> VLF is Very Low Frequency, which is below the radio beacons.
>
>
K what freqs are we talking about?

Dean_0

8463. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-18 23:20:18 UTC
From: Tom Humes
Topic: 8459 Message: 8463

all the way down to a few cycles. There is a lot of activity in the 180kc area and the 130kc area and other spots downward. Dial up 60 hertz and see what you hear.

--- On Mon, 4/18/11, Dean Wayman <dean_0_way@...> wrote:

From: Dean Wayman <dean_0_way@...>
Subject: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A
To: loopantennas@yahoogroups.com
Date: Monday, April 18, 2011, 4:13 PM

--- In loopantennas@yahoogroups.com, Tom Humes <tomhumes3050@...> wrote:
>
> VLF is Very Low Frequency, which is below the radio beacons.
>
>
K what freqs are we talking about?

Dean_0

[Non-text portions of this message have been removed]

8464. Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 00:05:09 UTC
From: Dean Wayman
Topic: 8459 Message: 8464

--- In loopantennas@yahoogroups.com, Tom Humes <tomhumes3050@...> wrote:
>
> all the way down to a few cycles.Â There is a lot of activity in the 180kc area and the 130kc area and other spots downward.Â Dial up 60 hertz and see what you hear.Â
>

150 khz is as low as i go for now :(

Dean_0

8465. RE: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 00:13:25 UTC
From: Fredric J. Einstein
Topic: 8459 Message: 8465

Whatever you guys discuss about this loop, the company (Pixel Technologies) is remiss in their business practices, trying to scalp their customers for inflated "shipping and handling" charges much as the shysters on late-night UHF TV used to do.

When I attempted to order one of these tonight, they tried to charge me $24.00 shipping (to Indiana) which is somewhat outrageous. Then, without my prior consent, they tried to charge me an additional $14.00 "shipping and handling" on the PayPal page. Doesn't seem very honest to me.

[Non-text portions of this message have been removed]

8466. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 00:37:55 UTC
From: Chris Trask
Topic: 8459 Message: 8466

>
> Whatever you guys discuss about this loop, the company (Pixel
Technologies)
> is remiss in their business practices, trying to scalp their customers for
> inflated "shipping and handling" charges much as the shysters on
late-night
> UHF TV used to do.
>
> When I attempted to order one of these tonight, they tried to charge me
> $24.00 shipping (to Indiana) which is somewhat outrageous. Then, without
my
> prior consent, they tried to charge me an additional $14.00 "shipping and
> handling" on the PayPal page. Doesn't seem very honest to me.
>

That's not all they scalp. Months ago the owner of Pixel approached me, wanting me to design an amplifier for them so that they could compete with Welbrook. I sent them information betond what they already had, and then they never returned any emails. So, I designed the amplifier and published it online (it's in the group files section). Now anybody can make one, and it beats both Pixel and Welbrook.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8467. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 00:46:21 UTC
From: Dale Parfitt
Topic: 8459 Message: 8467

Excellent Chris- these prices are outrageous.
And if you believe their hype- these loops are close to magical.
I recently had the opportunity to run some tests on the Wellbrook vs my homebrew shielded loop with preamp. No net S/N difference, and my loop always had as good or better nulls.

Dale W4OP

That's not all they scalp. Months ago the owner of Pixel approached me,
wanting me to design an amplifier for them so that they could compete with
Welbrook. I sent them information betond what they already had, and then
they never returned any emails. So, I designed the amplifier and published
it online (it's in the group files section). Now anybody can make one, and
it beats both Pixel and Welbrook.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3582 - Release Date: 04/18/11 10:22:00

[Non-text portions of this message have been removed]

8468. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 00:57:35 UTC
From: Chris Trask
Topic: 8459 Message: 8468

>
> >
> > That's not all they scalp. Months ago the owner of Pixel approached me,
> > wanting me to design an amplifier for them so that they could compete
with
> > Welbrook. I sent them information betond what they already had, and then
> > they never returned any emails. So, I designed the amplifier and
published
> > it online (it's in the group files section). Now anybody can make one,
and
> > it beats both Pixel and Welbrook.
> >
>
> Excellent Chris- these prices are outrageous.
> And if you believe their hype- these loops are close to magical.
> I recently had the opportunity to run some tests on the Wellbrook vs my
> homebrew shielded loop with preamp. No net S/N difference, and my loop
> always had as good or better nulls.
>

I have to give them credit for being the first to use the Meobius Strip
Loop in a commercial product. Good use of an interesting innovation in
antenna design,

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8469. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 03:08:18 UTC
From: John Kolb
Topic: 8459 Message: 8469

Here's the formal definitions of the frequency band divisions.

HF = 3-30 KHz
MF = 300 kHz - 3 MHz
LF = 30 kHz - 300 kHz
VLF = 3 kHz - 30 kHz

http://en.wikipedia.org/wiki/Very_low_frequency

John
KK6IL

At 04:13 PM 4/18/2011, you wrote:

>--- In loopantennas@yahoogroups.com, Tom Humes <tomhumes3050@...> wrote:
> > VLF is Very Low Frequency, which is below the radio beacons.
> >
>K what freqs are we talking about?
>
>Dean_0

8470. Phase Relationship of Loop and Sense Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 03:55:14 UTC
From: Greg Ella
Topic: 8470 Message: 8470

Am I correct that with a small magnetic receiving loop antenna, vertically oriented and with the edge pointed towards a distant vertically polarized transmission source, and with a vertical whip sense antenna next to this loop, there will be a 90 degree phase difference between the induced voltage in the loop antenna and the induced voltage in the whip antenna?

Furthermore, is it then necessary to shift this phase difference an additional 90 degrees in a loop and sense direction finding system, so that when combining the two signals they cancel out with the loop in one direction, and add when the loop is spun around 180 degrees in the other direction?

Greg Ella,

Livermore, Ca

8471. HV CAPACITOR AND BUTTERFLY CAPACITOR KITS for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 03:40:43 UTC
From: pop
Topic: 8471 Message: 8471

HV CAPACITOR AND BUTTERFLY CAPACITOR KITS

The spacers are 0.25"and 0.500"

pictures here:

http://calgary.kijiji.ca/c-buy-and-sell-electronics-FOR-HAM-RADIO-PROJECTS-HV-CAPACITOR-AND-BUTTERFLY-CAPACITOR-KITS-W0QQAdIdZ276176893

73 de VA6POP
Vasile

8472. RE: [loopantennas] AOR LA-320 Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 03:19:51 UTC
From: Steve Roberts
Topic: 8458 Message: 8472

I am interested please email digi pics.

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
Cell 416-786-7485

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of AlfredR
Sent: April 18, 2011 1:00 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] AOR LA-320 Loop Antenna

Am downsizing some items and I have an AOR LA-320 Loop Antenna with three loops.....(1) 320M covering .540---1.6 Mhz.....(2) 320S covering 1.6---5.0 Mhz.....(3) 320 H covering 5.0---15.0 Mhz. The unit is in perfect cosmetic and electrical condition. Works great! Included is AOR connecting cable and new 9 Volt battery. Photograph available. $225.00 Postal Money Order. Shipping charges to lower 48 included.

[Non-text portions of this message have been removed]

8473. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 00:42:41 UTC
From: Adrian Flynn
Topic: 8459 Message: 8473

Hello Chris,
That is the way to treat companies like that.
Would have been better if you could make a few coins also, but I do
appreciate you posting it in the files.
Keep up the good work,
I get over my head on some of your things but come to the surface with a
little research for the most part.

73
Adrian KF7DYU

>
> That's not all they scalp. Months ago the owner of Pixel approached me,
> wanting me to design an amplifier for them so that they could compete with
> Welbrook. I sent them information betond what they already had, and then
> they never returned any emails. So, I designed the amplifier and published
> it online (it's in the group files section). Now anybody can make one, and
> it beats both Pixel and Welbrook.
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>
>
>

[Non-text portions of this message have been removed]

8474. Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 12:00:51 UTC
From: AlienRelics
Topic: 8459 Message: 8474

A few typos crept in.

HF = 3MHz - 30MHz
MF = 300kHz - 3MHz
LF = 30kHz - 300kHz
VLF = 3kHz - 30kHz

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, John Kolb <jlkolb@...> wrote:
>
>
> Here's the formal definitions of the frequency band divisions.
>
> HF = 3-30 KHz
> MF = 300 kHz - 3 MHz
> LF = 30 kHz - 300 kHz
> VLF = 3 kHz - 30 kHz
>
> http://en.wikipedia.org/wiki/Very_low_frequency
>
> John
> KK6IL
>
> At 04:13 PM 4/18/2011, you wrote:
>
> >--- In loopantennas@yahoogroups.com, Tom Humes <tomhumes3050@> wrote:
> > > VLF is Very Low Frequency, which is below the radio beacons.
> > >
> >K what freqs are we talking about?
> >
> >Dean_0
>

8475. Re: Phase Relationship of Loop and Sense Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 12:11:11 UTC
From: AlienRelics
Topic: 8470 Message: 8475

With a perfectly balanced loop and no coupling between it and the whip, yes that is correct.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "Greg Ella" <gregella@...> wrote:
>
> Am I correct that with a small magnetic receiving loop antenna, vertically oriented and with the edge pointed towards a distant vertically polarized transmission source, and with a vertical whip sense antenna next to this loop, there will be a 90 degree phase difference between the induced voltage in the loop antenna and the induced voltage in the whip antenna?
>
> Furthermore, is it then necessary to shift this phase difference an additional 90 degrees in a loop and sense direction finding system, so that when combining the two signals they cancel out with the loop in one direction, and add when the loop is spun around 180 degrees in the other direction?
>
> Greg Ella,
>
> Livermore, Ca
>

8476. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 12:35:39 UTC
From: feinstei@frontier.com
Topic: 8459 Message: 8476

I received an E-mail last night regarding Pixel Technologies shipping charges. Apparently, they had made an honest mistake on PayPal which caused the additional shipping charge to be added onto the $24.00 FedEx charge. Apparently, they are new to PayPal and inadvertantly "hit the wrong button". They have now corrected this and graciously sent me an apology.

Fred E.

8477. RE: [loopantennas] HV CAPACITOR AND BUTTERFLY CAPACITOR KITS for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 13:06:46 UTC
From: KF5FEO
Topic: 8471 Message: 8477

Nice capacitors, but how do you go about purchases?

73 Tom kf5feo

From: pop [mailto:pop_vasile@...]
Sent: Monday, April 18, 2011 10:41 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] HV CAPACITOR AND BUTTERFLY CAPACITOR KITS for sale

HV CAPACITOR AND BUTTERFLY CAPACITOR KITS

The spacers are 0.25"and 0.500"

pictures here:

http://calgary.kijiji.ca/c-buy-and-sell-electronics-FOR-HAM-RADIO-PROJECTS-H
V-CAPACITOR-AND-BUTTERFLY-CAPACITOR-KITS-W0QQAdIdZ276176893

73 de VA6POP
Vasile

=======
Email scanned by PC Tools - No viruses or spyware found.
(Email Guard: 7.0.0.21, Virus/Spyware Database: 6.17310)
http://www.pctools.com <http://www.pctools.com/?cclick=EmailFooterClean_51>
=======

=======
Email scanned by PC Tools - No viruses or spyware found.
(Email Guard: 7.0.0.21, Virus/Spyware Database: 6.17310)
http://www.pctools.com/
=======

[Non-text portions of this message have been removed]

8478. Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 13:12:48 UTC
From: John
Topic: 8459 Message: 8478

Just to remind the other folks here, I ordered the PRO-1a several months ago. It was delivered in a few days with no s/h charges - as agreed. Not everyone is dissatisfied with their service.

It works quite well at 11 ft behind my house on a 5ft mast section mounted to my deck, putting it's loop's center ~8 ft off the ground. With the loop parallel to my house - and the HV lines in front of my house, it nulls the ever present powerline hash and RFI/EMI radiated/reradiated from my home quite well. It is adequately made, mechanically, and seems to be well designed electronically - and works well to 150 kHz. Certainly, my signals from .15-20MHz are much more readable than they are on my random wire antenna running through the back yard. My old 145ft LW - even my TTFD - would be rendered useless from that sporadic powerline EMI. I even fed the TTFD with 450 Ohm ladder line to the house - then a 9:1 BALUN at the window - less noise, but still S7-S8 at times (S9+ at times on the LW antenna - R8 & NRD525). Now it's barely discerned in the background (<S1 - NRD525 & Palstar R30A).

I have a basement full of tools - and some, admittedly dated, test equipment. I got my 1st Class Radiotelephone License in '68 - chiefed for several FM stations over the years, was a USN ET - schooled in the R-390A - from '69-'72, graduated from AU '75 in physics, and taught electronics & telecommunications in AL's post secondary system from '75-'95. I have several metal lathes - and a mini-mill. I have electronic parts - even some PCB material - photo goodies & etchant - raw PCB - and glass epoxy P holed board for pt-pt wiring design tests - and some ferrite/iron Amidon toroids, too. I have built remotely tuned & amplified loops for MW - tropical bands. Heck, my 'ultimate receiver' is still a 40 yr 'work in progress'! Why buy? Simple - I wanted something that worked - fast! I am retired - I have the time to build - but I wanted something 'now'. I got it!

Sure, it was a bundle - I had the money put back for an R75 - but, it wasn't enough - it would buy the loop - so, against my frugal nature, I bought it. 'Second thoughts' fade when I turn the R30A on - and the loop - I just wish we still had the SW broadcasters we once had. Again, not everyone is upset with the PRO-1A - or their s/h.

John

8479. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 14:32:42 UTC
From: Tim Hills
Topic: 8459 Message: 8479

There's also..

ELF = 300Hz-3KHz
SLF = DC-300Hz

The only current uses I'm aware of offhand for ELF is lightning
detection and monitoring some ionospheric phenomena.
SLF was used for submarine communication and magnetospheric monitoring.
Also shows promise for earthquake prediction.

Tim Hills
Sioux Falls, SD

On 4/19/2011 7:00, AlienRelics wrote:
>
> A few typos crept in.
>
> HF = 3MHz - 30MHz
> MF = 300kHz - 3MHz
> LF = 30kHz - 300kHz
> VLF = 3kHz - 30kHz
>
> Steve Greenfield AE7HD
>

[Non-text portions of this message have been removed]

8480. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 18:20:30 UTC
From: Chris Trask
Topic: 8480 Message: 8480

>
> Chris' amp:
>
http://f1.grp.yahoofs.com/v1/kL-tTWE7QIQ6_fYedrfogw_6XyrVCV573LcuPmEyDq-0nLY
97pHdi_kP3KtF01ASkHi3PG8yUFAXbbVOQbLCbKLwMb8-zg/Wideband%20Loop%20Antenna%20
Amplifier%20RevA.pdf
>
> Where do you guys get parts to build up something like Chris'
> amp when no kit is available? Is it even practical to try it?
>
> I just spent a few minutes Googling for parts sources. Looks like
> finding parts houses that actually have the bits and pieces in stock
> is difficult, and then meeting each's minimum quantity or price order
> seems impractical.
>
> Is a kit or PCB and/or parts pick list available for it?
>

There isn't a single part in that design that cannot be readily
purchased. The transformer cores can be bought from Amidon or W8DIZ
(www.kitsandparts.com).

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8481. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 17:42:12 UTC
From: Jerry Flanders
Topic: 8459 Message: 8481

Chris' amp:
http://f1.grp.yahoofs.com/v1/kL-tTWE7QIQ6_fYedrfogw_6XyrVCV573LcuPmEyDq-0nLY97pHdi_kP3KtF0
1ASkHi3PG8yUFAXbbVOQbLCbKLwMb8-zg/Wideband%20Loop%20Antenna%20Amplifier%20RevA.pdf

Where do you guys get parts to build up something like Chris'
amp when no kit is available? Is it even practical to try it?

I just spent a few minutes Googling for parts sources. Looks like
finding parts houses that actually have the bits and pieces in stock
is difficult, and then meeting each's minimum quantity or price order
seems impractical.

Is a kit or PCB and/or parts pick list available for it?

Jerry W4UK

At 08:37 PM 4/18/2011, Chris Trask wrote:
>...
>
> That's not all they scalp. Months ago the owner of Pixel approached me,
>wanting me to design an amplifier for them so that they could compete with
>Welbrook. I sent them information betond what they already had, and then
>they never returned any emails. So, I designed the amplifier and published
>it online (it's in the group files section). Now anybody can make one, and
>it beats both Pixel and Welbrook.
>
>
>Chris Trask
>N7ZWY / WDX3HLB
>Senior Member IEEE
>http://www.home.earthlink.net/~christrask/

8482. Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 18:54:42 UTC
From: AlienRelics
Topic: 8459 Message: 8482

You cannot link directly to a file or photo in Yahoogroups. It gives you a link that works for 30 minutes at most.

You can link to the Files, or even into a folder. Scroll to the bottom, Chris's PDF is at the bottom:
http://groups.yahoo.com/group/loopantennas/files/

Or you can even add the name of the file manually:
<http://groups.yahoo.com/group/loopantennas/files/WidebandLoopAntennaAmplifierRevA.pdf>

However, spaces break the link. Which is one of the many reasons I don't like spaces in file names and folders. I just removed the spaces from that file name, so it should work.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Jerry Flanders <jeflanders@...> wrote:
>
> Chris' amp:
> http://f1.grp.yahoofs.com/v1/kL-tTWE7QIQ6_fYedrfogw_6XyrVCV573LcuPmEyDq-0nLY97pHdi_kP3KtF01ASkHi3PG8yUFAXbbVOQbLCbKLwMb8-zg/Wideband%20Loop%20Antenna%20Amplifier%20RevA.pdf
>
> Where do you guys get parts to build up something like Chris'
> amp when no kit is available? Is it even practical to try it?
>
> I just spent a few minutes Googling for parts sources. Looks like
> finding parts houses that actually have the bits and pieces in stock
> is difficult, and then meeting each's minimum quantity or price order
> seems impractical.
>
> Is a kit or PCB and/or parts pick list available for it?
>
> Jerry W4UK
>
>
>
> At 08:37 PM 4/18/2011, Chris Trask wrote:
> >...
> >
> > That's not all they scalp. Months ago the owner of Pixel approached me,
> >wanting me to design an amplifier for them so that they could compete with
> >Welbrook. I sent them information betond what they already had, and then
> >they never returned any emails. So, I designed the amplifier and published
> >it online (it's in the group files section). Now anybody can make one, and
> >it beats both Pixel and Welbrook.
> >
> >

> >Chris Trask
> >N7ZWY / WDX3HLB
> >Senior Member IEEE
> >http://www.home.earthlink.net/~christrask/
>

8483. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 19:09:46 UTC
From: Jerry Flanders
Topic: 8480 Message: 8483

At 02:20 PM 4/19/2011, Chris Trask wrote:
> >
> > Chris' amp:
> >
>http://f1.grp.yahoofs.com/v1/kL-tTWE7QIQ6_fYedrfogw_6XyrVCV573LcuPmEyDq-0nLY
>97pHdi_kP3KtF01ASkHi3PG8yUFAXbbVOQbLCbKLwMb8-zg/Wideband%20Loop%20Antenna%20
>Amplifier%20RevA.pdf
> >
> > Where do you guys get parts to build up something like Chris'
> > amp when no kit is available? Is it even practical to try it?
> >
> > I just spent a few minutes Googling for parts sources. Looks like
> > finding parts houses that actually have the bits and pieces in stock
> > is difficult, and then meeting each's minimum quantity or price order
> > seems impractical.
> >
> > Is a kit or PCB and/or parts pick list available for it?
> >
>
> There isn't a single part in that design that cannot be readily
>purchased. The transformer cores can be bought from Amidon or W8DIZ
>(www.kitsandparts.com).

I can't Google up a way to cross reference Fair-rite cores to
equivalent W8DIZ parts. Can you suggest his equivalents for all the cores?

BTW, I don't see any spec for the core of L1. What core does it use?

Thanks

Jerry W4UK

8484. Re: Phase Relationship of Loop and Sense Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 20:18:35 UTC
From: Dean Wayman
Topic: 8470 Message: 8484

--- In loopantennas@yahoogroups.com, "AlienRelics" <alienrelics@...> wrote:
>
> With a perfectly balanced loop and no coupling between it and the whip, yes that is correct.
>
> Steve Greenfield AE7HD
>
> --- In loopantennas@yahoogroups.com, "Greg Ella" <gregella@> wrote:
> >
> > Am I correct that with a small magnetic receiving loop antenna, vertically oriented and with the edge pointed towards a distant vertically polarized transmission source, and with a vertical whip sense antenna next to this loop, there will be a 90 degree phase difference between the induced voltage in the loop antenna and the induced voltage in the whip antenna?
> >
> > Furthermore, is it then necessary to shift this phase difference an additional 90 degrees in a loop and sense direction finding system, so that when combining the two signals they cancel out with the loop in one direction, and add when the loop is spun around 180 degrees in the other direction?
> >
> > Greg Ella,
> >
> > Livermore, Ca
> >
>I am going to set up a system just like this ,i have the pixel loop up already,and have a phaser and vertical ,but i did have a question?

:how far away from the loop should i install the vertical to keep the 2 from mutual coupling ?
i have heard zero separation is ok but not sure i can do that ,would like to have the optimum setup for phasing ,if there is such a thing?

Also does cable length (of a loop and vertical)have anything to do with phase?

P.S.
I have been using the loop phased against a BOG (120 feet aprox.),so far i have been able to get 180 degree phasing ,but have not been able to kill my local,i think my shack is just too close to it ,Rf saturation .

Thanks
Dean_0

8485. Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 20:25:20 UTC
From: Dean Wayman
Topic: 8459 Message: 8485

--- In loopantennas@yahoogroups.com, Tim Hills <thills@...> wrote:
>
> There's also..
>
> ELF = 300Hz-3KHz
> SLF = DC-300Hz
>
> The only current uses I'm aware of offhand for ELF is lightning
> detection and monitoring some ionospheric phenomena.
> SLF was used for submarine communication and magnetospheric monitoring.
> Also shows promise for earthquake prediction.
>
> Tim Hills
> Sioux Falls, SD
>
> On 4/19/2011 7:00, AlienRelics wrote:
> >
> > A few typos crept in.
> >
> > HF = 3MHz - 30MHz
> > MF = 300kHz - 3MHz
> > LF = 30kHz - 300kHz
> > VLF = 3kHz - 30kHz
> >
> > Steve Greenfield AE7HD
> >
LOL i wondered about that ,but i knew what you meant :)
i guess if i ever get another radio it will have to have the lower bands ?:)

Dean_0

8486. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 21:19:11 UTC
From: Chris Trask
Topic: 8486 Message: 8486

>
> BTW, I don't see any spec for the core of L1. What core does it use?
>

Nothing is specified for that part as it is optional and depends on the
users requirements.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8487. RE: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-19 22:41:58 UTC
From: Mike Mayer
Topic: 8480 Message: 8487

> There isn't a single part in that design that cannot be readily purchased.
The transformer cores can be bought from Amidon or W8DIZ
(www.kitsandparts.com).

Mouser is a good place to look for the other parts.

==========
Mike Mayer
mwmayer@...

8488. Re: [loopantennas] Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-20 17:51:43 UTC
From: Jerry Flanders
Topic: 8459 Message: 8488

As a test, I accessed Chris' article several times over almost 24
hours and it never failed to come up properly using the lengthy
two-line URL below and simply clicking on the first line. Don't know
why it would disappear after 30 mins for you. I use Eudora 7.1 mail
reader and IE7.

Jerry W4UK

At 02:54 PM 4/19/2011, you wrote:
>You cannot link directly to a file or photo in Yahoogroups. It gives
>you a link that works for 30 minutes at most.
>
>You can link to the Files, or even into a folder. Scroll to the
>bottom, Chris's PDF is at the bottom:
>http://groups.yahoo.com/group/loopantennas/files/
>
>Or you can even add the name of the file manually:
><http://groups.yahoo.com/group/loopantennas/files/WidebandLoopAntennaAmplifierRevA.pdf>
>
>However, spaces break the link. Which is one of the many reasons I
>don't like spaces in file names and folders. I just removed the
>spaces from that file name, so it should work.
>
>Steve Greenfield AE7HD
>
>--- In loopantennas@yahoogroups.com, Jerry Flanders <jeflanders@...> wrote:
> >
> > Chris' amp:
> >
> http://f1.grp.yahoofs.com/v1/kL-tTWE7QIQ6_fYedrfogw_6XyrVCV573LcuPmEyDq-0nLY97pHdi_kP3Kt
F01ASkHi3PG8yUFAXbbVOQbLCbKLwMb8-zg/Wideband%20Loop%20Antenna%20Amplifier%20RevA.pdf
> >
> > Where do you guys get parts to build up something like Chris'
> > amp when no kit is available? Is it even practical to try it?
> >
> > I just spent a few minutes Googling for parts sources. Looks like
> > finding parts houses that actually have the bits and pieces in stock
> > is difficult, and then meeting each's minimum quantity or price order
> > seems impractical.
> >
> > Is a kit or PCB and/or parts pick list available for it?
> >
> > Jerry W4UK
> >
> >

> >
> > At 08:37 PM 4/18/2011, Chris Trask wrote:
> > >...
> > >
> > > That's not all they scalp. Months ago the owner of Pixel
> approached me,
> > >wanting me to design an amplifier for them so that they could compete with
> > >Welbrook. I sent them information betond what they already had, and then
> > >they never returned any emails. So, I designed the amplifier
> and published
> > >it online (it's in the group files section). Now anybody can
> make one, and
> > >it beats both Pixel and Welbrook.
> > >
> > >
> > >Chris Trask
> > >N7ZWY / WDX3HLB
> > >Senior Member IEEE
> > >http://www.home.earthlink.net/~christrask/
> >
>
>

8489. Re: Pixel Technologies Magnetic Loop RF PRO 1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-21 16:31:23 UTC
From: tenorman1952
Topic: 8459 Message: 8489

--- In loopantennas@yahoogroups.com, Jerry Flanders <jeflanders@...> wrote:
>
> As a test, I accessed Chris' article several times over almost 24
> hours and it never failed to come up properly using the lengthy
> two-line URL below and simply clicking on the first line. Don't know
> why it would disappear after 30 mins for you. I use Eudora 7.1 mail
> reader and IE7.
>
> Jerry W4UK

Jerry, copy and paste the link to a text file. Then go through it and remove any spaces inserted between characters. I don't know why, but yahoo does this.

Then copy that repaired url and paste into your browser. Voila!

Paul

8490. RE: [loopantennas] HV CAPACITOR AND BUTTERFLY CAPACITOR KITS for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-21 03:56:12 UTC
From: Steve Roberts
Topic: 8471 Message: 8490

Hello Vasile,
I am confused (does not take much these days as I am in my eightieth year) I am looking for a 25 pf variable capacitor with a minimum of 2mm (0.08") between plates and preferably with a remote motor drive coupled to it. I am attempting t build 80 meter frame antenna by SM0VPO.
If you have please quote price. Your help in his matter will be sincerely appreciated.
Cheers
Steve Roberts VE3LEH (Oakville Ont.)

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of pop
Sent: April 18, 2011 11:41 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] HV CAPACITOR AND BUTTERFLY CAPACITOR KITS for sale

HV CAPACITOR AND BUTTERFLY CAPACITOR KITS

The spacers are 0.25"and 0.500"

pictures here:

http://calgary.kijiji.ca/c-buy-and-sell-electronics-FOR-HAM-RADIO-PROJECTS-HV-CAPACITOR-AND-BUTTERFLY-CAPACITOR-KITS-W0QQAdIdZ276176893

73 de VA6POP
Vasile

[Non-text portions of this message have been removed]

8491. Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-23 17:15:47 UTC
From: vaclav_sal
Topic: 8491 Message: 8491

Despite carrying my measuring caliper to the hardware store I run in to small problem with my new transmitting loop. Apparently soft copper ½ inch flexible line OUTSIDE dimension is not same as M type pipe of ½ inch size, again outside dimension, because my ½ inch to ¾ tee connection flops around with large gap. I did not measure it ☐ the fact is it cannot be reasonably filled with solder.
I am using the tee to connect the main loop to the piston style capacitor.
So I need to fill this large gap .
I am thinking of using the standard 3/8 end cap as reduction device, it fills the flop gap but obviously requires double soldering which I would like to avoid.
I guess the question is ☐ can the flexible soft copper pipe be enlarged so it will fit into the tee ½ side snugly. And does that have to be done by an experienced plumber's tools ?
Any other constructive suggestions are as always appreciated ,
Thanks for reading
73 Vaclav AA7EJ

8492. Re: [loopantennas] Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-23 19:02:41 UTC
From: Chris Trask
Topic: 8491 Message: 8492

```
>
> Despite carrying my measuring caliper to the hardware store I run in to
> small problem with my new transmitting loop. Apparently soft copper ?
inch
> flexible line OUTSIDE dimension is not same as M type pipe of ? inch
size,
> again outside dimension, because my ? inch to ? tee connection flops
around
> with large gap. I did not measure it - the fact is it cannot be
reasonably
> filled with solder.
>

I use thin-wall brass tubing to fill the gap. You can also use brass
shim stock, wrapping it around as you would tape to build up the needed
diameter.

>
> I guess the question is - can the flexible soft copper pipe be enlarged
so
> it will fit into the tee ? side snugly. And does that have to be done by
an
> experienced plumber's tools ?
>

You could use a flaring tool, but I would try the brass tubing or shim
stock first. Spreading a little flux on the shim stock as you roll it on
will help get a better joint.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/
```

8493. Re: [loopantennas] Lookinmg for hams who are plumbers- connecting flexible co...

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-23 19:00:44 UTC
From: toddroberts2001@aol.com
Topic: 8493 Message: 8493

In a message dated 4/23/2011 1:16:03 P.M. Eastern Daylight Time,
vaclav_sal@yahoo.com writes:

Despite carrying my measuring caliper to the hardware store I run in to
small problem with my new transmitting loop. Apparently soft copper ½ inch
flexible line OUTSIDE dimension is not same as M type pipe of ½ inch size,
again outside dimension, because my ½ inch to ¾ tee connection flops around
with large gap. I did not measure it – the fact is it cannot be reasonably
filled with solder.
I am using the tee to connect the main loop to the piston style capacitor.
So I need to fill this large gap .
I am thinking of using the standard 3/8 end cap as reduction device, it
fills the flop gap but obviously requires double soldering which I would like
to avoid.
I guess the question is – can the flexible soft copper pipe be enlarged so
it will fit into the tee ½ side snugly. And does that have to be done by
an experienced plumber's tools ?
Any other constructive suggestions are as always appreciated ,
Thanks for reading
73 Vaclav AA7EJ

Hi Vaclav,
I believe the actual O.D. of flexible copper tubing is the same as the size
listing. So 1/2 inch
soft copper or refrigeration tubing is exactly 1/2 inch or 0.5 inch O.D.

The O.D. of rigid tubing is usually 1/8 inch larger than the size listing,
so 3/4 inch hard copper
tubing is actually 7/8 inch O.D.

All adapters are sized for rigid tubing, so you would need to find an
adapter for 3/8 inch to 3/4 inch
rigid tubing. The O.D. of 3/8 inch rigid tubing is actually 1/2 inch so an
adapter for 3/8 inch rigid
tubing will fit the O.D. of 1/2 refrigeration tubing.

If you can't find what you need locally there are a number of online stores
that sell adapters in all sizes and they should have what you need. I
think that would be a better solution than trying to enlarge 1/2 inch
soft copper tubing.

73 - Todd WD4NGG

8494. Re: Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-23 19:36:29 UTC
From: vaclav_sal
Topic: 8491 Message: 8494

Thanks for replies.
I suppose there would be no harm done to use tape or tubing to provide mechanical connection about 3/4 way in , soldered, and fill the last 1/4 (or less) gap with silver solder.

I'll check on the flaring tool with local hams / plumbers.

Vaclav

8495. Re: [loopantennas] Lookinmg for hams who are plumbers- connecting flexible co...

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-24 01:50:01 UTC
From: Don
Topic: 8493 Message: 8495

Here is a link to a copper dimensions chart and explanation of why the different ID's and OD's.

<http://www.gizmology.net/pipe.htm>

Don
Upland, CA

8496. Re: Lookinmg for hams who are plumbers- connecting flexible co...

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-24 13:49:08 UTC
From: vaclav_sal
Topic: 8493 Message: 8496

Thanks Don,
now we all know why the strange dimensions.
Definetly not a pipe dream!
Also like the site name.
73 Vaclav AA7EJ

8497. Re: Lookinmg for hams who are plumbers- connecting flexible co...

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-24 21:53:32 UTC
From: Judi
Topic: 8493 Message: 8497

If you have any extra tubing cut two 1/2in sections and split them lengthwise and use them as shims to fill the gap.

8498. Re: Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-25 21:48:49 UTC
From: longjohn119
Topic: 8491 Message: 8498

For refrigeration copper we use a swaging tool, I use a pro version that's a lot like a flaring tool
http://www.amazon.com/Yellow-Jacket-60440-Swage-complete/dp/B003ANRLHO/ref=pd_sim_sbs_hi_8
but you can also get a cheaper version that's something like this
http://www.google.com/products/catalog?oe=utf-8&client=firefox-a&q=swaging+tool&cid=6959058365348049744&ei=tOW1TeyDLJCMNfuWzbkL&sa=image&ved=0CBEQ8gI#

We use this in place of couplings which saves one solder joint because silver brazing rod isn't cheap and the fewer the solder joints the less potential for leaks

Things that I've done in a pinch is use an old deep well socket, getting the right size can be hit and miss though. You use it like the cheap swaging tool by beating it in with a hammer

Personally I'd just get out a stick of Silver brazing rod which will fill a gap and still be stronger than the copper pipe itself. If you know someone who does refrigeration or A/C work they might be able to get you a couple of old 2-3" ends, I know a lot of guys just toss them when they get that short. In fact I put in my entire new system in 2008 using nothing but short pieces of silver rod that I found around rooftop units. You need a good hot torch (like a Turbo Torch brand) to use it though

I make most of my loops out of 'soft' refrigeration copper because I get old scraps for free and it's a lot more rigid that soft waterline copper. Be aware though that the fittings and pipe are all sized by OD not ID like water pipe.

JR

--- In loopantennas@yahoogroups.com, "vaclav_sal" <vaclav_sal@...> wrote:
>
> Despite carrying my measuring caliper to the hardware store I run in to small problem with my new transmitting loop. Apparently soft copper ½ inch flexible line OUTSIDE dimension is not same as M type pipe of ½ inch size, again outside dimension, because my ½ inch to ¾ tee connection flops around with large gap. I did not measure it ☐ the fact is it cannot be reasonably filled with solder.
> I am using the tee to connect the main loop to the piston style capacitor.
> So I need to fill this large gap .
> I am thinking of using the standard 3/8 end cap as reduction device, it fills the flop gap but obviously requires double soldering which I would like to avoid.
> I guess the question is ☐ can the flexible soft copper pipe be enlarged so it will fit into the tee ½ side snugly. And does that have to be done by an experienced plumber's tools ?
> Any other constructive suggestions are as always appreciated ,
> Thanks for reading
> 73 Vaclav AA7EJ
>

8499. Re: [loopantennas] Re: Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-25 22:06:57 UTC
From: Chris Trask
Topic: 8491 Message: 8499

>
> For refrigeration copper we use a swaging tool, I use a pro version
> that's a lot like a flaring tool
>
>
http://www.amazon.com/Yellow-Jacket-60440-Swage-complete/dp/B003ANRLHO/ref=p
d_sim_sbs_hi_8
>
> but you can also get a cheaper version that's something like this
>
>
http://www.google.com/products/catalog?oe=utf-8&client=firefox-a&q=swaging+t
ool&cid=6959058365348049744&ei=tOW1TeyDLJCMNfuWzbkL&sa=image&ved=0CBEQ8gI#
>

I'm going to have to remember this. I can easily make one on the lathe
in very quick time, and I should have a piece of stock readily available.

Chris

8500. Re: [loopantennas] Re: Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-26 05:43:50 UTC
From: brian nsl
Topic: 8491 Message: 8500

Hi,
In the pipeshop at the factory where I worked they used tapered boxwood versions
for copper / lead, up to fancy ones incorporating roller bearings for steel pipes.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Chris Trask
To: loopantennas@yahoogroups.com
Sent: Monday, April 25, 2011 11:06 PM
Subject: Re: [loopantennas] Re: Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

[Non-text portions of this message have been removed]

8501. Re: Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-26 13:58:04 UTC
From: vaclav_sal
Topic: 8491 Message: 8501

Thanks for all the advice.
I guess I need to hookup with local AC shop, should not be a big problem in Houston.I'll try the swaggering method, but I am affraid to damage the pipe in wise.

I am not trying to split hair - but can I mix "regular" solder with silver?
Anyway, I think putting the regular 3/8 cap on the end and soldering it on with regular solder and than solder the capped end into the tee with silver. If I fill the gap all the eay to the pipe surface the RF should like it because of the skin effect.
Any comments on that?

By the way I think I found good source of quality insulation (low loss) material - plastic kitchen cutting board. Now if I can make sure it is the real high density poly I'll be happier.

Electric motor from child riding toy - with reduction transmission looks very promising.
And it fits snuggly on top of the camo surplus pole!
The only "problem" with these poles is the odd diameter _ 1 13/16!
It must have a same history as copper pipe sizes HI HI.
Thanks for round files and sanding paper!

73 Vaclav AA7EJ

8502. HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-27 02:23:59 UTC
From: Steve Roberts
Topic: 8502 Message: 8502

Greetings to members,
This is my first post so please bear with me if it does not meet the normal criteria.
I am building the 80 meter Frame Antenna by Harry Lythall SM0VPO. Like all projects I sort of go at them bull headed and have machined a spider hub from 6" diameter aluminum from which I intend to attach 1" square x 1/8" wall aluminum tubes I the machined slots. See attached digi pic. These arms will be suitably drilled at intervals and rubber grommets installed to thread the insulated stranded wire. A friend today raised the question as to should I be using aluminum arm which stopped me in my tracks. My recollection of building quad antennas back in 1974 was that I use aluminum tubing but that the ones I built with fiber glass arms worked better.
So my question to the group is have I made a blunder in making the arms in aluminum????
Today I sold my Butternut HF9 vertical antenna so I am off air until I get something up to replace it.
Your views and recommendations will be sincerely appreciated.

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
Cell 416-786-7485

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

[Non-text portions of this message have been removed]

8503. Re: [loopantennas] HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-27 04:23:50 UTC
From: Jerry Flanders
Topic: 8502 Message: 8503

You could probably see the effect of the arms using one of the
antenna modeling programs. Run the design with and without them and
see the differences.

Jerry W4UK

At 10:23 PM 4/26/2011, you wrote:
>Greetings to members,
>This is my first post so please bear with me if it does not meet the normal
>criteria.
>I am building the 80 meter Frame Antenna by Harry Lythall SM0VPO. Like all
>projects I sort of go at them bull headed and have machined a spider hub
>from 6" diameter aluminum from which I intend to attach 1" square x 1/8"
>wall aluminum tubes I the machined slots. See attached digi pic. These arms
>will be suitably drilled at intervals and rubber grommets installed to
>thread the insulated stranded wire. A friend today raised the question as to
>should I be using aluminum arm which stopped me in my tracks. My
>recollection of building quad antennas back in 1974 was that I use aluminum
>tubing but that the ones I built with fiber glass arms worked better.
>So my question to the group is have I made a blunder in making the arms in
>aluminum????
>Today I sold my Butternut HF9 vertical antenna so I am off air until I get
>something up to replace it.
>Your views and recommendations will be sincerely appreciated.
>
>
>
>Regards,
>Steve Roberts VE3LEH
>Professional Engineer
>2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
>Tel 905-827-8462
>Fax 905-827-1467
>Cell 416-786-7485
>
>--
>----
>THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE
>PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail
>message and/or any attachments thereto may be confidential, legally
>privileged, and/or exempt from disclosure under applicable law. If you are
>not the intended recipient, please notify me immediately by return email,
>and delete this message from your system. Thank you. Note: We have taken
>precautions against viruses, but take no responsibility for loss or damage
>caused by any virus present.

>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>

8504. Re: [loopantennas] HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-27 12:31:41 UTC
From: Steve Ellington
Topic: 8502 Message: 8504

I would not even consider using metal arms for a small loop. It would lower the Q, thus lower the efficiency, modify the resonant frequency and invite arcing. It would be similar to using a metal tube as a coil form!

Steve
N4LQ
----- Original Message -----
From: Steve Roberts
To: loopantennas@yahoogroups.com
Sent: Tuesday, April 26, 2011 10:23 PM
Subject: [loopantennas] HELP

Greetings to members,
This is my first post so please bear with me if it does not meet the normal criteria.
I am building the 80 meter Frame Antenna by Harry Lythall SM0VPO. Like all projects I sort of go at them bull headed and have machined a spider hub from 6" diameter aluminum from which I intend to attach 1" square x 1/8" wall aluminum tubes I the machined slots. See attached digi pic. These arms will be suitably drilled at intervals and rubber grommets installed to thread the insulated stranded wire. A friend today raised the question as to should I be using aluminum arm which stopped me in my tracks. My recollection of building quad antennas back in 1974 was that I use aluminum tubing but that the ones I built with fiber glass arms worked better.
So my question to the group is have I made a blunder in making the arms in aluminum????
Today I sold my Butternut HF9 vertical antenna so I am off air until I get something up to replace it.
Your views and recommendations will be sincerely appreciated.

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
Cell 416-786-7485

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken

precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8505. Re: HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-27 14:59:12 UTC
From: tenorman1952
Topic: 8502 Message: 8505

I have bought some good fiberglass rod from Kencove.com.

Paul

8506. RE: [loopantennas] HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-27 19:35:45 UTC
From: Steve Roberts
Topic: 8502 Message: 8506

Hello Jerry,
Thank you for replying to my plea for help.
Where do I find the antenna modeing progams?
Your help appreciated.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Jerry Flanders
Sent: April 27, 2011 12:24 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] HELP

You could probably see the effect of the arms using one of the
antenna modeling programs. Run the design with and without them and
see the differences.

Jerry W4UK

At 10:23 PM 4/26/2011, you wrote:
>Greetings to members,
>This is my first post so please bear with me if it does not meet the normal
>criteria.
>I am building the 80 meter Frame Antenna by Harry Lythall SM0VPO. Like all
>projects I sort of go at them bull headed and have machined a spider hub
>from 6" diameter aluminum from which I intend to attach 1" square x 1/8"
>wall aluminum tubes I the machined slots. See attached digi pic. These arms
>will be suitably drilled at intervals and rubber grommets installed to
>thread the insulated stranded wire. A friend today raised the question as
to
>should I be using aluminum arm which stopped me in my tracks. My
>recollection of building quad antennas back in 1974 was that I use aluminum
>tubing but that the ones I built with fiber glass arms worked better.
>So my question to the group is have I made a blunder in making the arms in
>aluminum????
>Today I sold my Butternut HF9 vertical antenna so I am off air until I get
>something up to replace it.
>Your views and recommendations will be sincerely appreciated.
>
>
>
>Regards,
>Steve Roberts VE3LEH
>Professional Engineer
>2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7

>Tel 905-827-8462
>Fax 905-827-1467
>Cell 416-786-7485
>
>--
>----
>THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE
>PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail
>message and/or any attachments thereto may be confidential, legally
>privileged, and/or exempt from disclosure under applicable law. If you are
>not the intended recipient, please notify me immediately by return email,
>and delete this message from your system. Thank you. Note: We have taken
>precautions against viruses, but take no responsibility for loss or damage
>caused by any virus present.
>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>-----------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

8507. Re: [loopantennas] HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-27 21:21:18 UTC
From: Steve Ellington
Topic: 8502 Message: 8507

Steve
I use http://www.eznec.com/
but I have no idea how you could model a
hunk of mental in the mist of a small loop. usually people don't think of stuff like that!

Steve
N4LQ
----- Original Message -----
From: Steve Roberts
To: loopantennas@yahoogroups.com
Sent: Wednesday, April 27, 2011 3:35 PM
Subject: RE: [loopantennas] HELP

Hello Jerry,
Thank you for replying to my plea for help.
Where do I find the antenna modeing progams?
Your help appreciated.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
Behalf Of Jerry Flanders
Sent: April 27, 2011 12:24 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] HELP

You could probably see the effect of the arms using one of the
antenna modeling programs. Run the design with and without them and
see the differences.

Jerry W4UK

At 10:23 PM 4/26/2011, you wrote:
>Greetings to members,
>This is my first post so please bear with me if it does not meet the normal
>criteria.
>I am building the 80 meter Frame Antenna by Harry Lythall SM0VPO. Like all
>projects I sort of go at them bull headed and have machined a spider hub
>from 6" diameter aluminum from which I intend to attach 1" square x 1/8"
>wall aluminum tubes I the machined slots. See attached digi pic. These arms
>will be suitably drilled at intervals and rubber grommets installed to
>thread the insulated stranded wire. A friend today raised the question as
to
>should I be using aluminum arm which stopped me in my tracks. My
>recollection of building quad antennas back in 1974 was that I use aluminum

>tubing but that the ones I built with fiber glass arms worked better.
>So my question to the group is have I made a blunder in making the arms in
>aluminum????
>Today I sold my Butternut HF9 vertical antenna so I am off air until I get
>something up to replace it.
>Your views and recommendations will be sincerely appreciated.
>
>
>
>Regards,
>Steve Roberts VE3LEH
>Professional Engineer
>2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
>Tel 905-827-8462
>Fax 905-827-1467
>Cell 416-786-7485
>
>--
>----
>THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE
>PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail
>message and/or any attachments thereto may be confidential, legally
>privileged, and/or exempt from disclosure under applicable law. If you are
>not the intended recipient, please notify me immediately by return email,
>and delete this message from your system. Thank you. Note: We have taken
>precautions against viruses, but take no responsibility for loss or damage
>caused by any virus present.
>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>

>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8508. Re: HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-27 23:14:25 UTC
From: vbifyz
Topic: 8502 Message: 8508

My gut feeling (based on a bit of loop antenna experience) is that the central metal piece is more detrimental to the loop performance than the radial tubes. It is like a pickup loop, only short-circuited. 6" may not seem like a lot, but it will definitely cause some losses.

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> Steve
> I use http://www.eznec.com/
> but I have no idea how you could model a
> hunk of mental in the mist of a small loop. usually people don't think of stuff like that!
>
> Steve
> N4LQ

8509. RE: [loopantennas] HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-27 23:17:35 UTC
From: Jerry Flanders
Topic: 8502 Message: 8509

Several free ones are available. Google "antenna modeling software".
Takes a bit of study to understand how to use them, but it is well
worth the effort. IIRC, 4nec2 is good.

Jerry W4UK

At 03:35 PM 4/27/2011, you wrote:
>Hello Jerry,
>Thank you for replying to my plea for help.
>Where do I find the antenna modeing progams?
>Your help appreciated.
>Cheers
>Steve Roberts VE3LEH
>
>-----Original Message-----
>From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
>Behalf Of Jerry Flanders
>Sent: April 27, 2011 12:24 AM
>To: loopantennas@yahoogroups.com
>Subject: Re: [loopantennas] HELP
>
>
>
>
>You could probably see the effect of the arms using one of the
>antenna modeling programs. Run the design with and without them and
>see the differences.
>
>Jerry W4UK
>
>At 10:23 PM 4/26/2011, you wrote:
> >Greetings to members,
> >This is my first post so please bear with me if it does not meet the normal
> >criteria.
> >I am building the 80 meter Frame Antenna by Harry Lythall SM0VPO. Like all
> >projects I sort of go at them bull headed and have machined a spider hub
> >from 6" diameter aluminum from which I intend to attach 1" square x 1/8"
> >wall aluminum tubes I the machined slots. See attached digi pic. These arms
> >will be suitably drilled at intervals and rubber grommets installed to
> >thread the insulated stranded wire. A friend today raised the question as
>to
> >should I be using aluminum arm which stopped me in my tracks. My
> >recollection of building quad antennas back in 1974 was that I use aluminum
> >tubing but that the ones I built with fiber glass arms worked better.
> >So my question to the group is have I made a blunder in making the arms in

> >aluminum????
> >Today I sold my Butternut HF9 vertical antenna so I am off air until I get
> >something up to replace it.
> >Your views and recommendations will be sincerely appreciated.
> >
> >
> >
> >Regards,
> >Steve Roberts VE3LEH
> >Professional Engineer
> >2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
> >Tel 905-827-8462
> >Fax 905-827-1467
> >Cell 416-786-7485
> >
> >--
> >----
> >THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE
> >PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail
> >message and/or any attachments thereto may be confidential, legally
> >privileged, and/or exempt from disclosure under applicable law. If you are
> >not the intended recipient, please notify me immediately by return email,
> >and delete this message from your system. Thank you. Note: We have taken
> >precautions against viruses, but take no responsibility for loss or damage
> >caused by any virus present.
> >
> >
> >
> >[Non-text portions of this message have been removed]
> >
> >
> >
> >------------------------------------
> >
> >If you've got links, post them in the Links section!
> >http://groups.yahoo.com/group/loopantennas/links
> >
> >Post files here. If the file comes from a website, please put it in
> >the Links rather than uploading the file.
> >http://groups.yahoo.com/group/loopantennas/files
> >
> >You can now view images at higher resolution in Photos. Upload JPG
> >and GIF into Photos. Please convert BMP or TIF to JPG or GIF before
>uploading.
> >http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> >And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >

>
>
>
>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>

8510. RE: [loopantennas] Re: HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-28 00:56:44 UTC
From: Steve Roberts
Topic: 8502 Message: 8510

Hello Paul,
Many thanks for your response to my plea for help.
t may well be that I made a mistake to employ aluminum arms but we shall see as this is a frame wound wire antenna and not to be confused with a loop antenna made from say copper pipe. I am grasping at straws here!
I will most certainly Google Kencove.com to see the fiberglass rods.
If you know of a motor gear reduction to control the 25 pf variable capacitor I would be obliged to learn of a supplier.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of tenorman1952
Sent: April 27, 2011 10:59 AM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: HELP

I have bought some good fiberglass rod from Kencove.com.

Paul

[Non-text portions of this message have been removed]

8511. Re: [loopantennas] Re: HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-28 03:33:10 UTC
From: Dale Parfitt
Topic: 8502 Message: 8511

Hi Steve et al,
Have you looked into a stepper motor and controller for the variable?
Precise movement with low complexity.
Dale W4OP
Hello Paul,
Many thanks for your response to my plea for help.
t may well be that I made a mistake to employ aluminum arms but we shall see
as this is a frame wound wire antenna and not to be confused with a loop
antenna made from say copper pipe. I am grasping at straws here!
I will most certainly Google Kencove.com to see the fiberglass rods.
If you know of a motor gear reduction to control the 25 pf variable
capacitor I would be obliged to learn of a supplier.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
Behalf Of tenorman1952
Sent: April 27, 2011 10:59 AM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: HELP

I have bought some good fiberglass rod from Kencove.com.

Paul

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3601 - Release Date: 04/27/11 14:34:00

[Non-text portions of this message have been removed]

8512. RE: [loopantennas] Re: HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-28 21:07:22 UTC
From: Steve Roberts
Topic: 8502 Message: 8512

Hi Paul/Dale,
The short answer is no I had not thought of stepper motor. You are talking of those steppe motors used on CNC machines???
Do you have a supplier in mind?
My new mast was delivered today and it was aluminum instead of steel but suppler said keep it for same price as their mistake. It is 1/4" thick wall so will do a good job and never need painting.
Attached is digi pic of completed spider hub and I sure hope it is usable if not I will have to re make it in solid nylon.
Well thank you for your continued help it is indeed appreciated.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Dale Parfitt
Sent: April 27, 2011 11:33 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: HELP

Hi Steve et al,
Have you looked into a stepper motor and controller for the variable?
Precise movement with low complexity.
Dale W4OP
Hello Paul,
Many thanks for your response to my plea for help.
t may well be that I made a mistake to employ aluminum arms but we shall see as this is a frame wound wire antenna and not to be confused with a loop antenna made from say copper pipe. I am grasping at straws here!
I will most certainly Google Kencove.com to see the fiberglass rods.
If you know of a motor gear reduction to control the 25 pf variable capacitor I would be obliged to learn of a supplier.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com> [mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>] On
Behalf Of tenorman1952
Sent: April 27, 2011 10:59 AM
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Subject: [loopantennas] Re: HELP

I have bought some good fiberglass rod from Kencove.com.

Paul

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3601 - Release Date: 04/27/11
14:34:00

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8513. RE: [loopantennas] Re: HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-28 21:17:09 UTC
From: Steve Roberts
Topic: 8502 Message: 8513

Hi Paul/Dale
Thanks for the heads up on Kencove.com. I have sent them an inquiry.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
Behalf Of Dale Parfitt
Sent: April 27, 2011 11:33 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: HELP

Hi Steve et al,
Have you looked into a stepper motor and controller for the variable?
Precise movement with low complexity.
Dale W4OP
Hello Paul,
Many thanks for your response to my plea for help.
t may well be that I made a mistake to employ aluminum arms but we shall see
as this is a frame wound wire antenna and not to be confused with a loop
antenna made from say copper pipe. I am grasping at straws here!
I will most certainly Google Kencove.com to see the fiberglass rods.
If you know of a motor gear reduction to control the 25 pf variable
capacitor I would be obliged to learn of a supplier.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
[mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
] On
Behalf Of tenorman1952
Sent: April 27, 2011 10:59 AM
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Subject: [loopantennas] Re: HELP

I have bought some good fiberglass rod from Kencove.com.

Paul

[Non-text portions of this message have been removed]

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3601 - Release Date: 04/27/11

14:34:00

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8514. SW Logs

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-28 22:21:30 UTC
From: renaldoswl
Topic: 8514 Message: 8514

New SWL logs posted:

http://www.thehobbylife.net/

8515. Frame antenna versus multiturn small loop antenna - comments

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-29 00:43:46 UTC
From: vaclav_sal
Topic: 8502 Message: 8515

I am not sure I agree with using term "frame antenna".
Perhaps basic definition of small loop antenna is in order.
We should all agree that we are talking about a resonant circuit of dimensions (diameter) near 1/10 of wavelength.
As any resonant circuit, the properties are influenced by nearby objects. Hence making the support structure out of metal will have an effect. (I am not saying it is wrong!) Common wisdom also states that immediate or more technically - near electromagnetic field - is "strong" - same as any antenna, but since we have a small dimensions is must be stronger in comparison with say half wavelength dipole.

I do not believe that calling the antenna "frame antenna" is sound technical reason not to consider effect of the metallic support.

I believe that more descriptive term would be "multiturn loop antenna" anyway.

I did not notice, maybe I missed it, any author's comments on how much power can be safely applied to his design without "arcing".

Actually I wonder if radial distance of individual turns, and insulation from supporting booms is rather critical and at what power level.

73 Vaclav AA7EJ

8517. Painting a loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-30 10:37:29 UTC
From: drewbhoy67
Topic: 8517 Message: 8517

Hello all i built a mag loop for /p /m on my motorhome that works 20m-10m .I was thinking of painting the copper pipe i used for the loop white to blend in whith the motorhome.Do you think it make any diffrence to efficiency ?
Ta Drew

8518. Re: [loopantennas] Painting a loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-30 15:45:09 UTC
From: Jerry Flanders
Topic: 8517 Message: 8518

Almost all the "screwdriver" antennas you see on vehicles are
painted. I wouldn't expect to see any difference at all.

Jerry W4UK

At 06:37 AM 4/30/2011, you wrote:
>Hello all i built a mag loop for /p /m on my motorhome that works
>20m-10m .I was thinking of painting the copper pipe i used for the
>loop white to blend in whith the motorhome.Do you think it make any
>diffrence to efficiency ?
>Ta Drew
>
>
>
>------------------------------------

8519. Nulling Characteristics of a Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-30 18:24:10 UTC
From: neilbanera
Topic: 8519 Message: 8519

I am plagued with RFI in my urban location. I replaced my random length antenna with a PAR end-fed SWL antenna, which reduced the noise level from S9+20 to S9 on 10 MHz...thank you PAR, but still too noisy. I am considering a loop antenna due to its nulling capability but I think I understand that the nulling capability decreases with increasing frequency. So a loop antenna may not be of much help at frequencies of 10 MHz or more. Is that correct? And is anyone aware of published material or a graph which shows nulling of a loop antenna versus received frequency?

Thanks to all,

Neil

8520. Re: [loopantennas] Nulling Characteristics of a Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-30 19:57:59 UTC
From: M HOLDEN
Topic: 8519 Message: 8520

With any balanced antenna,(loops, doublets, dipoles, folded dipoles, etc.) positive going noise on one side is cancelled by negative going noise at any instant on the other side. But this applies to local QRN and sadly not to a neighbourhood full of square wave producing far-eastern toys. A single wire or whip is going to be noisier on receive as there is no cancellation effect. Good luck, Mike G4HOL

From: neilbanera <neilbanera@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, 30 April 2011, 19:24
Subject: [loopantennas] Nulling Characteristics of a Loop Antenna

I am plagued with RFI in my urban location. I replaced my random length antenna with a PAR end-fed SWL antenna, which reduced the noise level from S9+20 to S9 on 10 MHz...thank you PAR, but still too noisy. I am considering a loop antenna due to its nulling capability but I think I understand that the nulling capability decreases with increasing frequency. So a loop antenna may not be of much help at frequencies of 10 MHz or more. Is that correct? And is anyone aware of published material or a graph which shows nulling of a loop antenna versus received frequency?

Thanks to all,

Neil

[Non-text portions of this message have been removed]

8521. Re: [loopantennas] Nulling Characteristics of a Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-30 20:27:22 UTC
From: Dale Parfitt
Topic: 8519 Message: 8521

The nulls are very sharp- so if you have more than one noise source and they are either not on the same azimuth angle or 180 degrees opposed- you are not likely to reduce your local noise much.
On the EF-SWL, make sure you have a good RF ground at the matchbox to prevent common mode noise coming from your home out to the antenna and being brought back into the home via differential mode.

Dale W4OP

I am plagued with RFI in my urban location. I replaced my random length antenna with a PAR end-fed SWL antenna, which reduced the noise level from S9+20 to S9 on 10 MHz...thank you PAR, but still too noisy. I am considering a loop antenna due to its nulling capability but I think I understand that the nulling capability decreases with increasing frequency. So a loop antenna may not be of much help at frequencies of 10 MHz or more. Is that correct? And is anyone aware of published material or a graph which shows nulling of a loop antenna versus received frequency?

Thanks to all,

Neil

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.894 / Virus Database: 271.1.1/3606 - Release Date: 04/30/11 02:34:00

[Non-text portions of this message have been removed]

8522. Re: [loopantennas] Nulling Characteristics of a Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-04-30 22:09:47 UTC
From: Steve Ellington
Topic: 8519 Message: 8522

I'm using the MFJ-1026 to eliminate plasma tv noise from my neighbor. It does an amazing job. You must provide a dedicated receiving antenna that picks up the noise as well as or better than your main antenna. Using a band scope (panadapter) makes adjustment easy.

Steve
N4LQ
----- Original Message -----
From: neilbanera
To: loopantennas@yahoogroups.com
Sent: Saturday, April 30, 2011 2:24 PM
Subject: [loopantennas] Nulling Characteristics of a Loop Antenna

I am plagued with RFI in my urban location. I replaced my random length antenna with a PAR end-fed SWL antenna, which reduced the noise level from S9+20 to S9 on 10 MHz...thank you PAR, but still too noisy. I am considering a loop antenna due to its nulling capability but I think I understand that the nulling capability decreases with increasing frequency. So a loop antenna may not be of much help at frequencies of 10 MHz or more. Is that correct? And is anyone aware of published material or a graph which shows nulling of a loop antenna versus received frequency?

Thanks to all,

Neil

[Non-text portions of this message have been removed]

8523. Feeding a Magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-01 01:19:15 UTC
From: ve3pcd
Topic: 8523 Message: 8523

Hello Folks,

I am in the process of building a mag loop out of .5'' copper tubing; I have not decided as yet how to feed it I am lookng at the best options. My question is this; Can I use a smaller dia. copper tube of the correct (loop / 5) length bent into a circle (like the faraday loop and feed it this way?

I would rather not have to use the faraday loop, looks too complicated to build, so it's either a gamma match or smaller loop made of copper.

73 de Peter

8524. Re: Bandwidth

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-01 06:29:15 UTC
From: Andrew
Topic: 8516 Message: 8524

My first transmitting loop of 3' dia had a bandwidth of 500khz@28Mhz to 3.5khz@7Mhz.
Care to be specific?

There is no cut length for a magnetic loop because it is tuned via its tuning capacitor.
Think of it as an LC tank circuit who's bandwidth is widened with reduced efficiency.

--- In loopantennas@yahoogroups.com, "kd8dey" <kd8dey@...> wrote:
>
> Out of curiosity, where can i find a published list of the 2:1swr bandwidth for a loop antenna cut for a "specific" band?
>

8525. Re: Painting a loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-01 06:32:59 UTC
From: Andrew
Topic: 8517 Message: 8525

Hi Drew, it depends on your paint and how well your loop is already protected from the elements. The worst bit to worry about is the high voltage tuning end which is very conscious of any reduction in resistances.

--- In loopantennas@yahoogroups.com, "drewbhoy67" <drewrolland@...> wrote:
>
> Hello all i built a mag loop for /p /m on my motorhome that works 20m-10m .I was thinking of painting the copper pipe i used for the loop white to blend in whith the motorhome.Do you think it make any diffrence to efficiency ?
> Ta Drew
>

8526. Re: Bandwidth

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-01 07:32:53 UTC
From: kd8dey
Topic: 8516 Message: 8526

--- In loopantennas@yahoogroups.com, "Andrew" <m1aws@...> wrote:
>
> My first transmitting loop of 3' dia had a bandwidth of 500khz@28Mhz to 3.5khz@7Mhz.
> Care to be specific?
>
> There is no cut length for a magnetic loop because it is tuned via its tuning capacitor. Think of it as an LC tank circuit who's bandwidth is widened with reduced efficiency.
>
> --- In loopantennas@yahoogroups.com, "kd8dey" <kd8dey@> wrote:
> >
> > Out of curiosity, where can i find a published list of the 2:1swr bandwidth for a loop antenna cut for a "specific" band?
> >
>
I was thinking along the lines of a full wave loop made for a "specific" band using the classic 1005/F(mhz)

Say for instance I made a loop for the 40m band using 1005/f(mhz) cut at the middle of the band. what kind of spread (Khz) would i have from center for the swr to be 2:1 or less without a tuner?

8527. Re: [loopantennas] Feeding a Magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-01 14:31:45 UTC
From: Chris Trask
Topic: 8523 Message: 8527

>
> I am in the process of building a mag loop out of .5''
> copper tubing; I have not decided as yet how to feed it
> I am lookng at the best options. My question is this;
> Can I use a smaller dia. copper tube of the correct
> (loop / 5) length bent into a circle (like the faraday
> loop and feed it this way?
>
> I would rather not have to use the faraday loop, looks
> too complicated to build, so it's either a gamma match
> or smaller loop made of copper.
>

There's a much simpler and less expensive way of feeding a transmitting loop:

http://www.home.earthlink.net/~christrask/Paper012.html

No Faraday loop, no vacuum capacitor, no gamma match.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8528. RE: [loopantennas] Frame antenna versus multiturn small loop antenna - comments

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-02 02:38:13 UTC
From: Steve Roberts
Topic: 8502 Message: 8528

Hello Vaclav,
I would firstly thank you for your observations and comments regarding the 80 meter wire wound (frame) antenna.
The author Harry Lythall - SM0VPO did in fact use plastic coated metal arms and found them to be suitable. However what you say about my central aluminum hub spider could well be very valid. I have given consideration to your comments and have reached the conclusion I am to far ahead as the spider hub is now finished, see attachment. However because of your valid comments I am considering a modification whereby the arms instead of coming out of the hub at 0 degrees to have them angled at say 15 degrees. The effect of this would be to displace the spider hub outside of the windings much like the cloths dryer in the garden but of coarse in my case in the vertical plane. This I believe I can do by machining some 15 degree wedges.
The 25 pf variable capacitor is being made as of right now by Vasile in Western Canada.
I see no author mention of power to be applied and I was planning on 100 watts.
I have changed the author suggested McDonald drinking straws through the metal arms to rubber grommets and hope these will do a good job of insulating the insulated multi strand wire from the metal arms.
Once again I do thank you for your interest, I am a mechanical engineer overhead crane designer struggling to understand the magic of antennas.

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
Cell 416-786-7485

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On

Behalf Of vaclav_sal
Sent: April 28, 2011 8:44 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Frame antenna versus multiturn small loop antenna - comments

I am not sure I agree with using term "frame antenna".
Perhaps basic definition of small loop antenna is in order.
We should all agree that we are talking about a resonant circuit of dimensions (diameter) near 1/10 of wavelength.
As any resonant circuit, the properties are influenced by nearby objects. Hence making the support structure out of metal will have an effect. (I am not saying it is wrong!) Common wisdom also states that immediate or more technically - near electromagnetic field - is "strong" - same as any antenna, but since we have a small dimensions is must be stronger in comparison with say half wavelength dipole.

I do not believe that calling the antenna "frame antenna" is sound technical reason not to consider effect of the metallic support.

I believe that more descriptive term would be "multiturn loop antenna" anyway.

I did not notice, maybe I missed it, any author's comments on how much power can be safely applied to his design without "arcing".

Actually I wonder if radial distance of individual turns, and insulation from supporting booms is rather critical and at what power level.

73 Vaclav AA7EJ

[Non-text portions of this message have been removed]

8529. Re: Nulling Characteristics of a Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-02 10:30:07 UTC
From: lz1aq
Topic: 8519 Message: 8529

--- In loopantennas@yahoogroups.com, "neilbanera" <neilbanera@...> wrote:
>
> I am plagued with RFI in my urban location. I replaced my random length antenna with a PAR end-fed SWL antenna, which reduced the noise level from S9+20 to S9 on 10 MHz...thank you PAR, but still too noisy. I am considering a loop antenna due to its nulling capability but I think I understand that the nulling capability decreases with increasing frequency. So a loop antenna may not be of much help at frequencies of 10 MHz or more. Is that correct? And is anyone aware of published material or a graph which shows nulling of a loop antenna versus received frequency?
>
> Thanks to all,
>
> Neil
>
Hi Neil,

The small loop antenna has figure 8 pattern (sharp null) only for vertically polarized waves and that is for all frequencies for which the loop length is less than 0.1 of wavelength. For other wave polarizations the null is no sharp or there will be no null at all. Most of the waves comming from the ionosphere have random polarization which is not stable and changes sometimes very quickly. That is the reason why the loop has unstable directivity on higher bands. The small loop will be effective for local man made noise since its polarization usually (but not always) is vertical irrespective of the frequency. You should expect very good loop directivity for local noise. Also for nearby LW and MW stations during daytime and not so good for the night time. On SW sometimes you will have directivity but it will be very unstable.
Regards

Chavdar LZ1AQ
lz1aq@...
www.lz1aq.signacor.com

8530. Re: Nulling Characteristics of a Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-02 16:38:44 UTC
From: Darren Hennig
Topic: 8519 Message: 8530

My suggestion is a Timewave ANC-4 or similar noise phasing device. I live in a basement apartment condo suite, and RFI is unreal here! However, I now have a Miniwhip by PA0RDT:

http://www.radiopassioni.it/pdf/pa0rdt-Mini-Whip.PDF

This is a very low profile, excellent active antenna working from 10 kHz to 30 MHz, and I have mine about 4m up off a tree limb, 5-6m from the building. I can routinely receive WWVB (60kHz) at S7 to S9. Never had that before! ;-)

I use the ANC-4 indoors, and any localized RFI also gets hit by the ANC unit. I use the built in whip, and have nulled S9+10 noise to well below S4 with it. S7-S9 noise CAN often be almost eliminated with careful phasing. I assist this effort using the DSP filtering on my R75 - noiseblanker, noise reduction, etc. The ANC-4 does a great job getting most of the mian noise out of the signal path to the rig. Worth a look.

Darren
VE6IZ

[Non-text portions of this message have been removed]

8531. Re: Painting a loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-02 17:50:48 UTC
From: drewbhoy67
Topic: 8517 Message: 8531

Thanks all . I just need to finish the gama match then give it a coat to match the motorhome without painting the tuning cap.
Ta Drew

--- In loopantennas@yahoogroups.com, "Andrew" <m1aws@...> wrote:
>
> Hi Drew, it depends on your paint and how well your loop is already protected from the elements. The worst bit to worry about is the high voltage tuning end which is very conscious of any reduction in resistances.
>
> --- In loopantennas@yahoogroups.com, "drewbhoy67" <drewrolland@> wrote:
> >
> > Hello all i built a mag loop for /p /m on my motorhome that works 20m-10m .I was thinking of painting the copper pipe i used for the loop white to blend in whith the motorhome.Do you think it make any diffrence to efficiency ?
> > Ta Drew
> >
>

8532. Re: Nulling Characteristics of a Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-03 17:31:19 UTC
From: neilbanera
Topic: 8519 Message: 8532

Thanks to all for the feedback.

Currently my PAR antenna is mounted as a sloper running parallel (N - S) to the back fence approximately 40 feet from the surrounding houses...this is the farthest away from all houses I can get, and is also parallel to the pole-mounted electrical supply lines along the streets. The upper end of the 45 foot antenna is about 30 feet high in an eucalyptus tree, with the last (upper)8 feet being vertical downward. The ground rod at the matchbox is 5/8 inch copper-clad steel driven 9 and 1/2 feet into the moist ground (6 inches exposed). The matchbox is grounded to the ground rod by a 6 inch wire...I have tried different ground configurations for the matchbox. As an experiment I have been running the radio, a FRG 7, on internal batteries by the matchbox. The radio is connected to the matchbox with 18 inches of RG8 mini foam cable. I am doing this to avoid RFI pickup along the ultimate feedline which would have to be about 80 feet long and also rise to the second floor of my house. I also have a 3 foot 1/2 inch copper pipe driven into the ground as a ground located about 16 feet from the matchbox to which I have tested grounding the radio, but with no reduction in noise. That ground wire is parallel to the antenna and lies on the surface of the ground.

My latest question is whether changing the sloper antenna to a vertical rectangle or delta (triangle) loop antenna would null noise from the street power lines which would be broadside to the antenna (and noise from the nearest houses which are also broadside to the antenna). I assume that I would attach one end of the antenna to the antenna terminal of the matchbox (which is a 9:1 balun) and the other end of the antenna to the ground terminal of the antenna side of the balun, effectively creating a loop. Is my thinking correct?

Finally, I will borrow my friend's portable SW radio and walk the surrounding streets to determine if the RFI is general or if there are any hotspots. Personally, I find the RFI issue intriguing and disappointing. This issue did not exist 20 years ago when I last used my FRG 7 (I am retired now) and shows the kind of electromagnetic "soup" we are now immersed in.

Thanks again to all...I really appreciate your feedback,

Neil

8533. 80M Horizontal Loop in attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-03 13:51:50 UTC
From: kj4wrk
Topic: 8533 Message: 8533

Hi Everyone,
I live in an antenna-restricted community and want an HF antenna with as much coverage as possible. I'd like to work 40m-6m, but 80m would be nice as well. 160m's probably out of the question.

My setup is: Yaesu 897D with an LDG 100 Pro II tuner, a Balun Designs 4:1 Balun feeding 450 ohm window line to the loop in the attic. I plan on constructing the loop from 14 gauge stranded wire with insulation and ceramic insulators.

I believe I can put a 40m horizontal loop in the attic with no problems. but I've wondered what would be the effect of putting in the extra wire and artfully adding some bends in the wire (zig-zag or similar) to get to 80m.

I imagine it would affect propagation and possible even not tune correctly on the amateur bands. My neighbor has an antenna analyzer, so I can get the basic tuning and done that way, but I'd prefer not to spend hours in a hot attic reinstalling the antenna if I can avoid it.

Thanks and 73,

Steve (KJ4WRK)

8534. Re: [loopantennas] 80M Horizontal Loop in attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-03 18:56:32 UTC
From: brian nsl
Topic: 8533 Message: 8534

Steve,
A few years ago there appeared in QST an article on a ' Baby Loop ',
it covered 80m but was only the footprint of a 40m version.
It was basically done by a small coil on a PVC former at the 1/4 wave points
as I recall.
I am not a member of ARRL so sorry cant look it up for you.
Having spent many hours on antennas in our loft I know the feeling, you either need
a few layers on or are melting hi!
72, Brian,
G0NSL-QRP.
----- Original Message -----
From: kj4wrk
To: loopantennas@yahoogroups.com
Sent: Tuesday, May 03, 2011 2:51 PM
Subject: [loopantennas] 80M Horizontal Loop in attic?

[Non-text portions of this message have been removed]

8535. Re: [loopantennas] 80M Horizontal Loop in attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-04 00:48:22 UTC
From: Steve Ellington
Topic: 8533 Message: 8535

Steve;
You might consider cutting the loop opposite the feed point. This would turn it into a squashed 80 meter dipole and would probably be a lot more efficient on 80 than the loop was. If this works out, you might be able to rig up a relay or switch to open and close the loop.

Steve
N4LQ
----- Original Message -----
From: kj4wrk
To: loopantennas@yahoogroups.com
Sent: Tuesday, May 03, 2011 9:51 AM
Subject: [loopantennas] 80M Horizontal Loop in attic?

Hi Everyone,
I live in an antenna-restricted community and want an HF antenna with as much coverage as possible. I'd like to work 40m-6m, but 80m would be nice as well. 160m's probably out of the question.

My setup is: Yaesu 897D with an LDG 100 Pro II tuner, a Balun Designs 4:1 Balun feeding 450 ohm window line to the loop in the attic. I plan on constructing the loop from 14 gauge stranded wire with insulation and ceramic insulators.

I believe I can put a 40m horizontal loop in the attic with no problems. but I've wondered what would be the effect of putting in the extra wire and artfully adding some bends in the wire (zig-zag or similar) to get to 80m.

I imagine it would affect propagation and possible even not tune correctly on the amateur bands. My neighbor has an antenna analyzer, so I can get the basic tuning and done that way, but I'd prefer not to spend hours in a hot attic reinstalling the antenna if I can avoid it.

Thanks and 73,

Steve (KJ4WRK)

[Non-text portions of this message have been removed]

8536. Re: 80M Horizontal Loop in attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-04 13:23:24 UTC
From: kj4wrk
Topic: 8533 Message: 8536

That's not a bad suggestion. I may try that. One site I saw on the internet suggested that I could get creative and add some bends to the loop, so I'll give that a try.

It looks like I have a week of cool weather ahead, so I expect I'll be up in the attic pulling wire. Hopefully, my balun and ladder line show up in the mail soon.

73,
Steve
KJ4WRK

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> Steve;
> You might consider cutting the loop opposite the feed point. This would turn it into a squashed 80 meter dipole and would probably be a lot more efficient on 80 than the loop was. If this works out, you might be able to rig up a relay or switch to open and close the loop.
>
> Steve
> N4LQ
> ----- Original Message -----
> From: kj4wrk
> To: loopantennas@yahoogroups.com
> Sent: Tuesday, May 03, 2011 9:51 AM
> Subject: [loopantennas] 80M Horizontal Loop in attic?
>
>
>
> Hi Everyone,
> I live in an antenna-restricted community and want an HF antenna with as much coverage as possible. I'd like to work 40m-6m, but 80m would be nice as well. 160m's probably out of the question.
>
> My setup is: Yaesu 897D with an LDG 100 Pro II tuner, a Balun Designs 4:1 Balun feeding 450 ohm window line to the loop in the attic. I plan on constructing the loop from 14 gauge stranded wire with insulation and ceramic insulators.
>
> I believe I can put a 40m horizontal loop in the attic with no problems. but I've wondered what would be the effect of putting in the extra wire and artfully adding some bends in the wire (zig-zag or similar) to get to 80m.
>
> I imagine it would affect propagation and possible even not tune correctly on the amateur bands. My neighbor has an antenna analyzer, so I can get the basic tuning and done that way, but I'd prefer not to spend hours in a hot attic reinstalling the antenna if I can avoid it.
>

> Thanks and 73,
>
> Steve (KJ4WRK)
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8537. Re: [loopantennas] Re: 80M Horizontal Loop in attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-04 16:20:28 UTC
From: brian nsl
Topic: 8533 Message: 8537

Steve,
Maybe it was the late L B Cebiks website you saw and his article
' Zig Zag your dipole ' ????
If not it's worth a look.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: kj4wrk
To: loopantennas@yahoogroups.com
Sent: Wednesday, May 04, 2011 2:23 PM
Subject: [loopantennas] Re: 80M Horizontal Loop in attic?

[Non-text portions of this message have been removed]

8538. Re: 80M Horizontal Loop in attic?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-04 17:30:11 UTC
From: kj4wrk
Topic: 8533 Message: 8538

Actually, it was here where I first saw a mention of it:
http://mysite.verizon.net/ka1fsb/loopants.html#goodturn

I've read several of the Cebik articles now and I'm encouraged that I should be able to make something that works well enough to get out on the bands of interest. Multiband operation is very important to me, so my first priority will be that.

I've decided to cheat a bit and use PVC pipes to poke the corners of the antenna out into the far edges of the attic. The idea of crawling through insulation covered joists above a 2 story family room isn't especially appealing.

73,
Steve
KJ4WRK

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Steve,
> Maybe it was the late L B Cebiks website you saw and his article
> ' Zig Zag your dipole ' ????
> If not it's worth a look.
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: kj4wrk
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, May 04, 2011 2:23 PM
> Subject: [loopantennas] Re: 80M Horizontal Loop in attic?
>
> [Non-text portions of this message have been removed]
>

8539. Small transmitting loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-05 19:32:28 UTC
From: Ken
Topic: 8539 Message: 8539

After FDIM in Dayton I will be treking up to Bayfield, Ontario for the Summer with my IC-703+ and my home made loop, http://www.qrpbuilder.com/downloads/loop%20antenna%20110310.pdf . I'm looking forward to extended portable operations on 30m - 10m, and hope to run into you all on the air. I'll bring the loop to the show and tell night at FDIM.

73,

ken - wa4mnt

www.qrpbuilder.com

8540. RE: [loopantennas] Small transmitting loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-07 02:02:19 UTC
From: Steve Roberts
Topic: 8539 Message: 8540

Hello Ken,
I note that Bayfield is very near to Goderich where I have to visit this coming summer. I would very much like to view your new creation.
I am presently building the SM0VPO 80 meter frame and attache the file of the completed machined hub for your interest. Hope to have the arms completed in the next few days.
What time frame will you be in Bayfield??
73's

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
Cell 416-786-7485

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Ken
Sent: May 5, 2011 3:32 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Small transmitting loop antenna

After FDIM in Dayton I will be treking up to Bayfield, Ontario for the Summer with my IC-703+ and my home made loop,
http://www.qrpbuilder.com/downloads/loop%20antenna%20110310.pdf . I'm looking forward to extended portable operations on 30m - 10m, and hope to run into you
all on the air. I'll bring the loop to the show and tell night at FDIM.

73,

ken - wa4mnt

www.qrpbuilder.com

[Non-text portions of this message have been removed]

8541. Butterfly Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-07 11:45:08 UTC
From: drewbhoy67
Topic: 8541 Message: 8541

Hi does anyone know where i can get a butterfly capacitor for a magnetic loop i am building . A 5-70pF and i live in the UK . Thanks Drew

8542. Re: Butterfly Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-07 13:16:12 UTC
From: pop
Topic: 8541 Message: 8542

I HAVE FOR HAM RADIO PROJECTS HV CAPACITOR AND BUTTERFLY CAPACITOR KITS FOR SALE

I used a CNC machine to cut the blades and a lot of elbow grease to clean after by hand.

My spacers are 0.25"and 0.500".

The size are 5.5"x4"x3.25"

I can do custommade capacitors.

I need only how many pF and voltage(distance beetween blades)

Here the relatin between air gap and voltage

air
gap voltage

.030 950 V
.032 1100 V
.037* 1325 V
.045 1550 V
.075 2500 V
.080 2700 V
.100 3100 V
.120 3500 V
.140 3700 V

yo5bzz@...m

CALGARY,ALBERTA,CA

--- In loopantennas@yahoogroups.com, "drewbhoy67" <drewrolland@...> wrote:
>
> Hi does anyone know where i can get a butterfly capacitor for a magnetic loop i am building . A 5-70pF and i live in the UK . Thanks Drew
>

8543. RE: [loopantennas] Butterfly Capacitor

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-08 17:51:24 UTC
From: Steve Roberts
Topic: 8541 Message: 8543

Hi Drew,
Attached is a picture of a 25 pf capacitor that has just been manufactured for me by "Vasile" in Galgary Alberta. If you want his contac details let me know.

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
Cell 416-786-7485

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of drewbhoy67
Sent: May 7, 2011 7:45 AM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Butterfly Capacitor

Hi does anyone know where i can get a butterfly capacitor for a magnetic loop i am building . A 5-70pF and i live in the UK . Thanks Drew

[Non-text portions of this message have been removed]

8544. Any advise for the my first SWL loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-10 16:20:43 UTC
From: Giovanni
Topic: 8544 Message: 8544

Hi all.
I am new at this group and I would like to build a magnetic loop for general SWL. Is there any simple "worked" plans that can guarantee a success?
I have already tried with a capacitor taken from an old transistor but without success. My radio is a handheld scanner Yupiteru MVT-7100 and it seems that is not particularly fond of short-circuited the two parts of his antenna. At least that is what read.
Thank you in advance for any help.
John.

8545. Re: [loopantennas] Any advise for the my first SWL loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-11 13:57:11 UTC
From: Chris Trask
Topic: 8544 Message: 8545

>
> I am new at this group and I would like to build a magnetic loop
> for general SWL. Is there any simple "worked" plans that can
> guarantee a success?
> I have already tried with a capacitor taken from an old transistor
> but without success. My radio is a handheld scanner Yupiteru
> MVT-7100 and it seems that is not particularly fond of short-
> circuited the two parts of his antenna. At least that is what read.
>

Here are a few tunable loops:

http://www.home.earthlink.net/~christrask/Paper011.html

http://www.home.earthlink.net/~christrask/Paper012.html

http://www.home.earthlink.net/~christrask/Paper018.html

In the group files section you'll find similar papers for a wideband loop antenna amplifier and a generalized tutorial on loop antennas.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8546. Advice on feeding my Mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-13 17:33:26 UTC
From: ve3pcd
Topic: 8546 Message: 8546

Folks,

I am building a loop of 1/2" copper tubing ,I am also using a Vacuum Cap and motor to tune it. My confusion is feeding it, I have decided to go with the faraday small loop to feed the big loop but not sure if it's working because I cant seem to get a good SWR match. Here is how I have built the faraday loop.
1. small copper tubing circled into a small loop 1/5 the size of the main loop.
2. One end of the small loop is connected to center of the female coax connector.
3. The other end of the small loop it connected to the ground side of the coax connector.

is this correct, and if so how to I tune for best SWR?

73 de Peter

8547. Pixel Technologies Magnetic RX Loop ☐ any users out there?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-13 18:19:21 UTC
From: vtnn43e48073
Topic: 8547 Message: 8547

I have been considering buying a K9AY antenna but can only have it up during the late fall through spring. There is no way I can keep it up all year because it would have to be in my backyard and I would need to cut the grass where it is installed. Down it would have to come every spring.

So I recently saw an ad for the RF PRO-1A in QST and thought that it might be a decent RX antenna for my situation that I could keep it up year round. Would mount it on the side of my house and turn it with a cheap rotor.
http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf

It would be used in conjunction with my Flex-5000, a SteppIR BigIR for 80-10 and an inverted L for 160. Since my Flex-5000 has diversity RX my thought was that using the RF PRO-1A and one of my TX antennas would be a good combination.

So my questions are there any RF PRO-1A users on the list and if so what do they think of the RF PRO-1A in general and especially on 160/80?

73
Zack
N8FNR

8548. Re: [loopantennas] Pixel Technologies Magnetic RX Loop - any users out there?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-13 18:38:51 UTC
From: Dale Parfitt
Topic: 8548 Message: 8548

Your goal for an 80/160 RX antenna should be to maximize the RX Directivity Factor (RDF- see W8JI site or ON4UN book).
A loop comes in around 4. See:
http://www.k7tjr.com/rx1comparison.htm

The K9AY is remarkably better. I use Beverages on 40-->160 and have not found anything that can compare. However, my half sized Flag does outperform my 7' shielded/broadband loop consistantly- just as their respective RDF's predicts it should.

Dale W4OP

I have been considering buying a K9AY antenna but can only have it up during the late fall through spring. There is no way I can keep it up all year because it would have to be in my backyard and I would need to cut the grass where it is installed. Down it would have to come every spring.

So I recently saw an ad for the RF PRO-1A in QST and thought that it might be a decent RX antenna for my situation that I could keep it up year round. Would mount it on the side of my house and turn it with a cheap rotor.
http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf

It would be used in conjunction with my Flex-5000, a SteppIR BigIR for 80-10 and an inverted L for 160. Since my Flex-5000 has diversity RX my thought was that using the RF PRO-1A and one of my TX antennas would be a good combination.

So my questions are there any RF PRO-1A users on the list and if so what do they think of the RF PRO-1A in general and especially on 160/80?

73
Zack
N8FNR

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.901 / Virus Database: 271.1.1/3635 - Release Date: 05/13/11 02:34:00

[Non-text portions of this message have been removed]

8549. Re: [loopantennas] Pixel Technologies Magnetic RX Loop - any users out there?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-13 19:41:09 UTC
From: Andy Ikin
Topic: 8548 Message: 8549

Zack N8FNR wrote on the May 13.

"I have been considering buying a K9AY antenna but can only have it up during the late fall through spring. There is no way I can keep it up all year because it would have to be in my backyard and I would need to cut the grass where it is installed. Down it would have to come every spring.

So I recently saw an ad for the RF PRO-1A in QST and thought that it might be a decent RX antenna for my situation that I could keep it up year round. Would mount it on the side of my house and turn it with a cheap rotor.
http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf

It would be used in conjunction with my Flex-5000, a SteppIR BigIR for 80-10 and an inverted L for 160. Since my Flex-5000 has diversity RX my thought was that using the RF PRO-1A and one of my TX antennas would be a good combination.

So my questions are there any RF PRO-1A users on the list and if so what do they think of the RF PRO-1A in general and especially on 160/80?"

Zack, providing you don't suffer from high local noise the K9AY is a much better antenna. One way round the grass cutting issue is to raise the base of the antenna say about 5-6 ft above the ground i.e. the base is horizontal. I use two K9AYs with this configuration as a 200kHz to 2MHz phase array. My experience with the K9AY would indicate that having the antenna elevated does improve the directivity.

73

Andrew Ikin G8LUG

----- Original Message -----
From: vtnn43e48073
To: loopantennas@yahoogroups.com
Sent: Friday, May 13, 2011 7:19 PM
Subject: [loopantennas] Pixel Technologies Magnetic RX Loop - any users out there?

I have been considering buying a K9AY antenna but can only have it up during the late fall through spring. There is no way I can keep it up all year because it would have to be in my backyard and I would need to cut the grass where it is installed. Down it would have to come every spring.

So I recently saw an ad for the RF PRO-1A in QST and thought that it might be a decent RX antenna for my situation that I could keep it up year round. Would mount it on the side of my house and turn it with a cheap rotor.
http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf

It would be used in conjunction with my Flex-5000, a SteppIR BigIR for 80-10 and an inverted L for 160. Since my Flex-5000 has diversity RX my thought was that using the RF PRO-1A and one of my TX antennas would be a good combination.

So my questions are there any RF PRO-1A users on the list and if so what do they think of the RF PRO-1A in general and especially on 160/80?

73
Zack
N8FNR

[Non-text portions of this message have been removed]

8550. RE: [loopantennas] Advice on feeding my Mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-13 23:24:22 UTC
From: Ray Phillips
Topic: 8546 Message: 8550

Method one:-

Start with a loop obviously bigger than 20%. This is called aiming off - by deliberately missing a target in a known direction, you don't have to guess the direction of the target. In this case, the pickup loop must have to be smaller.
Tune the loop to resonance on a frequency in the centre of the TX range (listen for a peak in the noise).
Test the SWR.
If the SWR is out of tolerance then make the loop a bit smaller.
Retest and repeat until success.

Method two:-

If you have an antenna tester:-

Tune the main loop to resonance on a frequency in the centre of the TX range. Remember, resonance occurs when the reactance is zero.

If the pickup loop impedance at resonance is lower than 50 Ohms, make a bigger pickup loop; repeat until pickup loop impedance is 50 Ohms or just a bit larger. Fine tune the impedance by rotating the pickup loop in either the vertical plane axis or the azimuth plane axis (tilt it or twist it) until the impedance is 50 Ohms.

As you make the fine adjustment, you may need to retune the resonance due to interaction between the main and pickup loops.

Check at either end of the TX range; re-adjust and compromise as necessary.

If you don't have an antenna tester:-

Tune the main loop to a frequency in the centre of the TX range by listening for a peak in the noise.

Twist or tilt the pickup loop a few degrees at a time to get the best SWR however you are measuring it.

If the SWR is sitll not acceptable guess whether the loop is too large or too samall and make a new one. Twist or tilt to fine tune. If the SWR gets worse, you guessed wrong; make another pickup loop and try again.

Check both ends of the TX range.

If the impedance at resonance gets near 12.5 or 200 Ohms, stick in a 1:4
or 4:1 (respectively) guanella balun and the job's done.

To: loopantennas@yahoogroups.com
From: ve3pcd@hotmail.com
Date: Fri, 13 May 2011 17:33:26 +0000

Subject: [loopantennas] Advice on feeding my Mag loop

Folks,

I am building a loop of 1/2" copper tubing ,I am also using a Vacuum Cap and motor to tune it. My confusion is feeding it, I have decided to go with the faraday small loop to feed the big loop but not sure if it's working because I cant seem to get a good SWR match. Here is how I have built the faraday loop.

1. small copper tubing circled into a small loop 1/5 the size of the main loop.

2. One end of the small loop is connected to center of the female coax connector.

3. The other end of the small loop it connected to the ground side of the coax connector.

is this correct, and if so how to I tune for best SWR?

73 de Peter

[Non-text portions of this message have been removed]

8551. Re: Advice on feeding my Mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-14 01:26:14 UTC
From: ve3pcd
Topic: 8546 Message: 8551

Thanks for the reply and the information but I dont think you have answered my question.

2. One end of the small loop is connected to center of the female coax connector.
>
> 3. The other end of the small loop it connected to the ground side of the coax connector.
>
> I need to know if the feed is built correctly

Thanks,

>
> is this correct, and if so how to I tune for best SWR?--- In loopantennas@yahoogroups.com, Ray Phillips <uggliozzi@...> wrote:
>
>
> Method one:-
>
> Start with a loop obviously bigger than 20%. This is called aiming off - by deliberately missing a target in a known direction, you don't have to guess the direction of the target. In this case, the pickup loop must have to be smaller.
> Tune the loop to resonance on a frequency in the centre of the TX range (listen for a peak in the noise).
> Test the SWR.
> If the SWR is out of tolerance then make the loop a bit smaller.
> Retest and repeat until success.
>
>
> Method two:-
>
> If you have an antenna tester:-
>
> Tune the main loop to resonance on a frequency in the centre of the TX range. Remember, resonance occurs when the reactance is zero.
>
> If the pickup loop impedance at resonance is lower than 50 Ohms, make a bigger pickup loop; repeat until pickup loop impedance is 50 Ohms or just a bit larger. Fine tune the impedance by rotating the pickup loop in either the vertical plane axis or the azimuth plane axis (tilt it or twist it) until the impedance is 50 Ohms.
>
> As you make the fine adjustment, you may need to retune the resonance due to interaction between the main and pickup loops.
>
> Check at either end of the TX range; re-adjust and compromise as necessary.
>
>
>

> If you don't have an antenna tester:-
>
> Tune the main loop to a frequency in the centre of the TX range by listening for a peak in the noise.
>
> Twist or tilt the pickup loop a few degrees at a time to get the best SWR however you are measuring it.
>
> If the SWR is sitll not acceptable guess whether the loop is too large or too samall and make a new one. Twist or tilt to fine tune. If the SWR gets worse, you guessed wrong; make another pickup loop and try again.
>
> Check both ends of the TX range.
>
>
> If the impedance at resonance gets near 12.5 or 200 Ohms, stick in a 1:4
> or 4:1 (respectively) guanella balun and the job's done.
>
> To: loopantennas@...m
> From: ve3pcd@...
> Date: Fri, 13 May 2011 17:33:26 +0000
> Subject: [loopantennas] Advice on feeding my Mag loop
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

> Folks,
>
>
>
> I am building a loop of 1/2" copper tubing ,I am also using a Vacuum Cap and motor to tune it. My confusion is feeding it, I have decided to go with the faraday small loop to feed the big loop but not sure if it's working because I cant seem to get a good SWR match. Here is how I have built the faraday loop.
>
> 1. small copper tubing circled into a small loop 1/5 the size of the main loop.
>
> 2. One end of the small loop is connected to center of the female coax connector.
>
> 3. The other end of the small loop it connected to the ground side of the coax connector.
>
>
>
> is this correct, and if so how to I tune for best SWR?
>
>
>
> 73 de Peter
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8552. Re: Pixel Technologies Magnetic RX Loop ☐ any users out there?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-14 14:23:33 UTC
From: John
Topic: 8547 Message: 8552

--- In loopantennas@yahoogroups.com, "vtnn43e48073" <vtnn43e@...> wrote:
>
> I have been considering buying a K9AY antenna but can only have it up during the late fall through spring. There is no way I can keep it up all year because it would have to be in my backyard and I would need to cut the grass where it is installed. Down it would have to come every spring.
>
> So I recently saw an ad for the RF PRO-1A in QST and thought that it might be a decent RX antenna for my situation that I could keep it up year round. Would mount it on the side of my house and turn it with a cheap rotor.
> http://www.pixelsatradio.com/PDF/RF_PRO-1A_Cut_sheet.pdf
>
> It would be used in conjunction with my Flex-5000, a SteppIR BigIR for 80-10 and an inverted L for 160. Since my Flex-5000 has diversity RX my thought was that using the RF PRO-1A and one of my TX antennas would be a good combination.
>
> So my questions are there any RF PRO-1A users on the list and if so what do they think of the RF PRO-1A in general and especially on 160/80?
>
> 73
> Zack
> N8FNR
>

I have had my PRO-1a for several months. I mounted it on a 5' mast section mounted to the skirt of my deck, which is just under 2' off the ground. I had, over three plus decades, had long wires, TTFD's, large loops, A-D Slopers, etc, and fed them with everything - single wire, 450 Ohm balanced line, coax, you name it. They all picked up the sporadic high tension line noise, from defective compression insulators, and, most lately, the reradiated by my own house wiring trash from switching supply wall warts, PC's, HDTV's, satelite rcvr's, etc. I wanted to resurrect my SWLing - but the noise was horrific - and, my favorite old pine tree/support had to come down.

I thought about it for months - then took the plunge. It was a bundle of bucks, but worth it. I fed it with RG-6 Quad. I lined the loop parallel to my house - and 11 feet away from the back wall. It nulled the hideous power line noise - and reradiated hash from the house - at that position, so I didn't buy a rotator. Additionally, it's sky-wave directionality wasn't as pronounced, further negating the need to turn it - here. It is quite directional on the local NDB 224 kHz (BH) and MW stations, alike. It has worked quite well for three plus months now - weathered some heavy rain & wind quite well, too. Again, a lot of money - but a complete 'package' - and seemingly worth it.

It does have a 'key' input on the desk mounted power inserter/power switch - you can connect it to your transceiver mic/key line to de-sens the antenna during transmissions on adjacent antennas.

John

8553. Re: Advice on feeding my Mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-14 15:15:47 UTC
From: vaclav_sal
Topic: 8546 Message: 8553

Peter,
mine antenna is a copy of Ken's design
http://www.qrpbuilder.com/downloads/loop%20antenna%20110310.pdf
Check his design. He has great detailed drawings of his antenna.

Here is my faraday pickup loop.

Made of two halfs of 3/8 soft copper.
I inserted RG8 coax minus outside insulation and braid into one half BEFORE bending it in half circle.
The center of feed coax is connected to the center of faraday half loop coax - bottom end.
The other end of the center of this faraday coax insert is connected to the other copper half loop - top end.
At the feed end (bottom half) both copper loop halfs are connected via PL plug body.

I am about to fine tune my loop - it looks as my lower frequency is bellow 10 MHZ and top somewhere near 16 MHz.

I still have some mechanical issues to work out before checking the SWR.

73 Vaclav AA7EJ

8554. Re: Pixel Technologies Magnetic RX Loop ☐ any users out there?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-14 23:02:12 UTC
From: Dean Wayman
Topic: 8547 Message: 8554

--- In loopantennas@yahoogroups.com, "vtnn43e48073" <vtnn43e@...> wrote:

> So my questions are there any RF PRO-1A users on the list and if so what do they think of the RF PRO-1A in general and especially on 160/80?
>
> 73
> Zack
> N8FNR
>

I have had mine up for almost a year now ,i used it all last winter by itself ,this spring i installed the vertical.......I use it mainly for MW DXing and as a quiet alt. to a vertical for SW listening, and can report that it has opened the world to me.

I have mine setup on a 10 foot tower and rotator about 12 feet away from the power line that goes into the house and about 25 feet away from the house,fed with RG-6 buried in conduit to the radio , i expected to get all kinds of static there but it seems fine.

You have a really nice radio-antennas ,so i wouldn't expect you to be WOW'ed by the pixel loop performance ,but if i understand your question ? you are thinking of using it as a second antenna in a phased array?

For about 2 months i've had the Pixel loop , MFJ vertical and a quantum phaser running here, performance wise the loop is quieter than the vertical ,(no surprise there) but as a phasing array it does bring in the DX ,and i can even get rid of noises if they are on the right heading.

I have never had room for a K9ay... or 4 :) ,wish i did ,i suspect it would be better at getting very weak signals because of the bigger appeture ?
, however most of the time it's the conditions that decide if Dx will come your way or not, by that i mean if there is no signal there? ,there isn't any way to drag it out of the soup,unless your in a very quiet environment and can turn the gain all the way up,(add more amp).

The directtivity of this loop is good ,were i get into problems is having a station 180 degrees from the station i'm trying too ID,that's why i went with a phasing setup.

Being in N/E Nebraska i'm more or less in the central part of the continent,and several times already i have received stations from my north and south on the same freq , a thing not possible before this .

Hope i understood you correctly, if not just ask again :P

Dean_0

8555. Re: Lookinmg for hams who are plumbers- connecting flexible copper pipe. .

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-16 08:23:55 UTC
From: longjohn119
Topic: 8491 Message: 8555

Sorry I didn't get back to you sooner, I have a lot of contracted preventative maintenance work and I like to get as much of it out of the way plus we had a couple of days of record temps in the low 90's

The problem with mixing silver rod and normal solder is you have to hear the rod to a much higher temperature so if the other joint is too close it's literally spit the solder right out of the joint. You can use a heat trap paste but that's not very cost effective for a one time deal. Of course you can use the old standby of wrapping a wet rag around the regular solder joint if there is room. Be aware that the rag can dry out amazingly fast and catch fire. I usually fill and old dish soap battle with water and you can squirt it to keep the rag wet. I have to do that when I'm working around shut off valves, pressure switches and expansion valves so you don't ruin the seats and seals.

--- In loopantennas@yahoogroups.com, "vaclav_sal" <vaclav_sal@...> wrote:
>
> Thanks for all the advice.
> I guess I need to hookup with local AC shop, should not be a big problem in Houston.I'll try the swaggering method, but I am affraid to damage the pipe in wise.
>
> I am not trying to split hair - but can I mix "regular" solder with silver?
> Anyway, I think putting the regular 3/8 cap on the end and soldering it on with regular solder and than solder the capped end into the tee with silver. If I fill the gap all the eay to the pipe surface the RF should like it because of the skin effect.
> Any comments on that?
>
> By the way I think I found good source of quality insulation (low loss) material - plastic kitchen cutting board. Now if I can make sure it is the real high density poly I'll be happier.
>
> Electric motor from child riding toy - with reduction transmission looks very promising. And it fits snuggly on top of the camo surplus pole!
> The only "problem" with these poles is the odd diameter _ 1 13/16!
> It must have a same history as copper pipe sizes HI HI.
> Thanks for round files and sanding paper!
>
> 73 Vaclav AA7EJ
>

8556. Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-16 18:13:58 UTC
From: Andy Ikin
Topic: 8556 Message: 8556

Hello Folks,

I have just received a recent review comparing the above product to
the Wellbrook ALA1530, it can be found at:

http://www.wellbrook.uk.com/reviews/ALA1530-vs-RFPRO-1AReview.pdf

The review has a link to some MP3 recordings of the s/n comparisons from
the LW band up to the 13m broadcast Band

73

Andrew G8LUG

[Non-text portions of this message have been removed]

8557. Re: [loopantennas] Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-16 18:36:28 UTC
From: feinstei@frontier.com
Topic: 8556 Message: 8557

My experience with the Wellbrook was unfortunate due to the fact that there is no North American distributor for this product. I spent over $80.00 sending various parts of a Wellbrook antenna back and forth to Great Britain due to the fact that I had zero signal with the sample(s) that I had connected to a TenTec RX-350 shortwave receiver.

Either the electronics were somehow damaged in transit (this was right after 9/11, so maybe they x-rayed the suspicious looking loop???), the antenna was defective from manufacture, or the antenna was desensitized from close proximity to some powerful broadcast FM antennas located within a block of my residence. Unfortunately, since everything on the Wellbrook that I received was potted in putty, there was no way that I could self-repair any suspected defective parts and was stuck sending the various insundry parts of the antenna back to Great Britain for a replacement and refund. While the problems with the Wellbrook could certainly have stemmed from the proximity to the broadcast FM antennas (at 10 Mile and Greenfield in a northern suburb of Detroit for those familiar with the area), I am forever soured on ordering from overseas due to the logistics of overseas shipping. I must say that Andy treated me quite fairly and did refund my money, but the postage expenses made this a losing proposition for both sides. A North American dealership or distributor would have made all of these logistical difficulties less traumatic.

For North American users, my story might be a factor in determining which loop to buy.

8558. Re: Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-16 21:38:15 UTC
From: John
Topic: 8556 Message: 8558

Guy Atkins received nothing with the PRO-1A on the 25mb? Wow. Gotta wonder about that. Mine has worked quite well, thus far. Of course, I only had the comparison of the Wellbrook and Pixel loops provided by Pixel and eham reviews to go by - and the Pixel generally did better. Most folks still don't use SDR's, either - in my case, I have used it mainly on my Palstar R30A - and Lowe HF-150. I even hooked up my old much-modified JRC NRD525 - and it was impressive there, too. It's greatest attribute, to me, is it's ability to null both the high tension line noise and the house reradiated digital hash from switching wall warts, PC's, HD-TV's, and even satelite rcvr's. It came complete - except for the RG-6 quad and f-connectors - even with an F-female to PL259 adapter.

As an aside, BNC connectors were never meant for outside 'in the weather' use - they are faster on/off interconnect cable connectors, mainly used with test equipment. Of course, even at 30 MHz, 100 ft of RG-58 has measured loss - RG-6 Quad is much lower in loss. RG-58C/U is even lossier - but more flexible - RG-8X would be better for a long outdoor run, if you cannot use RG-6 quad.

John

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
> Hello Folks,
>
> I have just received a recent review comparing the above product to
> the Wellbrook ALA1530, it can be found at:
>
> http://www.wellbrook.uk.com/reviews/ALA1530-vs-RFPRO-1AReview.pdf
>
> The review has a link to some MP3 recordings of the s/n comparisons from
> the LW band up to the 13m broadcast Band
>
> 73
>
> Andrew G8LUG
>
>
> [Non-text portions of this message have been removed]
>

8559. Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-16 21:53:54 UTC
From: Jack Smith
Topic: 8556 Message: 8559

One comment on RG-6 versus RG-58...

Most RG-6 has a thin copper layer on top of a steel center conductor. Above a few MHz, the loss is about the same as for a solid copper conductor and less than RG-58. However, below a few MHz, the loss increases as the copper isn't thick enough. This can amount to a dB or two more loss for RG-6 compared with RG-58 for a typical run at 100 KHz.

In the overall scheme of things, a dB or two won't be noticed in this frequency range, but it's a real effect. If you want the best performance with RG-6, look for a cable with solid copper center conductor. It will also be a bit easier to handle as it isn't quite as stiff.

A BNC can be used outside, but requires weatherproofing with self-fusing tape, coax-seal or the like. BNCs in this regard are no different than UHF connectors.

Jack K8ZOA

[Non-text portions of this message have been removed]

8560. Re: Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-16 22:15:38 UTC
From: thinkdx
Topic: 8556 Message: 8560

Hi John,

You are not reading the charts correctly. The 25mb portion indicates that the RF PRO-1A was never the best antenna on the frequencies checked for that band. See the legend (caption) below each of the column charts.

It was the same findings on the 41, 31, and 13mb also... The RF PRO-1A never provided a better S/N than the ALA1530 on those bands. Please re-read the review to understand the metrics I used to evaluate the loops.

In the XLS file of captured S/N data (within the ZIP file you can download), you can see the S/N values of all of the signals measured on all bands, for both of the antennas. They show that the RF PRO-1A received the same stations as the Wellbrook loop for the 25, 41, 31, and 25 meter bands; however, the RF PRO-1A never equalled or surpassed the ALA1530 on these bands.

73,

Guy Atkins
Puyallup, WA

--- In loopantennas@yahoogroups.com, "John" <JRTOW3RD@...> wrote:
>
> Guy Atkins received nothing with the PRO-1A on the 25mb? Wow. Gotta wonder about that. Mine has worked quite well, thus far. Of course, I only had the comparison of the Wellbrook and Pixel loops provided by Pixel and eham reviews to go by - and the Pixel generally did better. Most folks still don't use SDR's, either - in my case, I have used it mainly on my Palstar R30A - and Lowe HF-150. I even hooked up my old much-modified JRC NRD525 - and it was impressive there, too. It's greatest attribute, to me, is it's ability to null both the high tension line noise and the house reradiated digital hash from switching wall warts, PC's, HD-TV's, and even satelite rcvr's. It came complete - except for the RG-6 quad and f-connectors - even with an F-female to PL259 adapter.
>
> As an aside, BNC connectors were never meant for outside 'in the weather' use - they are faster on/off interconnect cable connectors, mainly used with test equipment. Of course, even at 30 MHz, 100 ft of RG-58 has measured loss - RG-6 Quad is much lower in loss. RG-58C/U is even lossier - but more flexible - RG-8X would be better for a long outdoor run, if you cannot use RG-6 quad.
>
> John
>
> --- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@> wrote:
> >
> > Hello Folks,
> >
> > I have just received a recent review comparing the above product to

> > the Wellbrook ALA1530, it can be found at:
> >
> > http://www.wellbrook.uk.com/reviews/ALA1530-vs-RFPRO-1AReview.pdf
> >
> > The review has a link to some MP3 recordings of the s/n comparisons from
> > the LW band up to the 13m broadcast Band
> >
> > 73
> >
> > Andrew G8LUG
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

8561. Re: [loopantennas] Re: Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-16 23:08:03 UTC
From: Dale Parfitt
Topic: 8556 Message: 8561

I don't think you understand how to read Guy's tables and graphs.

Dale W4OP

Guy Atkins received nothing with the PRO-1A on the 25mb? Wow. Gotta wonder about that. Mine has worked quite well, thus far. Of course, I only had the comparison of the Wellbrook and Pixel loops provided by Pixel and eham reviews to go by - and the Pixel generally did better. Most folks still don't use SDR's, either - in my case, I have used it mainly on my Palstar R30A - and Lowe HF-150. I even hooked up my old much-modified JRC NRD525 - and it was impressive there, too. It's greatest attribute, to me, is it's ability to null both the high tension line noise and the house reradiated digital hash from switching wall warts, PC's, HD-TV's, and even satelite rcvr's. It came complete - except for the RG-6 quad and f-connectors - even with an F-female to PL259 adapter.

As an aside, BNC connectors were never meant for outside 'in the weather' use - they are faster on/off interconnect cable connectors, mainly used with test equipment. Of course, even at 30 MHz, 100 ft of RG-58 has measured loss - RG-6 Quad is much lower in loss. RG-58C/U is even lossier - but more flexible - RG-8X would be better for a long outdoor run, if you cannot use RG-6 quad.

John

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
> Hello Folks,
>
> I have just received a recent review comparing the above product to
> the Wellbrook ALA1530, it can be found at:
>
> http://www.wellbrook.uk.com/reviews/ALA1530-vs-RFPRO-1AReview.pdf
>
> The review has a link to some MP3 recordings of the s/n comparisons from
> the LW band up to the 13m broadcast Band
>
> 73
>
> Andrew G8LUG
>
>
> [Non-text portions of this message have been removed]
>

No virus found in this message.
Checked by AVG - www.avg.com
Version: 10.0.1375 / Virus Database: 1500/3641 - Release Date: 05/16/11

[Non-text portions of this message have been removed]

8562. Re: Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-17 09:56:02 UTC
From: John
Topic: 8556 Message: 8562

--- In loopantennas@yahoogroups.com, "thinkdx" <dx@...> wrote:
>
> Hi John,
>
> You are not reading the charts correctly. The 25mb portion indicates that the RF PRO-1A was never the best antenna on the frequencies checked for that band. See the legend (caption) below each of the column charts.

Hello Guy,

It's been a while since my last R'burg trip. Well, you were right - my cursory view of your charts was too brief. But - to look at your 25mb data - the Pixel antenna never had a better s/n ratio than the W-B on 17 compared signals. Further, the sum of all s/n for the antennas appears to be 290 for the W-B and 210 for the Pixel. You state that is a ratio - which would give the W-B a 290/210 s/n ratio improvement over the Pixel - that's a net +2.8 db cumulative s/n improvement for 17 signals - in general listening, how is that ever heard? I wonder how your selective use of your SDR's 'AVE' function - to help settle it's readings - may have influenced your results.

I see Wellbrook uses your article on their site. Price-wise, the 1530, available in models from $320-$400, and poly or Al tubes, plus s/h from the UK, can easily cost more than the Pixel. Additionally, repair/replacement parts - like the encapsulted preamp - will be pricey. I got a 'deal' from Pixel - they threw in s/h! I immediately had buyer's remorse - I had designed, built, and used balanced loops - remotely tuned and broadband - for many years - and I am 'frugal'. I had just spent $400 - on an 'appliance' antenna! Then it arrived - and I quickly had it up and going - and could 'hear' something other than powerline arcs and house-generated RFI. I'm still happy with it.

Take care.

John

8563. Re: Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-17 16:50:06 UTC
From: thinkdx
Topic: 8556 Message: 8563

Hi John,

I didn't realize it was John *Tow* I was replying to! Whoa... it's been a long time since we last visited at that DXers' GTG. My previous trip there was three years ago.

Regarding the ratio you mentioned between the columns or charts, there is no ratio or relationship between them. The left hand pairs of columns for each meter band are simply the total of the number of times an antenna gave the best signal (ie, best signal to noise ratio as measured by Perseus). In the case of the 25mb comparisons that you first pointed out, every signal was better on the ALA1530.

The right hand column also has no ratio going on; it is just the sum total of all S/N readings for each loop, per band. So, the only ratios used in my review are the signal-to-noise ratios of the individual signal receptions with each antenna.

If you haven't yet downloaded and looked at the XLS file of data I provided in the link at the end of the review, that will help show the actual S/N results in detail.

Personally, I think it's a good thing when specialty manufacturers pot or encapsulate their devices when they contain unique designs that represent tons of design effort. Kiwa Electronics does this also, and I think it's a good way to frustrate or prevent reverse engineering. The designers deserve to take this approach to help maintain their businesses' profitability. Practically speaking, it can also help avoid shock or thermal damage to the components.

73,

Guy

--- In loopantennas@yahoogroups.com, "John" <JRTOW3RD@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "thinkdx" <dx@> wrote:
> >
> > Hi John,
> >
> > You are not reading the charts correctly. The 25mb portion indicates that the RF PRO-1A was never the best antenna on the frequencies checked for that band. See the legend (caption) below each of the column charts.
>
>
> Hello Guy,
>
> It's been a while since my last R'burg trip. Well, you were right - my cursory view of your charts was too brief. But - to look at your 25mb data - the Pixel antenna never had a better s/n ratio than the W-B on 17 compared signals. Further, the sum of all s/n for the

antennas appears to be 290 for the W-B and 210 for the Pixel. You state that is a ratio - which would give the W-B a 290/210 s/n ratio improvement over the Pixel - that's a net +2.8 db cumulative s/n improvement for 17 signals - in general listening, how is that ever heard? I wonder how your selective use of your SDR's 'AVE' function - to help settle it's readings - may have influenced your results.
>
> I see Wellbrook uses your article on their site. Price-wise, the 1530, available in models from $320-$400, and poly or Al tubes, plus s/h from the UK, can easily cost more than the Pixel. Additionally, repair/replacement parts - like the encapsulted preamp - will be pricey. I got a 'deal' from Pixel - they threw in s/h! I immediately had buyer's remorse - I had designed, built, and used balanced loops - remotely tuned and broadband - for many years - and I am 'frugal'. I had just spent $400 - on an 'appliance' antenna! Then it arrived - and I quickly had it up and going - and could 'hear' something other than powerline arcs and house-generated RFI. I'm still happy with it.
>
> Take care.
>
> John
>

8564. Pyramid Star Horizontal Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-17 17:02:54 UTC
From: kj4wrk
Topic: 8564 Message: 8564

Hi All,

I'm planning an attic install of a horizontal loop to cover 40m and up for multiband operations. A 40m loop requires 140.5' of wire, but my available space for an antenna is a 30' square which would yield 120' if I were to only string wire around the perimeter.

Cebik's site has an article on a 40m star shaped loop which answered an earlier question about my being creative with the shape of a horizontal loop (http://www.cebik.com/content/a10/wire/40star.html)

In spite of my space limitations, I can easily manage the 140.5' length requirement if I pull the wire up into a loose pyramid shape. In fact, I could pull in as much as 173 feet that way. The apex of each star section would be 18" away from the apex of the other star sections. In order to construct the pyramid star loop, I'd follow about a foot under the roof
at a 30 degree angle.

Cebik's site seems to imply that I can use extra length (http://www.cebik.com/content/fdim/atl1.html), but I'd like some other opinions.

This is my signal chain:

Yaesu 897 -- 6' RG-8X --> LDG 100Pro Tuner -- 20' RG-8X -->
Balun Designs 4:1 --> 40' 450 ohm window line --> 40m loop

The question is: would the extra length (173' vs 140.5') cause issues or should I just stick with the nominal length?

Thanks and 73,
Steve (KJ4WRK)

8565. Feedline wire type

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-17 15:20:31 UTC
From: Garry
Topic: 8565 Message: 8565

Hello, I am re-constructing balanced feedline to feed a 160 meter loop multiband antenna. For a portion of this, I am using 14 ga wire for a run of approx 80 feet. The wire will be under tension for spacing and will not have individual spacers in the line. Is it better to use solid or stranded wire for this application?

Thanks - Garry - K4OR

[Non-text portions of this message have been removed]

8566. AW: [loopantennas] Re: Pixel RF PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-16 22:07:25 UTC
From: Stephan Schaa
Topic: 8556 Message: 8566

Hi John!

> Guy Atkins received nothing with the PRO-1A on the 25mb? Wow. Gotta wonder about that.

No, I think he ment: he received no Channel better with the Pixel Loops - or the other way raound: the Ala was better with every station he received.

The mp3's are quite impressing, I wonder what makes the two loops working so different at some frequencies?!

73, Stephan

8567. Re: Pyramid Star Horizontal Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-17 18:39:01 UTC
From: kj4wrk
Topic: 8564 Message: 8567

Upon further reading (which is usually helpful), Cebik said that a 1.25 WL star lowered the TOA and I believe I have very good chance of success.

My antenna's slightly different since I'm elevating the inner section of the star, but I don't foresee any issues with that.

Now I just need to avoid falling through the ceiling. :)

Steve (KJ4WRK)

--- In loopantennas@yahoogroups.com, "kj4wrk" <steve@...> wrote:
>
> Hi All,
SNIP
>

8568. Re: [loopantennas] Pyramid Star Horizontal Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-18 00:57:42 UTC
From: Steve Ellington
Topic: 8564 Message: 8568

Steve
First of all....Scrap the 4:1 balun. The impedance of that loop is already low (less than 100 ohms on 40m) and you will be stepping it down 4 times lower. A 1:1 balun would make more sense but there's not going to be anything 'balanced' about this antenna since it will be exposed to all kinds of objects. I would just try making the loop as large as possible. The zig zag idea isn't going to help anything. Use the tuner to make up for non=resonance
I would go like this:
897 > RG8x > Line isolator > LDG tuner.
Try to put the tuner as close to the antenna as possible and run coax all the way to it. The window line would radiate some due to the antenna unbalance and it will pick up even more noise from the house.
The line isolator will help decouple the shield of the coax from common mode currents. You might need another one at the rig. See Radio Works for an example of this product.
Keep in mind that the strongest RF field will be directly under the loop. That's not a good thing! It's like the primary of a transformer and your house wiring is the secondary. Expect RFI problems of all kinds. A shortened, loaded dipole up along the ridge might be a better idea.

Steve
N4LQ
----- Original Message -----
From: kj4wrk
To: loopantennas@yahoogroups.com
Sent: Tuesday, May 17, 2011 1:02 PM
Subject: [loopantennas] Pyramid Star Horizontal Loop?

Hi All,

I'm planning an attic install of a horizontal loop to cover 40m and up for multiband operations. A 40m loop requires 140.5' of wire, but my available space for an antenna is a 30' square which would yield 120' if I were to only string wire around the perimeter.

Cebik's site has an article on a 40m star shaped loop which answered an earlier question about my being creative with the shape of a horizontal loop
(http://www.cebik.com/content/a10/wire/40star.html)

In spite of my space limitations, I can easily manage the 140.5' length requirement if I pull the wire up into a loose pyramid shape. In fact, I could pull in as much as 173 feet that way. The apex of each star section would be 18" away from the apex of the other star sections. In order to construct the pyramid star loop, I'd follow about a foot under the roof
at a 30 degree angle.

Cebik's site seems to imply that I can use extra length
(http://www.cebik.com/content/fdim/atl1.html), but I'd like some other opinions.

This is my signal chain:

Yaesu 897 -- 6' RG-8X --> LDG 100Pro Tuner -- 20' RG-8X -->
Balun Designs 4:1 --> 40' 450 ohm window line --> 40m loop

The question is: would the extra length (173' vs 140.5') cause issues or should I just stick with the nominal length?

Thanks and 73,
Steve (KJ4WRK)

[Non-text portions of this message have been removed]

8569. Re: [loopantennas] Feedline wire type

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-17 21:50:37 UTC
From: jim wilkie
Topic: 8565 Message: 8569

On 5/17/2011 11:20 AM, Garry wrote:
> Hello, I am re-constructing balanced feedline to feed a 160 meter loop
> multiband antenna. For a portion of this, I am using 14 ga wire for a
> run of approx 80 feet. The wire will be under tension for spacing and
> will not have individual spacers in the line. Is it better to use solid
> or stranded wire for this application?
>
> Thanks - Garry - K4OR
>

<Excess quoting trimmed by moderator - hint, hint>

Gary,
I use solid #14.

I also use ladderlock spacers..not a good idea to let the wind set your
spacing.

good luck, Jim WY4R

8570. RE: [loopantennas] Feedline wire type

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-18 13:29:48 UTC
From: Mike Mayer
Topic: 8565 Message: 8570

On 5/17/2011 11:20 AM, Garry wrote:
> Hello, I am re-constructing balanced feedline to feed a 160 meter loop
> multiband antenna. For a portion of this, I am using 14 ga wire for a
> run of approx 80 feet. The wire will be under tension for spacing and
> will not have individual spacers in the line. Is it better to use
> solid or stranded wire for this application?

Wait: are you saying you will maintain spacing over the 80 foot length by tension only? If so you definitely want to use copper clad steel wire because you are going to have to really crank up the tension and soft-drawn copper will stretch.

==========
Mike Mayer
mwmayer@...

8571. Re: [loopantennas] Feedline wire type

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-18 15:37:39 UTC
From: Steve Ellington
Topic: 8565 Message: 8571

I tried that idea using 12ga copper clad steel and turnbuckles for tension over a 50 ft span (4"spacing). Didn't work! I ended up with several spacers. Maybe if you spaced them 12" it would work but why bother?

Steve
N4LQ
----- Original Message -----
From: Mike Mayer
To: loopantennas@yahoogroups.com
Sent: Wednesday, May 18, 2011 9:29 AM
Subject: RE: [loopantennas] Feedline wire type

On 5/17/2011 11:20 AM, Garry wrote:
> Hello, I am re-constructing balanced feedline to feed a 160 meter loop
> multiband antenna. For a portion of this, I am using 14 ga wire for a
> run of approx 80 feet. The wire will be under tension for spacing and
> will not have individual spacers in the line. Is it better to use
> solid or stranded wire for this application?

Wait: are you saying you will maintain spacing over the 80 foot length by tension only? If so you definitely want to use copper clad steel wire because you are going to have to really crank up the tension and soft-drawn copper will stretch.

==========
Mike Mayer
mwmayer@...

[Non-text portions of this message have been removed]

8572. Re: Pyramid Star Horizontal Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-20 13:36:06 UTC
From: kj4wrk
Topic: 8564 Message: 8572

Hi Steve,
Thanks for your reply. The reason I had the balanced line and the 4:1 balun was to enable multiband operation. I expect I'll see a pretty broad range of impedances at other frequencies and the balun will pull them down to something that's hopefully manageable by the tuner.

Given the dimensions of my available space in the attic, I can only manage 120 feet of wire unless I get creative and add a few bends. Pulling the sides upwards to follow the roofline will allow me to add as many as 55 extra feet to the antenna. My plan is to pull up the sides enough to get 1 WL closed loop at 40m.

Cebiks article was encouraging to that end. The 40m star he modeled had pretty good performance in spite of being pulled inwards til the centers were close to touching.

I do have a few metal objects in that area, but they're not significant and hopefully, won't be an issue.

Regards,
Steve (KJ4WRK)

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> Steve
> First of all....Scrap the 4:1 balun. The impedance of that loop is already low (less than 100 ohms on 40m) and you will be stepping it down 4 times lower. A 1:1 balun would make more sense but there's not going to be anything 'balanced' about this antenna since it will be exposed to all kinds of objects. I would just try making the loop as large as possible. The zig zag idea isn't going to help anything. Use the tuner to make up for non=resonance
> I would go like this:
> 897 > RG8x > Line isolator > LDG tuner.
> Try to put the tuner as close to the antenna as possible and run coax all the way to it. The window line would radiate some due to the antenna unbalance and it will pick up even more noise from the house.
> The line isolator will help decouple the shield of the coax from common mode currents. You might need another one at the rig. See Radio Works for an example of this product.
> Keep in mind that the strongest RF field will be directly under the loop. That's not a good thing! It's like the primary of a transformer and your house wiring is the secondary. Expect RFI problems of all kinds. A shortened, loaded dipole up along the ridge might be a better idea.
>
> Steve
> N4LQ
> ----- Original Message -----
> From: kj4wrk
> To: loopantennas@yahoogroups.com
> Sent: Tuesday, May 17, 2011 1:02 PM

> Subject: [loopantennas] Pyramid Star Horizontal Loop?
>
>
>
> Hi All,
>
> I'm planning an attic install of a horizontal loop to cover 40m and up for multiband operations. A 40m loop requires 140.5' of wire, but my available space for an antenna is a 30' square which would yield 120' if I were to only string wire around the perimeter.
>
> Cebik's site has an article on a 40m star shaped loop which answered an earlier question about my being creative with the shape of a horizontal loop (http://www.cebik.com/content/a10/wire/40star.html)
>
> In spite of my space limitations, I can easily manage the 140.5' length requirement if I pull the wire up into a loose pyramid shape. In fact, I could pull in as much as 173 feet that way. The apex of each star section would be 18" away from the apex of the other star sections. In order to construct the pyramid star loop, I'd follow about a foot under the roof
> at a 30 degree angle.
>
> Cebik's site seems to imply that I can use extra length (http://www.cebik.com/content/fdim/atl1.html), but I'd like some other opinions.
>
> This is my signal chain:
>
> Yaesu 897 -- 6' RG-8X --> LDG 100Pro Tuner -- 20' RG-8X -->
> Balun Designs 4:1 --> 40' 450 ohm window line --> 40m loop
>
> The question is: would the extra length (173' vs 140.5') cause issues or should I just stick with the nominal length?
>
> Thanks and 73,
> Steve (KJ4WRK)
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8573. Re: Feedline wire type

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-20 16:21:54 UTC
From: Garry
Topic: 8565 Message: 8573

Thanks for the response. I may have to rethink this. My thinking was
under tension I could maintain the spacing where I was going to start
out with 4" and move to 6" if necessary. I was going to replace a length of ladder line I have running across the back of my house to make the transmission line appear invisible for that particular run of line anchored just below the shack window which is on a second floor on one end, and the end of the house on the other. Guess I'll have to make a few spacers.

Thanks,
Garry

--- In loopantennas@yahoogroups.com, "Steve Ellington" <n4lq@...> wrote:
>
> I tried that idea using 12ga copper clad steel and turnbuckles for tension over a 50 ft span (4"spacing). Didn't work! I ended up with several spacers. Maybe if you spaced them 12" it would work but why bother?
>
> Steve
> N4LQ
> ----- Original Message -----
> From: Mike Mayer
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, May 18, 2011 9:29 AM
> Subject: RE: [loopantennas] Feedline wire type
>
>
>
> On 5/17/2011 11:20 AM, Garry wrote:
> > Hello, I am re-constructing balanced feedline to feed a 160 meter loop
> > multiband antenna. For a portion of this, I am using 14 ga wire for a
> > run of approx 80 feet. The wire will be under tension for spacing and
> > will not have individual spacers in the line. Is it better to use
> > solid or stranded wire for this application?
>
> Wait: are you saying you will maintain spacing over the 80 foot length by
> tension only? If so you definitely want to use copper clad steel wire
> because you are going to have to really crank up the tension and soft-drawn
> copper will stretch.
>
> ==
> Mike Mayer
> mwmayer@...
>
>
>
>

>
> [Non-text portions of this message have been removed]
>

8574. Receiving Loop - Faraday?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-22 12:01:40 UTC
From: Ralph
Topic: 8574 Message: 8574

A friend of mine has been experimenting with small loops for receiving tropical band signals (60 meters and 90 meters).

He has had a lot of success with a small loop, single turn, about 30' in diameter, fed thru a Wellbrook amplifying unit.

I am attempting to duplicate his success and improve upon it, but don't want to spend the big bucks for the Wellbrook.

So . . .

I have constructed the loop form out of 1" PVC, about 30' in diameter. Have coax run thru it, one turn. Am building a broadband RF amp to put next to unit, which will be remote from my receiver, up in attic, and situated/rotated for lowest electrical noise and therefore, theoretically, highest clean signal-to-noise.

My questions:

1. Should I make this a shielded loop? Can open the coax at far end of loop and shield the connection at near end of loop. But will not add tuning capacitor, as loop will be remote from listening post.

2. Should I use a 'Faraday loop' connection for the main loop? I keep reading how quiet the Faraday loop structure is, but it only seems to be used for coupling loops. In this case, there is no coupling loop, just a single large small loop. Would the Faraday method improve results? (Shield connected to center at the 'break', and shields connected at near end.)

Thoughts welcomed!

8575. RE: [loopantennas] Receiving Loop - Faraday?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-23 00:21:26 UTC
From: Ray Phillips
Topic: 8574 Message: 8575

Hi Ralph,

I don't get the full gist of what you are proposing but;

If you take the signal straight off the tuned loop, you need a high input impedance amplifier or you will load the tuned coil too much. The lower the impedance presented to the tuned loop, the lower the coil Q, the lower the output voltage, the worse the tuning bandwidth is and you might just as well not use a tuned loop at all. I would use a loop pickup rather than try to pick the voltage off the
tuned loop. A one-fifth pickup loop will present a low input impedance
to the amplifier and allows the use of traditional low-input-impedance
amplifiers. Look at
http://www.brisdance.com/vk4amz/files/Download/UnderMagLoop.pdf for some
good guts on magnetic loops from a man who can communicate to us mere
mortals who don't have the mathematical skills other paper writers
expect.

The tuning capacitor would best be placed as close as possible to the loop. This means that the capacitor will need to be remotely tuned. As it is a receiving loop and the tuning capacitor won't be subjected to high voltages, varactor tuning will suffice and is a lot simpler than trying to interface a mechanical capacitor to some sort of drive mechanism. It is also a lot cheaper than buying a vacuum capacitor. Oatley electronics in Oz sells a remotely tuned AM varactor kit with inbuilt preamp. It picks its voltage off the tuned loop but has an amplifier input impedance in the 200KOhms region and so should not load the loop to any appreciable amount. The inbuilt preamp op-amp has unity gain somewhere short of 10MHz and would not be suitable for your chosen frequencies but the schematic offers some ideas regarding remote diode tuning and how to interface to an op-amp. Its pdf is http://secure.oatleyelectronics.com/files/K256notes.pdf.

For the loop, just use the braid of the coax - don't worry about the inner. The braid will act like a wire of the same diameter and gives excellent loop Q.

To shield the loop, try wrapping it in one piece of aluminium cooking foil and earth the foil. Some people say shielding doesn't provide any benefits, others disagree. I say try it and see for yourself. Personally, I take advantage of good Q and the resultant narrow tuned bandwidth to provide noise elimination.

All the best,
Ray

To: loopantennas@yahoogroups.com
From: ralphperry@...
Date: Sun, 22 May 2011 12:01:40 +0000
Subject: [loopantennas] Receiving Loop - Faraday?

A friend of mine has been experimenting with small loops for receiving tropical band signals (60 meters and 90 meters).

He has had a lot of success with a small loop, single turn, about 30' in diameter, fed thru a Wellbrook amplifying unit.

I am attempting to duplicate his success and improve upon it, but don't want to spend the big bucks for the Wellbrook.

So . . .

I have constructed the loop form out of 1" PVC, about 30' in diameter. Have coax run thru it, one turn. Am building a broadband RF amp to put next to unit, which will be remote from my receiver, up in attic, and situated/rotated for lowest electrical noise and therefore, theoretically, highest clean signal-to-noise.

My questions:

1. Should I make this a shielded loop? Can open the coax at far end of loop and shield the connection at near end of loop. But will not add tuning capacitor, as loop will be remote from listening post.

2. Should I use a 'Faraday loop' connection for the main loop? I keep reading how quiet the Faraday loop structure is, but it only seems to be used for coupling loops. In this case, there is no coupling loop, just a single large small loop. Would the Faraday method improve results? (Shield connected to center at the 'break', and shields connected at near end.)

Thoughts welcomed!

[Non-text portions of this message have been removed]

8576. Re: Receiving Loop - Faraday?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-23 23:17:01 UTC
From: Stephan Grossklass
Topic: 8574 Message: 8576

First we may need some clarification here - a 30' dia. loop is not what I'd call "small". 30' of /circumference/ may have a better chance of fitting inside an attic, but that's still a bit on the cumbersome side. Maybe 30" then?

There's no way a 30" diameter single-turn coax loop will peak on 90m with typical capacitance values (diode or mechanical), that I know for sure. According to <http://www.66pacific.com/calculators/small_tx_loop_calc.aspx>, over 2 nF would be needed. That's more suited for a "10 to 30" (MHz) job.

Of course there's always the old trick of bumping up inductance with some series inductors (as Sony's AN-LP1 does on the lower bands), but obviously that means additional loss. It may be tolerable in a receiving application given the generally higher noise levels down there, but is something to keep in mind.

The aforementioned varicap tuning would be a good idea indeed (the additional effort when installing a rotor is small potatoes, and you generally do want a way of rotating such a loop) but it seems to me that AM varicap diodes may be even harder to come by than their mechanical colleagues nowadays. For best linearity, they should always be used back-to-back (which is why they made dual diodes).

Broadband operation is not the ideal way of getting a lot of RF power out of a small loop. Remember? Small size, efficiency, broadband - pick any two.
In this case not tuning out the loop inductance means you're seeing that in series with the very small radiation resistance. (For a good match, the next stage input impedance would have to be (Z_ant)*, which unsurprisingly turns out to be pretty much a series or parallel C. In other words, only a *tuned* small loop can be well-matched.)

For broadband use, an amplifier with very LOW input impedance would be required. |wL| is in the low to mid 2-digit ohms range for the 30" dia. loop on 90m to 60m. Maybe some Norton topology.

Whatever you do, don't actively disturb loop symmetry. Declaring one end of your loop "ground" means you can no longer get rid of common-mode signal pickup properly. This also disturbs directionality on higher frequencies - on my AN-LP1 it basically is 90° off from theory above 10 MHz, even with the ominous "filter unit" in the feedline (which seemingly contains two common-mode chokes). So the above broadband amp would need a

balanced input. On tuned loops, the main loop and coupling loop form a balun, thus you can connect coax without issue. If you wanted to use some FET emitter follower directly at the high impedance point, it would have to be a balanced circuit.

The Faraday loop apparently is our classic coupling/pickup loop. The type of conductor you use for it is almost entirely irrelevant, can be any old wire basically. However, you should get it running *very* close to the low-impedance point of the main loop, opposite the tuning capacitor (/ varicap). Tweaking the length of that segment also allows fine-tuning output impedance (which is not terribly constant, so a good setting has to be found for the whole tuning range) once approximate correct pickup loop circumference has been determined.

Broadband loops are connected directly. Those can be safely stuck into PVC tubing without having to worry about coupling.

Stephan

8577. Faraday - Small Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-25 10:55:15 UTC
From: Ralph Perry
Topic: 8577 Message: 8577

Stephan, thanks for the reply.

To clarify, the loop is 30' of coax in circumferenc, inside a PVC.

I am trying to backward engineer what I have already seen being successful, both in a friend's homebrew set-up and also from commercial sources (Wellbrook, AOR).

They both use a broadband amplifier and do not tune the loop, as far as I can see. But I would plan to feed signal outputted from my loop/preamp thru my receiver's usual preselector/preamp and ATU system, so there would be a little bit of juicing-up of the signal, anyway..

So, the only question I am trying to determine is if I would obtain enhanced signal-to-noise by using a Faraday-style connection on this large small loop (gap in coax at top of loop, with one side attached to center conductor; and coax shields at bottom of loop attached, taking feed from center conductor.

Other alternative, suggested to me in this group in an earlier post, is to just take the feed off the shields.

[Non-text portions of this message have been removed]

8578. AEA Iso Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-25 11:53:32 UTC
From: ve3pcd
Topic: 8578 Message: 8578

Folks,

I know this is a longshot but here goes...

I have an AEA IsoLoop antenna with the Iso Tuner controller which is used to remotely tune the loop, this controller has a port and can be connected to a computer for tuning the loop also. Question: Does anyone have the software for the controller or have any information at all on connecting this to a computer?, also is anyone out there using this loop?

73 de Peter

8579. Faraday coupling loop made of copper

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-25 15:18:34 UTC
From: ve3pcd
Topic: 8579 Message: 8579

Hello Folks,

In building my magnetic loop, I have deciseded to feed it with a small faraday loop but not sure if I have it built correctly. I have uploaded some pics of the design and need to confirm that this is correct.

The file folder name is "copper tube Faraday Loop", please have a look at the pics and give some feedback.

Thanks,
Peter

8580. Reminder - always put a description on files and photos

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-25 16:07:02 UTC
From: AlienRelics
Topic: 8580 Message: 8580

A reminder to always put a description on files and photos you upload. The description should be sufficient for someone joining in the future to come across it and understand, without having read the current threads.

Files and photos without descriptions may be deleted.

Your friendly neighborhood moderator,
Steve Greenfield AE7HD

8581. Re: [loopantennas] AEA Iso Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-25 17:01:59 UTC
From: Tom Humes
Topic: 8578 Message: 8581

Here is a source of help, possibly.

http://www.eham.net/reviews/detail/611

--- On Wed, 5/25/11, ve3pcd <ve3pcd@...> wrote:

From: ve3pcd <ve3pcd@...>
Subject: [loopantennas] AEA Iso Tuner
To: loopantennas@yahoogroups.com
Date: Wednesday, May 25, 2011, 4:53 AM

Folks,

I know this is a longshot but here goes...

I have an AEA IsoLoop antenna with the Iso Tuner controller which is used to remotely tune the loop, this controller has a port and can be connected to a computer for tuning the loop also. Question: Does anyone have the software for the controller or have any information at all on connecting this to a computer?, also is anyone out there using this loop?

73 de Peter

[Non-text portions of this message have been removed]

8582. Re: AEA Iso Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-25 19:01:58 UTC
From: c6alk
Topic: 8578 Message: 8582

Hello Peter:

I have two of these loops. I also have 3 different models of the controller. None are computer controllers, in fact I am not aware of a PC controller ever being available for the AEA Isoloop. They are manual controllers, that is they have a speed pot, along with two switches for two directions. I would be glad to furnish any other information that you may need concerning this product.

Brian K7RE

--- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@...> wrote:
>
> Folks,
>
> I know this is a longshot but here goes...
>
> I have an AEA IsoLoop antenna with the Iso Tuner controller which is used to remotely tune the loop, this controller has a port and can be connected to a computer for tuning the loop also. Question: Does anyone have the software for the controller or have any information at all on connecting this to a computer?, also is anyone out there using this loop?
>
> 73 de Peter
>

8583. Re: AEA Iso Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-25 21:47:18 UTC
From: ve3pcd
Topic: 8578 Message: 8583

Hi Brian,

I have the IsoTuner model IT-1 which has a 9 pin DB connector at the back, this model aslo has a keypad on the front. Do you have this?

--- In loopantennas@yahoogroups.com, "c6alk" <K7RE@...> wrote:
>
> Hello Peter:
>
> I have two of these loops. I also have 3 different models of the controller. None are computer controllers, in fact I am not aware of a PC controller ever being available for the AEA Isoloop. They are manual controllers, that is they have a speed pot, along with two switches for two directions. I would be glad to furnish any other information that you may need concerning this product.
>
> Brian K7RE
>
> --- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@> wrote:
> >
> > Folks,
> >
> > I know this is a longshot but here goes...
> >
> > I have an AEA IsoLoop antenna with the Iso Tuner controller which is used to remotely tune the loop, this controller has a port and can be connected to a computer for tuning the loop also. Question: Does anyone have the software for the controller or have any information at all on connecting this to a computer?, also is anyone out there using this loop?
> >
> > 73 de Peter
> >
>

8584. Re: AEA Iso Tuner

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-26 14:56:16 UTC
From: c6alk
Topic: 8578 Message: 8584

Hello Peter:

I am not at all familiar with the IsoTuner model IT-1 controller. All of my controllers have no keypad, and no DB-9. They have only a 5 pin DIN female, which is the same type of connector used by the old -pre PS2 type PC keyboard connectors. I do have the schematics, and that connector is simply a way to connect the UP/Down, Ground connections to the loop to control the stepper motor mounted inside the loop itself. Sorry if I mislead you. I'll do a search on the IT-1 and see if I can find out more information. It sure would be very nice to have my loops computer controlled.

Brian K7RE

--- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@...> wrote:
>
>
> Hi Brian,
>
> I have the IsoTuner model IT-1 which has a 9 pin DB connector at the back, this model aslo has a keypad on the front. Do you have this?
>
>
> --- In loopantennas@yahoogroups.com, "c6alk" <K7RE@> wrote:
> >
> > Hello Peter:
> >
> > I have two of these loops. I also have 3 different models of the controller. None are computer controllers, in fact I am not aware of a PC controller ever being available for the AEA Isoloop. They are manual controllers, that is they have a speed pot, along with two switches for two directions. I would be glad to furnish any other information that you may need concerning this product.
> >
> > Brian K7RE
> >
> > --- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@> wrote:
> > >
> > > Folks,
> > >
> > > I know this is a longshot but here goes...
> > >
> > > I have an AEA IsoLoop antenna with the Iso Tuner controller which is used to remotely tune the loop, this controller has a port and can be connected to a computer for tuning the loop also. Question: Does anyone have the software for the controller or have any information at all on connecting this to a computer?, also is anyone out there using this loop?
> > >
> > > 73 de Peter

> > >
> >
>

8585. AEA Isoloop Performance

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-26 15:20:56 UTC
From: Alex P
Topic: 8585 Message: 8585

I was wondering if the folks who have the Isoloop could share their performance experiences regarding the transmit signal. Do hams receiving your Isoloop transmit signal report the same (or less) signal as say a vertical or dipole transmit antenna when compared? Thanks in advance. Alex

8586. Re: AEA Isoloop Performance

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-26 16:52:10 UTC
From: ve3pcd
Topic: 8585 Message: 8586

I have been using my IsoLoop on 20 meters for over a year on/off and have always received excellent reports from DX stations, the only issue I have with it is that it doesnt tune 40 meters that is why I am building a 40 meter loop. Having the IsoTuner - TI-1 does allow better tuning of the loop as well.

Peter

--- In loopantennas@yahoogroups.com, "Alex P" <winston376@...> wrote:
>
> I was wondering if the folks who have the Isoloop could share their performance experiences regarding the transmit signal. Do hams receiving your Isoloop transmit signal report the same (or less) signal as say a vertical or dipole transmit antenna when compared? Thanks in advance. Alex
>

8587. AN 200 any opinion?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-26 20:04:30 UTC
From: Zacharias Liangas
Topic: 8578 Message: 8587

Does nyone here have opinion on the Kaito AN 200 antenna? Standard rig : ICOM R75 / 2x16 V / m@h40 heads Sennheiser
Please read and distribute this 15 year research article http://tinyurl.com/5vzg7e
Please read my article on SINPO at http://tinyurl.com/yt7qjd

_____
http://zlgr.multiply.com (radio monitoring site plus audio clips) MAIN SITE
http://www.delicious.com/gr_greek1/@zach (all mypages !!)
.....
Zacharias Liangas , Thessaloniki Greece
greekdx @ otenet dot gr ---
Pesawat penerima: ICOM R75 , Lowe HF150 , Degen 1102,1103,108,
Tecsun PL200/550, Chibo c300/c979, Yupi 7000
Antenna: 16m hor, 2x16 m V invert, 1m australian loop

8588. RE: [loopantennas] AN 200 any opinion?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-26 20:07:47 UTC
From: Pollock,Raphael E
Topic: 8578 Message: 8588

Select-a-tenna is better constructed, as is the Terk loop antenna. Easy enough to build one of your own that will work much better if you make it large enough (1 meter x 1 meter)-many plans available on the internet

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Zacharias Liangas
Sent: Thursday, May 26, 2011 3:05 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] AN 200 any opinion?

Does nyone here have opinion on the Kaito AN 200 antenna? Standard rig : ICOM R75 / 2x16 V / m@h40 heads Sennheiser
Please read and distribute this 15 year research article http://tinyurl.com/5vzg7e
Please read my article on SINPO at http://tinyurl.com/yt7qjd

_____
http://zlgr.multiply.com (radio monitoring site plus audio clips) MAIN SITE
http://www.delicious.com/gr_greek1/@zach (all mypages !!)
.....
Zacharias Liangas , Thessaloniki Greece
greekdx @ otenet dot gr ---
Pesawat penerima: ICOM R75 , Lowe HF150 , Degen 1102,1103,108,
Tecsun PL200/550, Chibo c300/c979, Yupi 7000
Antenna: 16m hor, 2x16 m V invert, 1m australian loop

[Non-text portions of this message have been removed]

8589. Re: AEA Isoloop Performance

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-27 18:41:20 UTC
From: c6alk
Topic: 8585 Message: 8589

I have run many operational tests with the AEA loop. It behaves exactly like a dipole, but at half of the height. Let me explain. I have mine at 16 foot high, for example. That is a quarter wave on 20M. I compared it against a 20M dipole at 33 feet, one half wavelength at 20M. With QRP rigs and/or SDR radios we could never see any difference in the radiation patterns or signal strength. So the big advantage is that the radiation pattern for the vertically mounted loop is that the angle is as low, or maybe a little lower than a dipole at twice the height of the loop.

Brian K7RE

--- In loopantennas@yahoogroups.com, "Alex P" <winston376@...> wrote:
>
> I was wondering if the folks who have the Isoloop could share their performance experiences regarding the transmit signal. Do hams receiving your Isoloop transmit signal report the same (or less) signal as say a vertical or dipole transmit antenna when compared? Thanks in advance. Alex
>

8590. Re: AEA Isoloop Performance

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-28 01:07:26 UTC
From: ve3pcd
Topic: 8585 Message: 8590

I have mine mounted horizontally up on my 11th floor balcony, I have no problem working all kinds of DX into Europe mostley, though I would love to work more stations down south. The front of the antenna is pointing north. I have the IT-1 Iso tuner and is just learning how to use it properly.

Peter

--- In loopantennas@yahoogroups.com, "c6alk" <K7RE@...> wrote:
>
> I have run many operational tests with the AEA loop. It behaves exactly like a dipole, but at half of the height. Let me explain. I have mine at 16 foot high, for example. That is a quarter wave on 20M. I compared it against a 20M dipole at 33 feet, one half wavelength at 20M. With QRP rigs and/or SDR radios we could never see any difference in the radiation patterns or signal strength. So the big advantage is that the radiation pattern for the vertically mounted loop is that the angle is as low, or maybe a little lower than a dipole at twice the height of the loop.
>
> Brian K7RE
>
> --- In loopantennas@yahoogroups.com, "Alex P" <winston376@> wrote:
> >
> > I was wondering if the folks who have the Isoloop could share their performance experiences regarding the transmit signal. Do hams receiving your Isoloop transmit signal report the same (or less) signal as say a vertical or dipole transmit antenna when compared? Thanks in advance. Alex
> >
>

8591. Re: AEA Isoloop Performance

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-28 15:16:20 UTC
From: c6alk
Topic: 8585 Message: 8591

I understand that vertically mounting the loop has some advantages, but if horizontal works so well for you, probably you don't want to fix something that already works so well. Has anyone ever had a lead on obtaining the IT-1 Iso tuner? I sure would love the have one. I assume that it contains a microprocessor, so copying the schematic would not help without the original source code. Now that I know that the IT-1 Iso tuner exists, I can start searching for a used one on famous auction sites I suppose.

Brian K7RE

--- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@...> wrote:
>
>
> I have mine mounted horizontally up on my 11th floor balcony, I have no problem working all kinds of DX into Europe mostley, though I would love to work more stations down south. The front of the antenna is pointing north. I have the IT-1 Iso tuner and is just learning how to use it properly.
>
> Peter
>
> --- In loopantennas@yahoogroups.com, "c6alk" <K7RE@> wrote:
> >
> > I have run many operational tests with the AEA loop. It behaves exactly like a dipole, but at half of the height. Let me explain. I have mine at 16 foot high, for example. That is a quarter wave on 20M. I compared it against a 20M dipole at 33 feet, one half wavelength at 20M. With QRP rigs and/or SDR radios we could never see any difference in the radiation patterns or signal strength. So the big advantage is that the radiation pattern for the vertically mounted loop is that the angle is as low, or maybe a little lower than a dipole at twice the height of the loop.
> >
> > Brian K7RE
> >
> > --- In loopantennas@yahoogroups.com, "Alex P" <winston376@> wrote:
> > >
> > > I was wondering if the folks who have the Isoloop could share their performance experiences regarding the transmit signal. Do hams receiving your Isoloop transmit signal report the same (or less) signal as say a vertical or dipole transmit antenna when compared? Thanks in advance. Alex
> > >
> >
>

8592. Re: AEA Isoloop Performance

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-28 13:17:06 UTC
From: Chevon
Topic: 8585 Message: 8592

I was able to load my Isoloop on 40M by adding a HV doorknob capacitor in parallel to the loop tuner (where the band splits). It loaded up very well and I did make quite a few contacts on CW but the the 2:1 bandwidth was ridiculously narrow, less than 1KHz if I recall.

It was a fun experiment with and then I decided to start building larger loops.

Andy
N3LCW

--- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@...> wrote:
>
> I have been using my IsoLoop on 20 meters for over a year on/off and have always received excellent reports from DX stations, the only issue I have with it is that it doesnt tune 40 meters that is why I am building a 40 meter loop. Having the IsoTuner - TI-1 does allow better tuning of the loop as well.
>
> Peter
>
>
>

8593. Re: Faraday coupling loop made of copper

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-29 18:27:32 UTC
From: Billy
Topic: 8579 Message: 8593

--- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@...> wrote:
>
> Hello Folks,
>
> In building my magnetic loop, I have deciseded to feed it with a small faraday loop but not sure if I have it built correctly. I have uploaded some pics of the design and need to confirm that this is correct.
>
> The file folder name is "copper tube Faraday Loop", please have a look at the pics and give some feedback.
>
> Thanks,
> Peter
>

Peter;
here is link to very well made mag loop antenna;
http://www.qrpbuilder.com/downloads/loop%20antenna%20110310.pdf

I made made a faraday loop in the same form and it seemed to work well. I have antenna torn down now to add vacuum variable and new mount. I will submit some photos later when I get a chance.

Billy
NN5EE

8594. Re: Faraday coupling loop made of copper

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-29 19:37:22 UTC
From: jeanmichel_62
Topic: 8579 Message: 8594

Hello Peter,

Nice and neat design, afaik, it should work pretty well. I've got
some similar design for receiving, and am pretty happy with this kind
of magnetic loop. (meaning low noise, high efficency into reducing
RFI and so on ...

Best regards

--- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@...> wrote:
>
> Hello Folks,
>
> In building my magnetic loop, I have deciseded to feed it with a small faraday loop but not sure if I have it built correctly. I have uploaded some pics of the design and need to confirm that this is correct.
>
> The file folder name is "copper tube Faraday Loop", please have a look at the pics and give some feedback.
>
> Thanks,
> Peter
>

8595. Re: AN 200 any opinion?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-30 03:23:08 UTC
From: yrjo_1
Topic: 8578 Message: 8595

--- In loopantennas@yahoogroups.com, "Zacharias Liangas " <greekdx@...> wrote:
>
> Does nyone here have opinion on the Kaito AN 200 antenna? Standard rig : ICOM R75 /
> 2x16 V / m@h40 heads Sennheiser
> Please read and distribute this 15 year research article http://tinyurl.com/5vzg7e
> Please read my article on SINPO at http://tinyurl.com/yt7qjd
> _________________________
> http://zlgr.multiply.com (radio monitoring site plus audio clips) MAIN SITE
> http://www.delicious.com/gr_greek1/@zach (all mypages !!)
> ....
> Zacharias Liangas , Thessaloniki Greece
> greekdx @ otenet dot gr ---
> Pesawat penerima: ICOM R75 , Lowe HF150 , Degen 1102,1103,108,
> Tecsun PL200/550, Chibo c300/c979, Yupi 7000
> Antenna: 16m hor, 2x16 m V invert, 1m australian loop
>
I have Kaito AN 200 antenna. It is medium wave antenna,not a shortwave antenna.. Works through well in medium wave band.

8596. Re: AEA Isoloop Performance

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-31 01:44:08 UTC
From: ve3pcd
Topic: 8585 Message: 8596

Hmmm, that is a good idea. I wonder if one could replace the capacitor in the IsoLoop to tune 40 meters?

Can you explain a bit more how / where you put this door knob cap?

Peter
VE3PCD

--- In loopantennas@yahoogroups.com, "Chevon" <capntripps2000@...> wrote:
>
> I was able to load my Isoloop on 40M by adding a HV doorknob capacitor in parallel to the loop tuner (where the band splits). It loaded up very well and I did make quite a few contacts on CW but the the 2:1 bandwidth was ridiculously narrow, less than 1KHz if I recall.
>
> It was a fun experiment with and then I decided to start building larger loops.
>
> Andy
> N3LCW
>
>
> --- In loopantennas@yahoogroups.com, "ve3pcd" <ve3pcd@> wrote:
> >
> > I have been using my IsoLoop on 20 meters for over a year on/off and have always received excellent reports from DX stations, the only issue I have with it is that it doesnt tune 40 meters that is why I am building a 40 meter loop. Having the IsoTuner - TI-1 does allow better tuning of the loop as well.
> >
> > Peter
> >
> >
> >
>

8597. Magnetic loop is finished but have transmit problems

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-05-31 01:55:44 UTC
From: ve3pcd
Topic: 8597 Message: 8597

So I have finally completed my mag loop, but no one seem to hear me.

The loop is very noisy, it picks up just about everything, I hear stations and lots of noise but I have not been able to make not one contact. I had a local ham come one the air for a test and he was not able to hear me, his signal was also weaker that usual. I am not sure what is going on. If anyone with more experience can offer any help it would be apprecated.

73,
Peter

8598. Looking for phasing line advice for a directional delta loop array

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-02 19:18:36 UTC
From: bconner_01876
Topic: 8598 Message: 8598

I'm thinking of building a version of this antenna for 17 meters.

http://www.infoark.org/InfoArk/Science-Engineering/Radio/Antennas/Gain%20Without%20Pain%20-%20A%20Beam%20Antenna%20for%20Field%20Day-Clarke_2001-06.pdf

I've never used coax phasing lines before, and since they are longer than the distance between the elements, I was wondering about the best way to handle them. Should they be coiled somehow or left loosly looped over the support or what? How do I keep symmetry?

My plan is to forego all the PVC supports shown and just have this as a non-rotatable array suspended by lines on the top and guys at the bottom to hold everything in position.

If anybody has the EZNEC (or MMANA) model for this, I'd love to have a copy to play with!

73,
Bruce
WB8OGK

8599. Is this usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-05 14:13:49 UTC
From: Ken
Topic: 8599 Message: 8599

Hi All

I know variable caps aren't as easy to come by as they once were.
Is this usable or is the max cap a bit too low?

http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992

Ken

8600. Re: [loopantennas] Is this usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-05 15:03:32 UTC
From: Chris Trask
Topic: 8599 Message: 8600

>
>I know variable caps aren't as easy to come by as they once were.
>Is this usable or is the max cap a bit too low?
>
>http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992
>

Usable for fine-tuning high-Q circuitry. At that price you could afford to have a few just lying around.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8601. Re: [loopantennas] Is this usable?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-05 16:34:10 UTC
From: van wd8aam
Topic: 8599 Message: 8601

In my opinion I think that a 250-400 pf air variable
with spacing at around .25 inches is what's required,
anything else is try it and see........

van
wd8aam

At 15:03 6/5/2011, you wrote:
> >
> >I know variable caps aren't as easy to come by as they once were.
> >Is this usable or is the max cap a bit too low?
> >
> >http://www.goldmine-elec-products.com/prodinfo.asp?number=G17992
> >
>
> Usable for fine-tuning high-Q circuitry. At that price you
> could afford to have a few just lying around.
>
>
>
>Chris Trask
>N7ZWY / WDX3HLB
>Senior Member IEEE
>http://www.home.earthlink.net/~christrask/
>
>
>----------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>

8602. Wideband Active loop protection

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-06 07:43:02 UTC
From: lz1aq
Topic: 8602 Message: 8602

Hello to everybody,

I have put on my page a new article "Wideband Active Small Magnetic
Loop Antenna. Protection from Strong Electromagnetic Fields"
http://www.lz1aq.signacor.com/docs/Wide_Mag_loop_prot_v1/wideband_mag_lo\
op_protection.htm
<http://www.lz1aq.signacor.com/docs/Wide_Mag_loop_prot_v1/wideband_mag_l\
oop_protection.htm>

73, Chavdar LZ1AQ

www.lz1aq.signacor.com <http://www.lz1aq.signacor.com/>

Please email me at: lz1aq@ abv.bg <mailto:lz1aq@...>

This message has been send to the following forums:

http://groups.yahoo.com/group/softrock40
<http://groups.yahoo.com/group/softrock40> /

http://groups.yahoo.com/group/soft_radio/
<http://groups.yahoo.com/group/soft_radio/>

http://groups.yahoo.com/group/Shortwave-SWL-Antenna
<http://groups.yahoo.com/group/Shortwave-SWL-Antenna> /

http://groups.yahoo.com/group/loopantennas
<http://groups.yahoo.com/group/loopantennas> /

http://groups.yahoo.com/group/perseus_sdr/
<http://groups.yahoo.com/group/perseus_sdr/>

[Non-text portions of this message have been removed]

8603. Re: Looking for phasing line advice for a directional delta loop array

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-07 13:36:36 UTC
From: Andrew
Topic: 8598 Message: 8603

--- In loopantennas@yahoogroups.com, "bconner_01876" <bruce.conner@...> wrote:
>
> I'm thinking of building a version of this antenna for 17 meters.
>
> http://www.infoark.org/InfoArk/Science-Engineering/Radio/Antennas/Gain%20Without%20Pain%20-%20A%20Beam%20Antenna%20for%20Field%20Day-Clarke_2001-06.pdf
>
> I've never used coax phasing lines before, and since they are longer than the distance between the elements, I was wondering about the best way to handle them. Should they be coiled somehow or left loosly looped over the support or what? How do I keep symmetry?
>
> My plan is to forego all the PVC supports shown and just have this as a non-rotatable array suspended by lines on the top and guys at the bottom to hold everything in position.
>
> If anybody has the EZNEC (or MMANA) model for this, I'd love to have a copy to play with!
>
> 73,
> Bruce
> WB8OGK
>

hi Bruce,
Let 'em dangle if you want. They don't radiate nor receive.
A.

8604. Re: Wideband Active Loop Amplifier

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-12 14:03:56 UTC
From: Daniele
Topic: 7647 Message: 8604

Hello folks,

I'm new to this group so please let me briefly introduce myself. I'm Daniele Tincani from Livorno, Italy. I'm a SWL (with special interest for LF, MF and low HF) and I like to homebrew simple projects like the one discussed in the attached messages.
I would like to know if someone tried in practice to apply modifications suggested by Chris to the amplfier circuit proposed by John 9V1VV. In particular I would be interested in how to build the input BalBal and the output 1:1:1 BalUn and how connect the latter into the circuit.
Best regards
Daniele

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> >I would appreciate any comments you may have on this design;
> >
> >http://xephemera.blogspot.com/2009/08/16-30-mhz-broadband-low-noise-loop.html
> >
> >It is not an original - the circuit has been around for years.
> >
> >In my noisy urban and tropical environment I can detect no difference
> >when switching to my ALA 100L-1 amplifier.
> >
> >Some Finnish hams reported that the design was pretty good in quiet
> >environments compared with the Wellbrook.
> >
> >I now use both amps on separate loops orientated 90 degs and switch
> >between the two.
> >
>
> I've seen a number of amplifiers similar to that. The first one that comes to mind is that of the British fellow who has an extensive online presentation of a large loop antenna. Can't recall his name or the URL at the moment, but I'm certain that there are list members who will readily recognize who I'm refering to.
>
> It would be interesting to compare the radiation patterns that result between high input impedance and low input impedance amplifiers used for wideband active loop antenna applications. I suspect that the former approach would deteriorate the null.
>
> One item I find missing from this design is an input BalBal transformer. Such a transformer would serve a number of uses, in particular providing a degree of immunity from common-mode interference such as lightning strikes. It would also provide a ground reference for the antenna proper, and in addition would allow the two transistors to have an identical base voltage. The limiting diodes would be placed across the primary side of

the transformer.
>
> I would also disconnect the two emitters, have a separate biasing resistor from each emitter to ground, and then a suitable capacitor between the two emitters. Then the two capacitors from the collectors to the output transformer primary winding can be eliminated. The 1:1 UnUn output transformer could be replaced with a 1:1:1 BalUn, the centre tap of the primary connected to the supply line. This would increase the P1dB a bit plus raise the gain by an additional 6dB.
>
> Chris
>

8605. loopantenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-12 16:39:32 UTC
From: Ralph Lane
Topic: 8605 Message: 8605

[Body unavailable in the source archive]

8606. Loop types in restricted space

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-13 09:57:04 UTC
From: Daniele
Topic: 8606 Message: 8606

Hello all,

I'm planning to build a wideband active loop antenna for reception, hopefully covering LF to low HF.
Now I'm thinking about how to build the aerial element.
Due to space restrictions, I'm forced to no more than 80 cm diameter. Is this enough for an acceptable antenna efficiency, in principle?
Second questions (very classic!) is: shielded or unshielded?
Third question is: how better is copper tubing - for practical use - in comparison with large-diameter coax cable (or other solutions), in both the shielded and the unshielded cases?
Many thanks in advance for your feedbacks.
Best regards
Daniele

8607. Re: [loopantennas] Loop types in restricted space

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-13 15:34:55 UTC
From: Tim Hills
Topic: 8606 Message: 8607

Hi Daniele,

I'm using a 2' (60cm) tuned loop for MW and one about 40cm for SW up to 60M. I haven't built anything under a Meter for LW but I don't see why it couldn't be done.

Tim

On 6/13/2011 4:57, Daniele wrote:
>
>
> Hello all,
>
> I'm planning to build a wideband active loop antenna for reception,
> hopefully covering LF to low HF.
> Now I'm thinking about how to build the aerial element.
> Due to space restrictions, I'm forced to no more than 80 cm diameter.
> Is this enough for an acceptable antenna efficiency, in principle?
> Second questions (very classic!) is: shielded or unshielded?
> Third question is: how better is copper tubing - for practical use -
> in comparison with large-diameter coax cable (or other solutions), in
> both the shielded and the unshielded cases?
> Many thanks in advance for your feedbacks.
> Best regards
> Daniele
>

[Non-text portions of this message have been removed]

8608. am antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-13 16:42:36 UTC
From: Hubert Badgley
Topic: 8608 Message: 8608

Could anyone recommend a good antenna for receiving 1570khz on the am radio? I would be interested in either a store bought or a schematic for one.
Thanks,
Hubert

8609. Re: [loopantennas] am antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-14 03:53:59 UTC
From: Tom Humes
Topic: 8608 Message: 8609

Use the same one you use for 1480 or 1620. What is so unique about 1570 for you.

--- On Mon, 6/13/11, Hubert Badgley <habadgley@...> wrote:

From: Hubert Badgley <habadgley@...>
Subject: [loopantennas] am antenna
To: loopantennas@yahoogroups.com
Date: Monday, June 13, 2011, 9:42 AM

Could anyone recommend a good antenna for receiving 1570khz on the am radio? I would be interested in either a store bought or a schematic for one.

Thanks,

Hubert

[Non-text portions of this message have been removed]

8610. Re: [loopantennas] am antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-14 06:31:19 UTC
From: kevin asato
Topic: 8608 Message: 8610

How far is this station on 1570KHz from your location? What are your requirements for size and or form factor of this antenna?
Your mileage will vary but there has been a recent thread about small loops such as the Terk Advantage or the Kaito AN-200 (and derivatives). These are small (9") loop antennas which are tunable across the entire AM band. I have also built similar type antennas with a loopstick antenna and tuning capacitor, when one could buy loopstick antennas for AM radios. I have even done this using the coil and capacitor for (Quaker) Oatbox crystal radios. These loops are designed to passively couple to your existing radio and are meant for indoor use.
 A nice feature of the Terk is that there is a 1/8" jack on the back that can be coupled to a wire antenna and ground connection should that be needed. One could also throw wire out the window and wrap the free end around the radio to achieve the same goal. I prefer using the Terk to couple the antenna as it allows a bit more tuning of the antenna coupling to the radio.
73,kevinkc6pob

Could anyone recommend a good antenna for receiving 1570khz on the am radio? I would be interested in either a store bought or a schematic for one.

[Non-text portions of this message have been removed]

8611. Re: [loopantennas] am antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-14 06:47:37 UTC
From: kevin asato
Topic: 8608 Message: 8611

Here is a link for the Terk Advantage. I am not trying to promote it. I just have one and am familiar with it. It's not perfect but adds to my listening pleasure at home or on travel (yes, it has gone in my checked luggage without problem).http://www.ccrane.com/instruction-manuals/terk-am-advantage.pdf

73,kevinkc6pob
--- On Mon, 6/13/11, kevin asato <kc6pob@...> wrote:

From: kevin asato <kc6pob@...>
Subject: Re: [loopantennas] am antenna
To: loopantennas@yahoogroups.com
Date: Monday, June 13, 2011, 11:31 PM

How far is this station on 1570KHz from your location? What are your requirements for size and or form factor of this antenna?

Your mileage will vary but there has been a recent thread about small loops such as the Terk Advantage or the Kaito AN-200 (and derivatives). These are small (9") loop antennas which are tunable across the entire AM band. I have also built similar type antennas with a loopstick antenna and tuning capacitor, when one could buy loopstick antennas for AM radios. I have even done this using the coil and capacitor for (Quaker) Oatbox crystal radios. These loops are designed to passively couple to your existing radio and are meant for indoor use.

A nice feature of the Terk is that there is a 1/8" jack on the back that can be coupled to a wire antenna and ground connection should that be needed. One could also throw wire out the window and wrap the free end around the radio to achieve the same goal. I prefer using the Terk to couple the antenna as it allows a bit more tuning of the antenna coupling to the radio.

73,kevinkc6pob

Could anyone recommend a good antenna for receiving 1570khz on the am radio? I would be interested in either a store bought or a schematic for one.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8612. Re: am antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-14 13:43:03 UTC
From: Hubert Badgley
Topic: 8608 Message: 8612

Nothing unusal just a channel which is about 15 miles away with a weak transmitter. It has some programs I would like to pickup.

--- In loopantennas@yahoogroups.com, Tom Humes <tomhumes3050@...> wrote:
>
> Use the same one you use for 1480 or 1620.Â What is so unique about 1570 for you.
>
> --- On Mon, 6/13/11, Hubert Badgley <habadgley@...> wrote:
>
> From: Hubert Badgley <habadgley@...>
> Subject: [loopantennas] am antenna
> To: loopantennas@yahoogroups.com
> Date: Monday, June 13, 2011, 9:42 AM
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Â
>
>
>
>
>
>
>
>
>
>
> Could anyone recommend a good antenna for receiving 1570khz on the am radio? I would be interested in either a store bought or a schematic for one.
>
> Thanks,
>
> Hubert

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8613. Re: am antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-14 13:52:43 UTC
From: Hubert Badgley
Topic: 8608 Message: 8613

Thanks for the information. I am about 15 miles from this weak station. If I try the wire out the window and wrapped around the receiver and get no results will these antennas you mention be worth trying or should I put something up in the air outside.
Thanks

--- In loopantennas@yahoogroups.com, kevin asato <kc6pob@...> wrote:
>
> How far is this station on 1570KHz from your location? What are your requirements for size and or form factor of this antenna?
> Your mileage will vary but there has been a recent thread about small loops such as the Terk Advantage or the Kaito AN-200 (and derivatives). These are small (9") loop antennas which are tunable across the entire AM band. I have also built similar type antennas with a loopstick antenna and tuning capacitor, when one could buy loopstick antennas for AM radios. I have even done this using the coil and capacitor for (Quaker) Oatbox crystal radios. These loops are designed to passively couple to your existing radio and are meant for indoor use.
> A nice feature of the Terk is that there is a 1/8" jack on the back that can be coupled to a wire antenna and ground connection should that be needed. One could also throw wire out the window and wrap the free end around the radio to achieve the same goal. I prefer using the Terk to couple the antenna as it allows a bit more tuning of the antenna coupling to the radio.
> 73,kevinkc6pob
>
>
>
>
> Could anyone recommend a good antenna for receiving 1570khz on the am radio? I would be interested in either a store bought or a schematic for one.
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>

>
>
>
>
> [Non-text portions of this message have been removed]
>

8614. Re: [loopantennas] Re: am antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-14 17:53:37 UTC
From: kevin asato
Topic: 8608 Message: 8614

I have some low power community broadcasts (emergency, traffic) that I dig out with my Terk. Two are around 1620-1630KHz and another at LAX (about 12 miles distant) at 530KHz that need a bit of help at times - too much computer and other electrical trash in my house!
Good luck,kevinkc6pob
--- On Tue, 6/14/11, Hubert Badgley <habadgley@...> wrote:

From: Hubert Badgley <habadgley@...>
Subject: [loopantennas] Re: am antenna
To: loopantennas@yahoogroups.com
Date: Tuesday, June 14, 2011, 6:52 AM

Thanks for the information. I am about 15 miles from this weak station. If I try the wire out the window and wrapped around the receiver and get no results will these antennas you mention be worth trying or should I put something up in the air outside.

Thanks

--- In loopantennas@yahoogroups.com, kevin asato <kc6pob@...> wrote:

>

> How far is this station on 1570KHz from your location? What are your requirements for size and or form factor of this antenna?

> Your mileage will vary but there has been a recent thread about small loops such as the Terk Advantage or the Kaito AN-200 (and derivatives). These are small (9") loop antennas which are tunable across the entire AM band. I have also built similar type antennas with a loopstick antenna and tuning capacitor, when one could buy loopstick antennas for AM radios. I have even done this using the coil and capacitor for (Quaker) Oatbox crystal radios. These loops are designed to passively couple to your existing radio and are meant for indoor use.

> A nice feature of the Terk is that there is a 1/8" jack on the back that can be coupled to a wire antenna and ground connection should that be needed. One could also throw wire out the window and wrap the free end around the radio to achieve the same goal. I prefer using the Terk to couple the antenna as it allows a bit more tuning of the antenna coupling to the radio.

> 73,kevinkc6pob

>

>

>

>

> Could anyone recommend a good antenna for receiving 1570khz on the am radio? I would be interested in either a store bought or a schematic for one.

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

>

> [Non-text portions of this message have been removed]

>

[Non-text portions of this message have been removed]

8615. Help in selecting a stepper motor for my loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-16 01:58:56 UTC
From: ve3pcd
Topic: 8615 Message: 8615

I need some help in deciding what size stepper motor for my loop, I have a 1.8 deg. motor but it's not tight enough. What is a good stepper motor to tune a maganetic loop?

73 de Peter

8616. Re: [loopantennas] Help in selecting a stepper motor for my loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-16 04:23:58 UTC
From: crabtreejr@aol.com
Topic: 8615 Message: 8616

Hello peter

I presume that when you say that a 1.8 degree stepping motor is not tight enough, you mean that it does not have sufficient resolution?

Most hybrid stepping motors have a step size of 1.8 degress. In other types, the step size is typically larger. With the hybrid motor, you have a coiuple of options:
i) use a gear box to improve the resolution
ii) use a microstepping drive, to move the motor a small fraction of a step.

HTH and 73

John KC0G

In a message dated 6/15/2011 8:59:16 PM Central Daylight Time, ve3pcd@... writes:
> I need some help in deciding what size stepper motor for my loop, I have
> a 1.8 deg. motor but it's not tight enough. What is a good stepper motor to
> tune a maganetic loop?
>
> 73 de Peter

[Non-text portions of this message have been removed]

8617. Re: Help in selecting a stepper motor for my loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-16 15:22:08 UTC
From: ve3pcd
Topic: 8615 Message: 8617

Hi John,

What I meant is that it does not allow me to make very fine adjustments. I have a controller, are you saying that I will need a gearbox as well, and what ratio do you recommend?

Also, would the 1.8 deg stepper be ok with a gearbox?

73 de Peter

--- In loopantennas@yahoogroups.com, crabtreejr@... wrote:
>
> Hello peter
>
> I presume that when you say that a 1.8 degree stepping motor is not tight
> enough, you mean that it does not have sufficient resolution?
>
> Most hybrid stepping motors have a step size of 1.8 degress. In other
> types, the step size is typically larger. With the hybrid motor, you have a
> coiuple of options:
> i) use a gear box to improve the resolution
> ii) use a microstepping drive, to move the motor a small fraction of a
> step.
>
> HTH and 73
>
> John KC0G
>
>
> In a message dated 6/15/2011 8:59:16 PM Central Daylight Time,
> ve3pcd@... writes:
> > I need some help in deciding what size stepper motor for my loop, I have
> > a 1.8 deg. motor but it's not tight enough. What is a good stepper motor to
> > tune a maganetic loop?
> >
> > 73 de Peter
>
>
> [Non-text portions of this message have been removed]
>

8618. Re: [loopantennas] Re: Help in selecting a stepper motor for my loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-16 16:21:16 UTC
From: Tim Hills
Topic: 8615 Message: 8618

de Peter,

There are 6:1 reduction drives available on Ebay and elsewhere with 1/4" (6mm) shafts in and out that would give you 540 steps over 180* or 0.3* per step.
Look under Ham radio/parts.

Tim

On 6/16/2011 10:22, ve3pcd wrote:
>
> Hi John,
>
> What I meant is that it does not allow me to make very fine
> adjustments. I have a controller, are you saying that I will need a
> gearbox as well, and what ratio do you recommend?
>
> Also, would the 1.8 deg stepper be ok with a gearbox?
>
> 73 de Peter
>
> --- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, crabtreejr@... wrote:
> >
> > Hello peter
> >
> > I presume that when you say that a 1.8 degree stepping motor is not
> tight
> > enough, you mean that it does not have sufficient resolution?
> >
> > Most hybrid stepping motors have a step size of 1.8 degress. In other
> > types, the step size is typically larger. With the hybrid motor, you
> have a
> > coiuple of options:
> > i) use a gear box to improve the resolution
> > ii) use a microstepping drive, to move the motor a small fraction of a
> > step.
> >
> > HTH and 73
> >
> > John KC0G
> >
> >
> > In a message dated 6/15/2011 8:59:16 PM Central Daylight Time,

> > ve3pcd@... writes:
> > > I need some help in deciding what size stepper motor for my loop,
> I have
> > > a 1.8 deg. motor but it's not tight enough. What is a good stepper
> motor to
> > > tune a maganetic loop?
> > >
> > > 73 de Peter
> >
> >
>

[Non-text portions of this message have been removed]

8619. Re: Help in selecting a stepper motor for my loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-17 12:15:33 UTC
From: ve3pcd
Topic: 8615 Message: 8619

Hi Tim,

Could I also use a DC motor with a variable power controller, or may be a gear motor? All I need is to make very fine adjustments.

Peter

--- In loopantennas@yahoogroups.com, Tim Hills <thills@...> wrote:
>
> de Peter,
>
> There are 6:1 reduction drives available on Ebay and elsewhere with 1/4"
> (6mm) shafts in and out that would give you 540 steps over 180* or 0.3*
> per step.
> Look under Ham radio/parts.
>
> Tim
>
> On 6/16/2011 10:22, ve3pcd wrote:
> >
> > Hi John,
> >
> > What I meant is that it does not allow me to make very fine
> > adjustments. I have a controller, are you saying that I will need a
> > gearbox as well, and what ratio do you recommend?
> >
> > Also, would the 1.8 deg stepper be ok with a gearbox?
> >
> > 73 de Peter
> >
> > --- In loopantennas@yahoogroups.com
> > <mailto:loopantennas%40yahoogroups.com>, crabtreejr@ wrote:
> > >
> > > Hello peter
> > >
> > > I presume that when you say that a 1.8 degree stepping motor is not
> > tight
> > > enough, you mean that it does not have sufficient resolution?
> > >
> > > Most hybrid stepping motors have a step size of 1.8 degress. In other
> > > types, the step size is typically larger. With the hybrid motor, you
> > have a
> > > coiuple of options:
> > > i) use a gear box to improve the resolution
> > > ii) use a microstepping drive, to move the motor a small fraction of a
> > > step.

> > >
> > > HTH and 73
> > >
> > > John KC0G
> > >
> > >
> > > In a message dated 6/15/2011 8:59:16 PM Central Daylight Time,
> > > ve3pcd@ writes:
> > > > I need some help in deciding what size stepper motor for my loop,
> > I have
> > > > > a 1.8 deg. motor but it's not tight enough. What is a good stepper
> > motor to
> > > > > tune a maganetic loop?
> > > > >
> > > > > 73 de Peter
> > > >
> > > >
> > >
>
>
>
> [Non-text portions of this message have been removed]
>

8620. MW pasive loop about 10 " hight

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-17 12:48:46 UTC
From: jose maria
Topic: 8620 Message: 8620

I am looking for a project MW pasive loop no more of 10 " hight .

Ibuilted some thing like MTM am loop ,it works very good but it is too hight 17 " and it is dificult to operate in a small computer (3 level) table.

I will apreciated if somebody help in a project.

Thanks Jose Mendicoa Valencia Venezuela jmmendicoa@...
<mailto:jmmendicoa@...>

[Non-text portions of this message have been removed]

8621. Re: MW pasive loop about 10 " hight

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-18 14:14:47 UTC
From: John
Topic: 8620 Message: 8621

The Grundig AN-200 tuned loop runs 25-30$ US on evil-bay, etc. It peaks at ~10 3/16". The rear foot could be cut to lower it to 10". It is quite well made and has a 1/8" jack on the back foot for connection to your receiver - or it can magnetically couple to a portable.

John

--- In loopantennas@yahoogroups.com, "jose maria" <jmmendicoa@...> wrote:
>
>
> I am looking for a project MW pasive loop no more of 10 " hight .
>
> Ibuilted some thing like MTM am loop ,it works very good but it is too
> hight 17 " and it is dificult to operate in a small computer (3 level)
> table.
>
> I will apreciated if somebody help in a project.
>
> Thanks Jose Mendicoa Valencia Venezuela jmmendicoa@...
> <mailto:jmmendicoa@...>
>
>
>
> [Non-text portions of this message have been removed]
>

8622. Re: MW pasive loop about 10 " hight

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-23 16:12:21 UTC
From: jose maria
Topic: 8620 Message: 8622

Thanks John for the sugestion i order from Amazon the an-200 but they are sending me the the an-100 (Brands Kaito,Grundig or Tecsun)they are all the same ,i prefer this design because the tunning Knob is in one side of the antenna ,not in the middle. Thanks Jose

--- In loopantennas@yahoogroups.com, "John" <JRTOW3RD@...> wrote:
>
> The Grundig AN-200 tuned loop runs 25-30$ US on evil-bay, etc. It peaks at ~10 3/16". The rear foot could be cut to lower it to 10". It is quite well made and has a 1/8" jack on the back foot for connection to your receiver - or it can magnetically couple to a portable.
>
> John
>
> --- In loopantennas@yahoogroups.com, "jose maria" <jmmendicoa@> wrote:
> >
> >
> > I am looking for a project MW pasive loop no more of 10 " hight .
> >
> > Ibuilted some thing like MTM am loop ,it works very good but it is too
> > hight 17 " and it is dificult to operate in a small computer (3 level)
> > table.
> >
> > I will apreciated if somebody help in a project.
> >
> > Thanks Jose Mendicoa Valencia Venezuela jmmendicoa@
> > <mailto:jmmendicoa@>
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

8623. Capacitor connection question, mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-26 13:36:06 UTC
From: wwblues
Topic: 8623 Message: 8623

Hi, all.
Loop rookie here.
On a magnetic loop, I read about fairly extreme measures to keep any unnecessary resistance out of the loop - silver solder rather than lead or tin, 3/4" pipe or larger rather than 1/2", etc. In considering capacitor types, motorized. Vacuum variables seem to rise to the top, and butterfly capacitors are right behind them. But, when I look at them, I see rather small connection points, wires or screws, which seems to conflict with the effort described above. Is there something I'm missing? Is it a big deal?

Bill, WWoJ
MN

8624. Re: [loopantennas] Capacitor connection question, mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-26 14:40:27 UTC
From: toddroberts2001@aol.com
Topic: 8623 Message: 8624

Vacuum Variables are sort of a catch 22 when it comes to
transmitting loops. All the information says to never use screw-on
or bolted connections. Vacuum variables are very low loss
but the only way you can make a
connection to a vacuum variable is with a bolt or screw or
some type of clamp. The best way to try to cope is to
use silver-on-silver connections and firmly clamp a silver
strap as tight as possible around the vacuum variable, which
should be silver plated on the outside of the body where
connections are made.

One way around this is to build your own trombone-style
variable capacitor using copper tubes and Teflon sheet for
insulation. This way you can integrate the trombone capacitor
directly into the loop antenna and silver solder all connections.

Also never use wire or "flying leads" when connecting any kind
of capacitor to a transmitting loop. Use only copper strap at least one
inch
wide when making any type of connection to a transmitting loop. Do
not use flexible ground braid when making connections, it is too lossy.

73 - Todd WD4NGG

8625. OT (a bit), a french book freely available

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-26 15:14:45 UTC
From: dx11
Topic: 8625 Message: 8625

I found the following announcement on a hamradio site. Even if you
don't read french it may be of value for you. It is not a book but a well
organised collection of pdf files. Thes are well illustrated with
schematicvs, drawings and pictures.

regards,

Cor Beijersbergen

The Big 'French Handbook' - free to download

New 2011 edition - available since June 25 2011.

Now, it is possible to download free the 'French Handbook' accomplished by
F6BCU.

Numerous technical articles are at your disposal, ideal for home-brew.

You can download compact disk free on the site of Onlineradio (exclusive).
http://communaute.onlineradio.fr/files/file/
<http://communaute.onlineradio.fr/files/file/162-handbook-de-la-ligne-bleue/
>
162-handbook-de-la-ligne-bleue/ - for download (540 Mo)

Jean-Nicolas
http://www.onlineradio.fr <http://www.onlineradio.fr/>

[Non-text portions of this message have been removed]

8626. Questions for Chris Trask

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-26 21:19:10 UTC
From: vbifyz
Topic: 8626 Message: 8626

Hello Chris and group,

After trying several options (gain, bandwidth, stability - pick any two :)) , I've decided to build the amplifier described in your article WidebandLoopAntennaAmplifierRevA.pdf.
The problem is I don't have the binocular cores made of 61 material, only made of 43 material. I understand this will kill the performance of T3, because it is loaded with the very low input impedance of the second stage.
Question 1: Can 43 material still be used for T6? Its loading impedance is 50 Ohm.
Question 2: If I omit T3 altogether and couple the stages directly (with the necessary bias circuit modifications), how much gain would I lose? My naive opinion is that in the end, voltage gain of the whole amplifier is the ratio of 50 Ohm to the input impedance. I don't see how interstage and output transformers can increase it. T6 is still nice to have for balanced to unbalanced connection and for splitting/combining the power and the signal.

73, Mike

8627. Re: [loopantennas] OT (a bit), a french book freely available

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-26 15:41:21 UTC
From: DR Don
Topic: 8625 Message: 8627

Thank you for the information. A very nice site.
Dr Don HC4/W4BWS

----- Original Message -----
From: dx11
To: Shortwave-SWL-Antenna@yahoogroups.com ; loopantennas@yahoogroups.com ; qrp-tech@yahoogroups.com
Sent: Sunday, June 26, 2011 10:14 AM
Subject: [loopantennas] OT (a bit), a french book freely available

I found the following announcement on a hamradio site. Even if you don't read french it may be of value for you. It is not a book but a well organised collection of pdf files. Thes are well illustrated with schematicvs, drawings and pictures.

regards,

Cor Beijersbergen

The Big 'French Handbook' - free to download

New 2011 edition - available since June 25 2011.

Now, it is possible to download free the 'French Handbook' accomplished by F6BCU.

Numerous technical articles are at your disposal, ideal for home-brew.

You can download compact disk free on the site of Onlineradio (exclusive).
http://communaute.onlineradio.fr/files/file/
<http://communaute.onlineradio.fr/files/file/162-handbook-de-la-ligne-bleue/>
162-handbook-de-la-ligne-bleue/ - for download (540 Mo)

Jean-Nicolas
http://www.onlineradio.fr <http://www.onlineradio.fr/>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8628. Re: [loopantennas] Capacitor connection question, mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-27 01:30:58 UTC
From: kevin asato
Topic: 8623 Message: 8628

Hmm. I don't know what the big deal is. I usually use lugged wires and star washers.
73,kevinkc6pob

--- On Sun, 6/26/11, wwblues <wwblues2@...m> wrote:

From: wwblues <wwblues2@...>
Subject: [loopantennas] Capacitor connection question, mag loop
To: loopantennas@yahoogroups.com
Date: Sunday, June 26, 2011, 6:36 AM

Hi, all.

Loop rookie here.

On a magnetic loop, I read about fairly extreme measures to keep any unnecessary resistance out of the loop - silver solder rather than lead or tin, 3/4" pipe or larger rather than 1/2", etc. In considering capacitor types, motorized. Vacuum variables seem to rise to the top, and butterfly capacitors are right behind them. But, when I look at them, I see rather small connection points, wires or screws, which seems to conflict with the effort described above. Is there something I'm missing? Is it a big deal?

Bill, WWoJ

MN

[Non-text portions of this message have been removed]

8629. Summary from a newbie on how to build - Is this right?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-27 03:32:42 UTC
From: Jim
Topic: 8629 Message: 8629

Hi all,

I would like to build a small, 20m loop. I just read some articles and watched a few YouTube videos and wanted to see if I got this right:

1) Get about 7' of wire.
2) Feed each end into the two terminals of a variable capacitor that will ultimately be at the top of the antenna.
3) Form your circle / square / octagon.
4) For the feedpoint, feed a Faraday loop that will sit at the bottom of the outer loop, butting up against it.
5) Connect to the radio and tune the capacitor for maximum noise.
6) Review SWR's.

A few of questions:

1) Was that close
2) Do you need to match with a Faraday loop (or some other matching network) or can you just feed the outer loop?
3) Since I'm new to this, please explain how we "get away with" not feeding the outer loop and only the Faraday
4) How big is the Faraday loop supposed to be?

In the articles and videos, there were just a few things that seemed to be breezed over.

Thanks a lot! - Jim K9IDX

8630. Re: [loopantennas] Capacitor connection question, mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-27 13:44:52 UTC
From: Jim Miller
Topic: 8623 Message: 8630

I had similar concerns until I realized that the VV cap has a specified loss curve which in order to be measured had to be connected by the supplied means, hence the loss included the connection.

Go with the manufacturer supplied connection means.

Jim

[Non-text portions of this message have been removed]

8631. Re: [loopantennas] Questions for Chris Trask

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-06-30 02:40:54 UTC
From: Chris Trask
Topic: 8626 Message: 8631

Had to think about this a bit.

>
> After trying several options (gain, bandwidth, stability - pick any two
:)),
> I've decided to build the amplifier described in your article
> WidebandLoopAntennaAmplifierRevA.pdf.
>
> The problem is I don't have the binocular cores made of 61 material, only
> made of 43 material. I understand this will kill the performance of T3,
> because it is loaded with the very low input impedance of the second
stage.
>
> Question 1: Can 43 material still be used for T6? Its loading impedance is
> 50 Ohm.
>

Yes, you can probably get away with that. I made T3 and T6 identical so
as to reduce that number of different parts. 43 material performs poorly in
low-impedance circuitry so I use either 61 or 73.

>
> Question 2: If I omit T3 altogether and couple the stages directly (with
> the necessary bias circuit modifications), how much gain would I lose?
> My naive opinion is that in the end, voltage gain of the whole amplifier
> is the ratio of 50 Ohm to the input impedance. I don't see how interstage
> and output transformers can increase it. T6 is still nice to have for
> balanced to unbalanced connection and for splitting/combining the power
> and the signal.
>

Transformer T3 gives you a current gain factor of 2 (6dB of power gain).
It also provides second-order IMD immunity from even-order products from the
first amplifier stage. So, you'll lose 6dB of gain plus the OIP2 will
suffer.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8632. Re: Capacitor connection question, mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-03 15:22:47 UTC
From: wwblues
Topic: 8623 Message: 8632

If that connection is not critical, such that bolts and star washers work, wouldn't 3/4" CATV hard line make a decent loop material then?

Bill. WW0J

--- In loopantennas@yahoogroups.com, kevin asato <kc6pob@...> wrote:
>
> Hmm. I don't know what the big deal is. I usually use lugged wires and star washers.
> 73,kevinkc6pob
>
> --- On Sun, 6/26/11, wwblues <wwblues2@...> wrote:
>
> From: wwblues <wwblues2@...>
> Subject: [loopantennas] Capacitor connection question, mag loop
> To: loopantennas@yahoogroups.com
> Date: Sunday, June 26, 2011, 6:36 AM
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Â
>
>
>
>
>
>
>
>
>
>
> Hi, all.
>
> Loop rookie here.

>
> On a magnetic loop, I read about fairly extreme measures to keep any unnecessary resistance out of the loop - silver solder rather than lead or tin, 3/4" pipe or larger rather than 1/2", etc. In considering capacitor types, motorized. Vacuum variables seem to rise to the top, and butterfly capacitors are right behind them. But, when I look at them, I see rather small connection points, wires or screws, which seems to conflict with the effort described above. Is there something I'm missing? Is it a big deal?
>
>
>
> Bill, WWoJ
>
> MN
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8633. Re: [loopantennas] Re: Capacitor connection question, mag loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-03 15:28:34 UTC
From: toddroberts2001@aol.com
Topic: 8623 Message: 8633

In a message dated 7/3/2011 11:23:07 A.M. Eastern Daylight Time,
wwblues2@... writes:

Hi Bill,
Bolts and star washers "work", just not as well as silver-soldered
connections when
it comes to transmitting loop connections. Personally I would never use
bolts and
star washers to make connections to a transmitting loop. It can make the
difference between a loop that "works", or one that is an exceptional
performer.
73 - Todd WD4NGG

If that connection is not critical, such that bolts and star washers work,
wouldn't 3/4" CATV hard line make a decent loop material then?

Bill. WW0J

8634. Large-diameter stranded wire or coax?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-04 10:06:25 UTC
From: Daniele
Topic: 8634 Message: 8634

Hello group,

given a square structure (say 100x100 cm) of PVC tube, 16 mm diameter, and a wide-bandwidth loop preamplifier (http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html), what would you choose for building the loop? Large-diameter stranded wire or coax (RG8, RG213)?

Regards
D.

8635. Re: [loopantennas] Large-diameter stranded wire or coax?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-04 13:26:42 UTC
From: John Seager
Topic: 8634 Message: 8635

Hi Daniele
If you are threading the conductor through the PVC you might try using the 3cm wide copper tapes sold as slug deterrents. This gives you a relatively good surface area and takes advantage of the skin effect to give a very light structure. It is awkward but not impossible to feed it through a narrow tube. The corners are the problem. The peelable backing should be left on. However it is not particularly cheap. Regards John G0UCP

Daniele <danieletincani@...>
To: loopantennas@yahoogroups.com
Sent: Monday, 4 July, 2011 11:06:25
Subject: [loopantennas] Large-diameter stranded wire or coax?

Hello group,

given a square structure (say 100x100 cm) of PVC tube, 16 mm diameter, and a wide-bandwidth loop preamplifier (http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html), what would you choose for building the loop? Large-diameter stranded wire or coax (RG8, RG213)?

Regards
D.

[Non-text portions of this message have been removed]

8636. Re: Large-diameter stranded wire or coax?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-05 16:37:25 UTC
From: vbifyz
Topic: 8634 Message: 8636

For this kind of amplifier, there will be little difference because of the high-impedance input. Whatever you can thread through the pipes will work the same way.
In case you will upgrade the preamp to a low-impedance input, thicker conductor may help somewhat. By thicker I mean anything more than 18AWG or cheap RG-59 cable.

73, Mike

> Daniele <danieletincani@...>
> To: loopantennas@yahoogroups.com
> Sent: Monday, 4 July, 2011 11:06:25
> Subject: [loopantennas] Large-diameter stranded wire or coax?
>
>
> Hello group,
>
> given a square structure (say 100x100 cm) of PVC tube, 16 mm diameter, and a
> wide-bandwidth loop preamplifier
> (http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html), what would you
> choose for building the loop? Large-diameter stranded wire or coax (RG8, RG213)?
>
> Regards
> D.
>
>
>
>
> [Non-text portions of this message have been removed]
>

8637. I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-05 17:57:43 UTC
From: Tom
Topic: 8637 Message: 8637

I live in an apartment. I'm looking to find a frame that I can use to wind various loop antenna designs.

I'm looking for a frame that would allow me to have 4 sides, each side no shorter than 36 in or bigger than 40 in.

Does anyone know of any supply sources that sell loop antenna frames?

I could build my own of course but I HATE woodworking.

TNX to all who respond.

Tom

8638. Re: [loopantennas] I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-05 23:31:35 UTC
From: ve7sl@shaw.ca
Topic: 8637 Message: 8638

> I could build my own of course but I HATE woodworking.

Tom - you can still build your own and continue to hate woodworking by building a frame made from PVC tubing. The variety of connectors available make almost any shape possible, including a nice stand. All you need is a hacksaw, some PVC glue and a tape measure!

Steve

WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

8639. Re: [loopantennas] I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-06 00:45:15 UTC
From: Ernie Rice
Topic: 8637 Message: 8639

OK give us some plans!

Ernie

On Tue, Jul 5, 2011 at 4:31 PM, <ve7sl@shaw.ca> wrote:

> **
>
>
> > I could build my own of course but I HATE woodworking.
>
> Tom - you can still build your own and continue to hate woodworking by
> building a frame made from PVC tubing. The variety of connectors available
> make almost any shape possible, including a nice stand. All you need is a
> hacksaw, some PVC glue and a tape measure!
>
> Steve
>
> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
>
>
>

--
Remember that when you think you have it all figured out... you wake up to
start all over again!
Trust yourself and MOST times you will not be disappointed

[Non-text portions of this message have been removed]

8640. Re: [loopantennas] I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-06 00:48:51 UTC
From: Tom Humes
Topic: 8637 Message: 8640

Hire a fellow radio fan to build it for you. Some people get a kick out of building.

--- On Tue, 7/5/11, Tom <msznh@...> wrote:

From: Tom <msznh@...>
Subject: [loopantennas] I'm Looking For A Loop Antenna Frame
To: loopantennas@yahoogroups.com
Date: Tuesday, July 5, 2011, 10:57 AM

I live in an apartment. I'm looking to find a frame that I can use to wind various loop antenna designs.

I'm looking for a frame that would allow me to have 4 sides, each side no shorter than 36 in or bigger than 40 in.

Does anyone know of any supply sources that sell loop antenna frames?

I could build my own of course but I HATE woodworking.

TNX to all who respond.

Tom

[Non-text portions of this message have been removed]

8641. Re: [loopantennas] I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-06 01:33:02 UTC
From: ve7sl@shaw.ca
Topic: 8637 Message: 8641

> OK give us some plans!

Do a little research. There's lots of info on the web on building PVC loops.

WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

8642. Re: Large-diameter stranded wire or coax?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-05 14:45:41 UTC
From: Andrew
Topic: 8634 Message: 8642

A square loop of 100x100cm is 4m round. You do not need a pre-amp!!

12m wavelength (8MHz) will be around the highest frequency you can reach at this size. Depending on the input capacitance.

At 8Mhz (1/3 lambda) you have no need to worry about your wire efficiencies unless you are going down towards the top bands. You can always add more wire in parallel through the tube increasing its efficiency each time, n/1.

--- In loopantennas@yahoogroups.com, John Seager <jseager2009@...> wrote:
>
> Hi Daniele
> If you are threading the conductor through the PVC you might try using the 3cm
> wide copper tapes sold as slug deterrents. This gives you a relatively good
> surface area and takes advantage of the skin effect to give a very light
> structure. It is awkward but not impossible to feed it through a narrow tube.
> The corners are the problem. The peelable backing should be left on. However it
> is not particularly cheap. Regards John G0UCP
>
> Daniele <danieletincani@...>
> To: loopantennas@yahoogroups.com
> Sent: Monday, 4 July, 2011 11:06:25
> Subject: [loopantennas] Large-diameter stranded wire or coax?
>
>
> Hello group,
>
> given a square structure (say 100x100 cm) of PVC tube, 16 mm diameter, and a
> wide-bandwidth loop preamplifier
> (http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html), what would you
> choose for building the loop? Large-diameter stranded wire or coax (RG8, RG213)?
>
> Regards
> D.
>
>
>
>
> [Non-text portions of this message have been removed]
>

8643. Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-09 15:33:55 UTC
From: Tom
Topic: 8637 Message: 8643

I should have been more explicit. I don't want to build ANYTHING, be it plastic, metal, wood, buffalo horn...nothing!

I want to buy a pre made form. "Back in the day" if you wanted to wind your own coils you could use toilet paper roles, dowl sticks, oatmeal boxes...anything. OR...you could buy pre made coil forms.

I just thought there might be a maker of loop antenna forms. I guess not.

Thank you all anyway.

Tom

--- In loopantennas@yahoogroups.com, <ve7sl@...> wrote:
>
>
> > OK give us some plans!
>
>
> Do a little research. There's lots of info on the web on building PVC loops.
>
>
>
> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
>

8644. Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-09 15:35:19 UTC
From: Tom
Topic: 8637 Message: 8644

I should have been more explicit. I don't want to build ANYTHING, be it plastic, metal, wood, buffalo horn...nothing!

I want to buy a pre made form. "Back in the day" if you wanted to wind your own coils you could use toilet paper roles, dowl sticks, oatmeal boxes...anything. OR...you could buy pre made coil forms.

I just thought there might be a maker of loop antenna forms. I guess not.

Thank you all anyway.

Tom

--- In loopantennas@yahoogroups.com, <ve7sl@...> wrote:
>
>
> > OK give us some plans!
>
>
> Do a little research. There's lots of info on the web on building PVC loops.
>
>
>
> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
>

8645. Re: [loopantennas] Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-09 16:51:29 UTC
From: kevin asato
Topic: 8637 Message: 8645

How about picture frames, boxes, milk crates/storage containers ? These can be used as loop antenna forms although they are not round. The "radio waves" being captured are not particular as to the shape of the "net" being used.
73,kevinkc6pob

--- On Sat, 7/9/11, Tom <msznh@...> wrote:

From: Tom <msznh@...>
Subject: [loopantennas] Re: I'm Looking For A Loop Antenna Frame
To: loopantennas@yahoogroups.com
Date: Saturday, July 9, 2011, 8:35 AM

I should have been more explicit. I don't want to build ANYTHING, be it plastic, metal, wood, buffalo horn...nothing!

I want to buy a pre made form. "Back in the day" if you wanted to wind your own coils you could use toilet paper roles, dowl sticks, oatmeal boxes...anything. OR...you could buy pre made coil forms.

I just thought there might be a maker of loop antenna forms. I guess not.

Thank you all anyway.

Tom

--- In loopantennas@yahoogroups.com, <ve7sl@...> wrote:

>

>

> > OK give us some plans!

>

>

> Do a little research. There's lots of info on the web on building PVC loops.

>

>

>

> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

>

[Non-text portions of this message have been removed]

8646. Re: [loopantennas] Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-09 17:23:14 UTC
From: Sam Morgan
Topic: 8637 Message: 8646

on this page:
http://makearadio.com/loops/loops3.php

at the bottom of the page it says:

"Michael Thompson is a loop builder and has offered to make custom loops for visitors of makearadio.com. Please contact him directly for details and prices at this address: mltube@... "

perhaps this person will build what you want......?
GB & 73
K5OAI
Sam Morgan

On 7/9/2011 10:33 AM, Tom wrote:
> I should have been more explicit. I don't want to build ANYTHING, be it
> plastic, metal, wood, buffalo horn...nothing!
>
> I want to buy a pre made form. "Back in the day" if you wanted to wind your
> own coils you could use toilet paper roles, dowl sticks, oatmeal
> boxes...anything. OR...you could buy pre made coil forms.
>
> I just thought there might be a maker of loop antenna forms. I guess not.
>
> Thank you all anyway.
>
> Tom
>

8647. Re: [loopantennas] Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-09 16:43:54 UTC
From: dreagin@q.com
Topic: 8637 Message: 8647

MFJ 1786.HI-Q Loop antenna.

----- Original Message -----
From: Tom <msznh@hotmail.com>
To: loopantennas@yahoogroups.com
Sent: Sat, 09 Jul 2011 11:35:19 -0400 (EDT)
Subject: [loopantennas] Re: I'm Looking For A Loop Antenna Frame

I should have been more explicit. I don't want to build ANYTHING, be it plastic, metal, wood, buffalo horn...nothing!

I want to buy a pre made form. "Back in the day" if you wanted to wind your own coils you could use toilet paper roles, dowl sticks, oatmeal boxes...anything. OR...you could buy pre made coil forms.

I just thought there might be a maker of loop antenna forms. I guess not.

Thank you all anyway.

Tom

--- In loopantennas@yahoogroups.com, <ve7sl@...> wrote:

>

>

> > OK give us some plans!

>

>

> Do a little research. There's lots of info on the web on building PVC loops.

>

>

>

> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

>

[Non-text portions of this message have been removed]

8648. Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-10 11:47:55 UTC
From: Tom
Topic: 8637 Message: 8648

Thank you. I'll look into this.

Tom

--- In loopantennas@yahoogroups.com, Sam Morgan <k5oai.sam@...> wrote:
>
> on this page:
> http://makearadio.com/loops/loops3.php
>
> at the bottom of the page it says:
>
> "Michael Thompson is a loop builder and has offered to make custom loops for
> visitors of makearadio.com. Please contact him directly for details and prices
> at this address: mltube@... "
>
> perhaps this person will build what you want......?
> GB & 73
> K5OAI
> Sam Morgan
>
> On 7/9/2011 10:33 AM, Tom wrote:
> > I should have been more explicit. I don't want to build ANYTHING, be it
> > plastic, metal, wood, buffalo horn...nothing!
> >
> > I want to buy a pre made form. "Back in the day" if you wanted to wind your
> > own coils you could use toilet paper roles, dowl sticks, oatmeal
> > boxes...anything. OR...you could buy pre made coil forms.
> >
> > I just thought there might be a maker of loop antenna forms. I guess not.
> >
> > Thank you all anyway.
> >
> > Tom
> >
>

8649. Re: Large-diameter stranded wire or coax?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-10 19:39:56 UTC
From: Howard W
Topic: 8634 Message: 8649

I have a dual 10 turn loop (so I can series/parallel the two). My loop wire is AWG22 fed thru a small choke balun core to a 2 stage homebrew 2N5109 AMP. I can remotely series or parallel the two loops with a relay.

Built my frame out of military fiberglass masting sections epoxied into a PVC 4 input connector. It was just a bit loose so I drilled the connector and fiberglass and inserted some self tapping screws then applied the Devcon epoxy down and around in the small gap then tightened up the screws. This is the pic of the loop frame without the wire support end pieces. The loop frame is 4.5 feet per side (X 4 sides = 22 feet for one full turn). So 10 turns = ~ 220 feet.

I works well with my Kenwood R5000 and my Rycom 6040.

http://groups.yahoo.com/group/loopantennas/photos/album/854121357/pic/list

--- In loopantennas@yahoogroups.com, "Daniele" <danieletincani@...> wrote:
>
> Hello group,
>
> given a square structure (say 100x100 cm) of PVC tube, 16 mm diameter, and a wide-bandwidth loop preamplifier (http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html), what would you choose for building the loop? Large-diameter stranded wire or coax (RG8, RG213)?
>
> Regards
> D.
>

8650. Re: Large-diameter stranded wire or coax? OOPS !

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-11 01:57:22 UTC
From: Howard W
Topic: 8634 Message: 8650

Sorry, the loop frame is 5.5 feet per side, for a total of 22 feet circumference.

I have some additional pictures of the loop wire supports which I will post, if you are interested - each support is just a 3/4 pvc tee fitting with 5 inch pvc stubs on each side and secured in the fiberglass mast tube with 3 evenly spaced sheet metal screws. My first attempt was to drill holes and thread the wire thru...a dismal failure. Then I decided to try a hacksaw and make notches about 1/3 of the way thru the pipe. The AWG 22 wire is pulled around the outside of the pvc and pressed down into the notch. The width of the cut (thickness of the hacksaw blade) is sufficient for a tight fit of the wire and it is firmly held in place.

That worked out pretty well.

--- In loopantennas@yahoogroups.com, "Howard W" <virginia_gentleman48@...> wrote:
>
>
>
>
>
>
> I have a dual 10 turn loop (so I can series/parallel the two). My loop wire is AWG22 fed thru a small choke balun core to a 2 stage homebrew 2N5109 AMP. I can remotely series or parallel the two loops with a relay.
>
> Built my frame out of military fiberglass masting sections epoxied into a PVC 4 input connector. It was just a bit loose so I drilled the connector and fiberglass and inserted some self tapping screws then applied the Devcon epoxy down and around in the small gap then tightened up the screws. This is the pic of the loop frame without the wire support end pieces. The loop frame is 4.5 feet per side (X 4 sides = 22 feet for one full turn). So 10 turns = ~ 220 feet.
>
> I works well with my Kenwood R5000 and my Rycom 6040.
>
>
>
> http://groups.yahoo.com/group/loopantennas/photos/album/854121357/pic/list
>
>
>
> --- In loopantennas@yahoogroups.com, "Daniele" <danieletincani@> wrote:
> >
> > Hello group,
> >
> > given a square structure (say 100x100 cm) of PVC tube, 16 mm diameter, and a wide-bandwidth loop preamplifier (http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html), what would you choose for

building the loop? Large-diameter stranded wire or coax (RG8, RG213)?
> >
> > Regards
> > D.
> >
>

8651. Re: Large-diameter stranded wire or coax?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-11 14:07:49 UTC
From: kd8phx
Topic: 8634 Message: 8651

I am more impressed by the driveway. Nice!

--- In loopantennas@yahoogroups.com, "Howard W" <virginia_gentleman48@...> wrote:
>
>
>
>
>
>
> I have a dual 10 turn loop (so I can series/parallel the two). My loop wire is AWG22 fed thru a small choke balun core to a 2 stage homebrew 2N5109 AMP. I can remotely series or parallel the two loops with a relay.
>
> Built my frame out of military fiberglass masting sections epoxied into a PVC 4 input connector. It was just a bit loose so I drilled the connector and fiberglass and inserted some self tapping screws then applied the Devcon epoxy down and around in the small gap then tightened up the screws. This is the pic of the loop frame without the wire support end pieces. The loop frame is 4.5 feet per side (X 4 sides = 22 feet for one full turn). So 10 turns = ~ 220 feet.
>
> I works well with my Kenwood R5000 and my Rycom 6040.
>
>
>
> http://groups.yahoo.com/group/loopantennas/photos/album/854121357/pic/list
>
>
>
> --- In loopantennas@yahoogroups.com, "Daniele" <danieletincani@> wrote:
> >
> > Hello group,
> >
> > given a square structure (say 100x100 cm) of PVC tube, 16 mm diameter, and a wide-bandwidth loop preamplifier (http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html), what would you choose for building the loop? Large-diameter stranded wire or coax (RG8, RG213)?
> >
> > Regards
> > D.
> >
>

8652. Re: Large-diameter stranded wire or coax?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-11 16:46:19 UTC
From: Howard W
Topic: 8634 Message: 8652

The driveway (300 + feet in length) is more impressive at night with the bollard lights on. The past few winters, however, have made me grateful for my snowblower.

And if you are impressed with the driveway, my 570 foot free-floating delta loop @ 70 feet would send you into a tizzy.

Check out my page on QRZ.

Break a leg...OOPS, I see you've already done that

73
Howard Walker
KI4VEO

--- In loopantennas@yahoogroups.com, "kd8phx" <rrmvargo@...> wrote:
>
> I am more impressed by the driveway. Nice!
>
> --- In loopantennas@yahoogroups.com, "Howard W" <virginia_gentleman48@> wrote:
> >
> >
> >
> >
> >
> >
> > I have a dual 10 turn loop (so I can series/parallel the two). My loop wire is AWG22 fed thru a small choke balun core to a 2 stage homebrew 2N5109 AMP. I can remotely series or parallel the two loops with a relay.
> >
> > Built my frame out of military fiberglass masting sections epoxied into a PVC 4 input connector. It was just a bit loose so I drilled the connector and fiberglass and inserted some self tapping screws then applied the Devcon epoxy down and around in the small gap then tightened up the screws. This is the pic of the loop frame without the wire support end pieces. The loop frame is 4.5 feet per side (X 4 sides = 22 feet for one full turn). So 10 turns = ~ 220 feet.
> >
> > I works well with my Kenwood R5000 and my Rycom 6040.
> >
> >
> >
> > http://groups.yahoo.com/group/loopantennas/photos/album/854121357/pic/list
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "Daniele" <danieletincani@> wrote:
> > >

> > > Hello group,
> > >
> > > given a square structure (say 100x100 cm) of PVC tube, 16 mm diameter, and a wide-bandwidth loop preamplifier (http://www.qsl.net/m0ayf/active-loop-receiving-antenna.html), what would you choose for building the loop? Large-diameter stranded wire or coax (RG8, RG213)?
> > >
> > > Regards
> > > D.
> > >
> >
>

8653. Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-12 16:19:02 UTC
From: Andrew
Topic: 8637 Message: 8653

If you have a cheap radio or it has a high impedance input then simply wrap your wire around a cardboard box. If you want to @up@ it's Q you can tune it with a variable capacitor.
Enjoy the fun.
--- In loopantennas@yahoogroups.com, "Tom" <msznh@...> wrote:
>
> Thank you. I'll look into this.
>
> Tom
>
> --- In loopantennas@yahoogroups.com, Sam Morgan <k5oai.sam@> wrote:
> >
> > on this page:
> > http://makearadio.com/loops/loops3.php
> >
> > at the bottom of the page it says:
> >
> > "Michael Thompson is a loop builder and has offered to make custom loops for
> > visitors of makearadio.com. Please contact him directly for details and prices
> > at this address: mltube@ "
> >
> > perhaps this person will build what you want......?
> > GB & 73
> > K5OAI
> > Sam Morgan
> >
> > On 7/9/2011 10:33 AM, Tom wrote:
> > > I should have been more explicit. I don't want to build ANYTHING, be it
> > > plastic, metal, wood, buffalo horn...nothing!
> > >
> > > I want to buy a pre made form. "Back in the day" if you wanted to wind your
> > > own coils you could use toilet paper roles, dowl sticks, oatmeal
> > > boxes...anything. OR...you could buy pre made coil forms.
> > >
> > > I just thought there might be a maker of loop antenna forms. I guess not.
> > >
> > > Thank you all anyway.
> > >
> > > Tom
> > >
> >
>

8654. Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-12 23:57:38 UTC
From: Tom
Topic: 8637 Message: 8654

I tried him. He doesn't respond to email. I know he received because it didn't bounce back at me.

Tom

--- In loopantennas@yahoogroups.com, Sam Morgan <k5oai.sam@...> wrote:
>
> on this page:
> http://makearadio.com/loops/loops3.php
>
> at the bottom of the page it says:
>
> "Michael Thompson is a loop builder and has offered to make custom loops for
> visitors of makearadio.com. Please contact him directly for details and prices
> at this address: mltube@... "
>
> perhaps this person will build what you want......?
> GB & 73
> K5OAI
> Sam Morgan
>
> On 7/9/2011 10:33 AM, Tom wrote:
> > I should have been more explicit. I don't want to build ANYTHING, be it
> > plastic, metal, wood, buffalo horn...nothing!
> >
> > I want to buy a pre made form. "Back in the day" if you wanted to wind your
> > own coils you could use toilet paper roles, dowl sticks, oatmeal
> > boxes...anything. OR...you could buy pre made coil forms.
> >
> > I just thought there might be a maker of loop antenna forms. I guess not.
> >
> > Thank you all anyway.
> >
> > Tom
> >
>

8655. Re: [loopantennas] Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-13 01:16:13 UTC
From: Sam Morgan
Topic: 8637 Message: 8655

by the way your email address DOES bounce.....?
I was going to send this off list, but since I can't
I'll have to pose here

in Google if you enter:
"Michael Thompson" loop antennas

the 6th links says:

TheRadioBoard :: Search
May 5, 2011 ? Hello All, Very Happy My name is Michael Thompson. Just letting
all that may be interested in a Tuned Loop Antenna for your radio project, ...
christopher.theradioboard.com/rb/search.php?search_author... - Cached

click on the cached link
http://tinyurl.com/5s52r6x

so he posted back on May 5, 2011
that he was still actively making antennas

you might become a member of that board
then try a private message to mltube

if that don't work
then he either doesn't want to respond
or perhaps is having problems of his own
computer, health, new girlfriend keeping him busy......
and for some reason can't respond?
:-)

good luck

GB & 73
K5OAI
Sam Morgan

On 7/12/2011 6:57 PM, Tom wrote:
> I tried him. He doesn't respond to email. I know he received because it
> didn't bounce back at me.
>
> Tom
>
> --- In loopantennas@yahoogroups.com, Sam Morgan<k5oai.sam@...> wrote:
>>
>> on this page: http://makearadio.com/loops/loops3.php
>>
>> at the bottom of the page it says:

>>
>> "Michael Thompson is a loop builder and has offered to make custom loops
>> for visitors of makearadio.com. Please contact him directly for details and
>> prices at this address: mltube@... "
>>
>> perhaps this person will build what you want......? GB& 73 K5OAI Sam
>> Morgan
>>
>> On 7/9/2011 10:33 AM, Tom wrote:
>>> I should have been more explicit. I don't want to build ANYTHING, be it
>>> plastic, metal, wood, buffalo horn...nothing!
>>>
>>> I want to buy a pre made form. "Back in the day" if you wanted to wind
>>> your own coils you could use toilet paper roles, dowl sticks, oatmeal
>>> boxes...anything. OR...you could buy pre made coil forms.
>>>
>>> I just thought there might be a maker of loop antenna forms. I guess
>>> not.
>>>
>>> Thank you all anyway.
>>>
>>> Tom

8656. Re: I'm Looking For A Loop Antenna Frame

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-13 02:08:22 UTC
From: Tom
Topic: 8637 Message: 8656

I did not use Yahoo mail. I used another email account. So if my yahoo bounces it's not relevant.

Tom

--- In loopantennas@yahoogroups.com, Sam Morgan <k5oai.sam@...> wrote:
>
> by the way your email address DOES bounce.....?
> I was going to send this off list, but since I can't
> I'll have to pose here
>
> in Google if you enter:
> "Michael Thompson" loop antennas
>
> the 6th links says:
>
> TheRadioBoard :: Search
> May 5, 2011 ☐ Hello All, Very Happy My name is Michael Thompson. Just letting
> all that may be interested in a Tuned Loop Antenna for your radio project, ...
> christopher.theradioboard.com/rb/search.php?search_author... - Cached
>
> click on the cached link
> http://tinyurl.com/5s52r6x
>
> so he posted back on May 5, 2011
> that he was still actively making antennas
>
> you might become a member of that board
> then try a private message to mltube
>
> if that don't work
> then he either doesn't want to respond
> or perhaps is having problems of his own
> computer, health, new girlfriend keeping him busy.....
> and for some reason can't respond?
> :-)
>
> good luck
>
> GB & 73
> K5OAI
> Sam Morgan
>
> On 7/12/2011 6:57 PM, Tom wrote:

> > I tried him. He doesn't respond to email. I know he received because it
> > didn't bounce back at me.
> >
> > Tom
> >
> > --- In loopantennas@yahoogroups.com, Sam Morgan<k5oai.sam@> wrote:
> >>
> >> on this page: http://makearadio.com/loops/loops3.php
> >>
> >> at the bottom of the page it says:
> >>
> >> "Michael Thompson is a loop builder and has offered to make custom loops
> >> for visitors of makearadio.com. Please contact him directly for details and
> >> prices at this address: mltube@ "
> >>
> >> perhaps this person will build what you want.....? GB& 73 K5OAI Sam
> >> Morgan
> >>
> >> On 7/9/2011 10:33 AM, Tom wrote:
> >>> I should have been more explicit. I don't want to build ANYTHING, be it
> >>> plastic, metal, wood, buffalo horn...nothing!
> >>>
> >>> I want to buy a pre made form. "Back in the day" if you wanted to wind
> >>> your own coils you could use toilet paper roles, dowl sticks, oatmeal
> >>> boxes...anything. OR...you could buy pre made coil forms.
> >>>
> >>> I just thought there might be a maker of loop antenna forms. I guess
> >>> not.
> >>>
> >>> Thank you all anyway.
> >>>
> >>> Tom
>

8657. Anyone used a PanCake Coil as a Loop antenna?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-13 19:59:22 UTC
From: w9ifz
Topic: 8657 Message: 8657

If one is building a magnetic loop antenna it appears the use of a pancake coil would have a better magnetic field pattern.

Wonder what the pros and cons of using one. Any references?

thanks, Stan AK0B

8658. Loop Antenna Components For Sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-13 20:20:10 UTC
From: AlfredR
Topic: 8658 Message: 8658

I have two complete sets of Loop Antenna components for sale. Each consist of three items (1) 12VDC Power Supply (2) Antenna connector module (3) Power unit module which connects 12 VDC and Antenna connector module. Both of these sets are brand new. They were built by Mark Bauman KB7GF of College Place WA. I purchased them 7 months ago and am not able to use them due to health problems at this time. I owned two previous models of these antenna's from Mark and they are great for LW/MW/SW reception! All you will need is a framework of wood or PVC around 3-4 feet and one or two turns of wire, depending on the frequency you are interested in. Asking $50.00 each plus $7.00 shipping. Photographs and further information available. Al Rugel Yucca Valley CA W6JHO

8659. MFJ Small loop tuners

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-19 17:42:51 UTC
From: Michael
Topic: 8659 Message: 8659

Hello, does anyone use any of MFJ's small loop tuners(933,935B,936B)?
If so, could you please explain how best to tune the loop and transmit
with regards to safe distance relative to MPE.

Thank you.

Mike, WB3KBB

8665. 2 videos Tecsun PL-380 using a 30cm diameter loop in place of the ferrite antenn

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-07-29 20:11:36 UTC
From: Milton
Topic: 8665 Message: 8665

2 videos Tecsun PL-380 using a 30cm diameter loop in place of the ferrite antenna and advantages

Hello friends,

After so much time trying to make time, I finally got
do 2 videos Tecsun PL-380 instead of using traditional antenna Amidon ferrite type 61 7.5 ", a homemade loop 30 cm in diameter with cardboard structure used in shoe soles, easily found in bookstores and for shoe making.

This cardboard, to be directed to the manufacture of shoe soles is very flexible and resilient and therefore the circumference needed for the circular loop antenna does not lose so easily, which allowed me to put the Terk AM loop 1000 even within this antenna to obtain the best possible signal and also noticed that the Q is very high as the circles are closer to each other.

With the permission of the moderator, here are the videos and also a link to my homemade antennas:

www.youtube.com/watch?v=NqXDV410iFc -> video made in Curitiba Tecsun the PL-380 loop antenna with a diameter of 30cm in capturing the Radio Gaucha 600Khz and canceling an interference with the Terk AM 1000 puts it in this loop. Uptake was much stronger than with the antenna Amidon ferrite type 61 with 7.5 ".

www.youtube.com/watch?v=y4j7sHwmoPM -> video made in Curitiba Tecsun the PL-380 with the same antenna picking up Radio Eldorado Criciuma, much stronger than with the antenna of Amidon ferrite type 61 with 7.5 " .

www.flickr.com/x/t/0102002/photos/11973886 @ N06 / -> photos of my antennas

I'm listening a lot to post delayed.

73'sa all and thank you for this opportunity to publish my experiences really crazy, based on what I see so many do.

Milton,
Curitiba / PR

8677. Please do NOT respond to spam

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-22 13:44:38 UTC
From: loopantennas-owner@yahoogroups.com
Topic: 8677 Message: 8677

Please do not post on the list about spam.

I welcome messages sent OFF LIST alerting me to spam.

When you reply to a spam to the list, it just clogs the list. If you leave the message attached, you are just reposting the spam. And worst of all if you hit Reply All, you are sending your message out to a lot of people who already know it is spam.

Thank you,
Steve Greenfield AE7HD
loopantennas moderator

8679. Help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-22 19:01:05 UTC
From: radiotech750
Topic: 8679 Message: 8679

I am trying to redo my BCB loop. I have the frame and wire on it but.... I got this variable 365pf cap that I have no idea how to hook up> I posted pics in the photo section.

Ernie

8680. Cap pictures

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-22 19:05:16 UTC
From: radiotech750
Topic: 8680 Message: 8680

The capacitor photos are loaded in under the name Ernies Capacitor

Ernie

8681. Re: [loopantennas] Help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-22 22:58:43 UTC
From: John Hoopes
Topic: 8679 Message: 8681

Go to my picture folder "John's Corner" and look at picture 2. One wire goes to the frame (rotor, which is mechanical connection) and the other to the stator which has two solder lugs. The two solder lugs can be joined to gether in parallel to provide more capactance.]

John

[Non-text portions of this message have been removed]

8682. Re: Help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-22 23:15:15 UTC
From: radiotech750
Topic: 8679 Message: 8682

I see the two solder lugs BUT where does the other side go? I am sorry I don't understand!

Ernie

--- In loopantennas@yahoogroups.com, John Hoopes <jdh1812@...> wrote:
>
> Go to my picture folder "John's Corner" and look at picture 2. One wire goes to the frame (rotor, which is mechanical connection) and the other to the stator which has two solder lugs. The two solder lugs can be joined to gether in parallel to provide more capactance.]
> ï¿½
> John
> ï¿½
> ï¿½
>
>
> [Non-text portions of this message have been removed]
>

8683. Re: Help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-23 14:54:23 UTC
From: legonedijk
Topic: 8679 Message: 8683

--- In loopantennas@yahoogroups.com, "radiotech750" <ranger2995@...> wrote:
>
> I see the two solder lugs BUT where does the other side go? I am sorry I don't understand!
>
> Ernie
>
> --- In loopantennas@yahoogroups.com, John Hoopes <jdh1812@> wrote:
> >
> > Go to my picture folder "John's Corner" and look at picture 2. One wire goes to the frame (rotor, which is mechanical connection) and the other to the stator which has two solder lugs. The two solder lugs can be joined to gether in parallel to provide more capactance.]
> > ï¿½
> > John
> > ï¿½
> > ï¿½
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
Ernie,

Go to "Photos" and look for "ernie_var_cap".

Hope it helps a little...

Regards,
jan

8684. Re: [loopantennas] Re: Help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-24 01:46:42 UTC
From: John Hoopes
Topic: 8679 Message: 8684

You have to make a mechanical connection to the frame. I mounted the cap to single sided PC board and connected one end of the loop to PC board using a ring terminal soldered to the loop wire. You can get ring terminals at the shack. Look at all my atenna photos.

From: radiotech750 <ranger2995@...>
To: loopantennas@yahoogroups.com
Sent: Monday, August 22, 2011 7:15 PM
Subject: [loopantennas] Re: Help!

I see the two solder lugs BUT where does the other side go? I am sorry I don't understand!

Ernie

--- In loopantennas@yahoogroups.com, John Hoopes <jdh1812@...> wrote:
>
> Go to my picture folder "John's Corner" and look at picture 2. One wire goes to the frame (rotor, which is mechanical connection) and the other to the stator which has two solder lugs. The two solder lugs can be joined to gether in parallel to provide more capactance.]
> ï¿½
> John
> ï¿½
> ï¿½
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

8685. Re: Help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-25 20:50:42 UTC
From: Bruce Carter
Topic: 8679 Message: 8685

From that top view - hook one side of the loop to the left lug. Hook the other side to the frame.

If this is already in a radio - whatever you do - do NOT hook the loop between the two lugs. Results would range somewhere from non-operational to downright potentially catastrophic in a tube unit!

If you are making a standalone box loop antenna, you may or may not hook the two sections in parallel to get more tuning range out of the loop. A bit of experimentation is sometimes called for ----

--- In loopantennas@yahoogroups.com, "radiotech750" <ranger2995@...> wrote:
>
> I am trying to redo my BCB loop. I have the frame and wire on it but.... I got this variable 365pf cap that I have no idea how to hook up> I posted pics in the photo section.
>
> Ernie
>

8686. How High Up Off A Metal Roof

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-27 15:26:31 UTC
From: stevenpender
Topic: 8686 Message: 8686

Thanx to the group for letting me join , I have a VERTICAL 40 Meter Delta Loop I'm going to mount above a metal sloping roof. What's the minimum height I need to get above the sheet metal? The Delta is a low aspect ratio loop (2.9:1 LxH) fed 12% up from the lower corner with the feed line is supported away from the loop.
Thanx in Advance
73 Steve

8687. Re: Help!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-08-28 17:53:22 UTC
From: legonedijk
Topic: 8679 Message: 8687

--- In loopantennas@yahoogroups.com, "radiotech750" <ranger2995@...> wrote:
>
> I am trying to redo my BCB loop. I have the frame and wire on it but.... I got this variable 365pf cap that I have no idea how to hook up> I posted pics in the photo section.
>
> Ernie
>
Hi Ernie,

Bruce, John and me want to know if you have any progres
with your BCB loop.

Tell us .....

Regards,
jan

8688. Fw: 160m DX Results w/ Air Core Loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-09-08 06:47:10 UTC
From: Jim Koshmider
Topic: 8688 Message: 8688

Oops - I sent the message below to the wrong address.

--- On Thu, 9/8/11, Jim Koshmider <k8oz1@...> wrote:

From: Jim Koshmider <k8oz1@yahoo.com>
Subject: 160m DX Results w/ Air Core Loops?
To: loopantennas@yahoo.com
Date: Thursday, September 8, 2011, 2:44 AM

Greetings to all -

I'm new to this group, and am looking forward to interesting dialogue on loop antennas.

Has anyone had good DX results on 160 meters using multi-turn air core loops?

Thanks - Will appreciate any reports of results -

Jim, K8OZ

[Non-text portions of this message have been removed]

8689. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-01 14:51:45 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 8689

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

8690. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-01 14:51:45 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 8690

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

8691. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-06 12:38:10 UTC
From: Bruce Carter
Topic: 5136 Message: 8691

Good resource, but some of the links are way out of date - I even saw a Geocities link on there!

My loop antenna stuff is now at:

http://www.earmark.net/gesr/loop

And I have to admit - some of my links are way out of date, too. But at least the good people at earmark have lent me a reliable hosting site.

--- In loopantennas@yahoogroups.com, loopantennas@...m wrote:
>
>
> Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
> http://www.ccrane.com/antennas/am-antennas/
>
> JLKolb's antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
> http://jlkolb.cts.com/site/ant.htm
>
> Directional Terminated MW/LW Loop by WellBroook (UK)
> K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
> http://www.wellbrook.uk.com/K9AY.html
>
> Kiwa - High Performance MW Air-Core Loop Antenna
> High Performance MW Air-Core Loop Antenna by KIWA
> http://www.kiwa.com/kiwaloop.html
>
> Palomar Engineers Loop Antennas LW-MW-SW2
> Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
> http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html
>
> The Quantum loop antennas, now V2.0
> http://www.dxtools.com/
>
> Terk AM loop at Amazon.com
> Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
> http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719
>
> WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
> http://wl1030.com/content/

>
> C Crane Company
> They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
> http://www.ccrane.com
>
> Kiwa Electronics
> Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
> http://www.kiwa.com
>
> Stormwise Ferrite Rods
> Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
> http://www.stormwise.com
>
> Universal Radio Company
> They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
> http://www.rffun.com
>
>
> ALA-1530
> Find the best UK LF/MF antenna here.
> http://www.wellbrook.uk.com/
>
> AOR
> This is the site that sells the AOR loop
> http://www.aorja.com/ant-e.html
>
> Kiwa Electronics
> The maker of the air core loop antenna and other useful items that you may want on your wish list.
> http://www.kiwa.com
>
> LF Engineering Company
> A group of engineers, who make products for VLF/LF listening even ELF loops!
> http://www.lfengineering.com
>
> Select A Tenna by Intensitronics Corp
> The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
> discontinued
>
> Terk Technolegies
> The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
> http://www.terk.com
>
> Torus Tuner Loop Company
> A very specially made loop that is almost as big as a hula hoop
> discontinued

>
>
> GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
> Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
> Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
> http://makeashorterlink.com/?Z5F025FE4
>
>
> When considering AM Loop Antennas . . .
> - - - It all comes down to Time? & Money?
>
> How much Time? Are you going to be 'using' the Loop Antenna for
> DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio
> Loop).
>
> How Much Money? Are you willing to spend for a Loop Antenna to get
> the kind of better reception you want.
>
> TBL: Time and Money translates to the AM Loop Antenna's Value to You.
>
>
> The average radio listener (97%), who wants better AM Radio
> Reception, can spend $100 or less and get an AM Loop Antenna that
> meets their needs.
>
> Here is a brief list of the more common AM Loop Antennas for $100 or
> less.
>
> * Twin Coil Ferrite AM Loop Antenna (Active)
> - - - http://www.ccrane.com/antennas/am-antennas/
>
> * Torus Tuner 27" Loop Antenna (Passive)
> - - - discontinued
>
> * Select-A-Tenna Model #541M (Passive)
> - - - discontinued
>
> * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>
> * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)
>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!

>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> #1. * Justice AM Loop Antenna (Active)
> > - - - discontinued
> >
>
> #2. * Torus Tuner 27" Loop Antenna (Passive)
> > - - - website gone
> >
>
> #3. * Select-A-Tenna Model #541M (Passive)
> > - - - website gone
> >
>
> #4. * Terk AM Advantage Loop Antenna (Passive)
> > - - - http://www.ccrane.com/antennas/am-antennas/
> >
>
> #5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> > - - - Discontinued (Find 'used' on eBay)
>
>
> >
> > * MTM Scientific AM Radio Loop Antenna (Passive)
> > * http://www.mtmscientific.com/loop.html
> > - - - Starter Kit, Deluxe Kit or Finished Antenna!
> >
> > * * * Home made 'Box' AM Loop Antennas
> > - Usually 20" to 24" in size
> > - - Generally a simple Passive antenna
> > - - - Can be made Active with an add-on amplifier
> >
> >
> > NOTE: Beyond $100 in the $200 to $400 range are the
> >
>
> #1.a. Kiwa MW Air Loop Antenna
>
> #1.b. Quantum Loop Antennas
>
> . . . #3. Palomar Loop Antenna
>
>
> Basic Wire Back Yard Loop Antennas
> Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters

where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
> http://www.radioworks.com/nloop.html
>
> K9AY: How to Build the K9AY Loop Receiving Antenna
> AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
> http://www.aytechnologies.com/Products/products.htm
>
> Six Foot Square by Six Turn Loop Antenna
> New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
> http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm
>
> Ten Foot Receiveing Loop for Low-Frequency DXing
> A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
> http://members.shaw.ca/ve7sl/loop.html
>
>
> Dave's HomeMade Loop Antennas
> This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
> http://www.schmarder.com/radios/misc-stuff/loops.htm
>
> 4 Foot Box loop antenna
> Heres a 4 foot loop project by Bruce
> http://www.mindspring.com/~brucec/loop2.htm
>
> ATL-3 Loop Antenna by Graham Maynard (UK)
> Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
> http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm
>
> Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
> The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
> http://www.radiointel.com/anthooploop.htm
>
> DXers Tool Box - DIY - Tuned Loop Antenna
> The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
> http://www.geocities.com/SunsetStrip/Underground/8585/loop.html
>
> Embrodary Loops
> While these loop are for crafts, they can be a craft of art for improved AM radio reception!
> http://www.craftking.com/crafthtml/embroidery_loops.htm
>

> Hard Core DXing
> Here's what nordic dx has to offer in their discription of loops in this website
> http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html
>
> K5DKZ - Three Foot Box Loop Antenna Kit
> Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
> http://www.k5dkz.com/4loop1.html
>
> KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
> KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
> http://www.mtmscientific.com/loop.html
>
> Long LoopStick Antenna for MW DXing
> Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
> http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm
>
> TL Loop Receiving Antenna 10 KHz - 30 MHz
> The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
> http://ecforster.netfirms.com/LpAnt/Doc1.html
>
>
> W2BRI Xmit Loops Contributed by n3hkn
> Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
> http://www.standpipe.com/w2bri/index.htm
>
> "AM Loop Antenna Calculator" - by Bruce Carter
> Here is a Great Tool for those Loop Antenna => "What Ifs...."
> http://www.mindspring.com/~loop_antenna/amloop_calc4.htm
>
> "Loop Antennas 101" Read This First
> Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
> http://www.frontiernet.net/~jadale/Loop.htm
>
> * NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
> Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
> http://www.mindspring.com/~loop_antenna/
>

> Loop Antennas at Hard Core DX
> TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Loops and Rods =&= The Ferrite Rod Antenna
> Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
> http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html
>
> Modify the common AM Radio Loop Antenna
> Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Sensitivity of Multi Turn Receiving Loops
> LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
> http://www.vlf.it/octoloop/rlt-n4ywk.htm
>
> Using the Small Loop Antenna by Joe Carr
> DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
> http://www.dxing.com/tnotes/tnote09.pdf
>
>
> How to Get Better AM Radio Reception
> Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
> http://geocities.com/SunsetStrip/Towers/3332/amradio.html
>
> Introduction to Broadcast Band AM/BCB/MW DXing
> The International Radio Club of America (IRCA) WebPages
> http://www.geocities.com/Heartland/5792/bcbdx.htm
>
>
> ** Radio-Antenna-PRO ** H.Hertz-Forum
> Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
> http://groups.yahoo.com/group/Hz/
>
>
> Radio DXing with The Interference Problem
> This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
> http://groups.yahoo.com/group/RadioDx/

>
>
> "3805er" 80-Meter balanced coax loop
> Small shielded rx only loop for 80 meters
> http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm
>
> Magnetic Loop Antennas Receiving - by W8JI
> This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
> http://www.w8ji.com/magnetic_receiving_loops.htm
>
> Radiation and Fields (Magnetic Loop Antennas) - by W8JI
> This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
> http://www.w8ji.com/radiation_and_fields.htm
>
> Shielded-Loop Receiving Antenna by N5FC
> Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
> http://www.io.com/~n5fc/loop_ant.html
>
> Antique Electronic Supply
> A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
> http://www.tubesandmore.com
>
> Fair Radio Sales
> A wide variety of electronic components, radios, and variable capacitors for your loop antenna
> http://www.fairradio.com/
>
> Ocean State Electronics
> Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
> http://www.oselectronics.com/ose_p96.htm
>
> The Crystal Set Society
> Here are some capacitor available from a club that devotes to Crystal Set Radio
> http://www.midnightscience.com/catalog5.html
>
> The Surplus Sales of Nebraska
> This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
> http://www.surplussales.com/Variables/AirVariables/AirVar1.html
>
>
> Dan Small Parts and Kits
> Dan's wide selection from Canada.
> http://www.danssmallpartsandkits.net/
>
>

> American Science and Surplus
> A big spool of wire here just about for AM
> http://www.sciplus.com/category.cfm?subsection=15&category=150
>
> DigiKey.com
> For ribbon cable and other sorts of wire.
> http://www.digikey.com
>
> Femco Magnet Wire
> Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
> http://www.femcomagnetwire.com/
>
> Litz-Wire,com
> Welcome to Litz-Wire.com!
> http://www.litz-wire.com/
>
> MCM electronics
> They do sell wire and magnet wire here
> http://www.mcmelectronics.com
>
> MWS Industries
> A place for all sorts of wire for business and industry
> http://www.mwswire.com
>
> Magnet Wire from Radio Shack
> This is what I use often
> http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345
>
> Mouser Electronics
> Mouser has the biggest spools here for a great price, that makes sense
> http://www.mouser.com
>
> Ocean State Electronics
> magnet wire at a good price
> http://www.oselectronics.com
>
> WIRE "Flex-Weave" Antenna Wire
> "Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
> http://www.radio-ware.com/products/fw.htm
>
> WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
> "QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
> http://www.antennasmore.com/wire&.htm

>
> Scanning, Ham Radio and Public Safety Resources
> - Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
> http://myweb.accessus.net/~090/resources-ps.html
>
> Amidon Ferrite rods, bars, plates, and tubes.
> https://www.amidoncorp.com/
>
> Bytemark Ferrite rods, bars, plates, and tubes.
> http://www.bytemark.com/products/rod1.htm
>

8692. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-10 14:19:42 UTC
From: shibukiau
Topic: 5136 Message: 8692

I didn't see the PIXEL LOOP listed anywhere. Check it out at ----

http://store.xmfanstore.com/pixel-technologies-magnetic-loop-antenna-pro-1.html

After buying the first one at its introduction in Dayton in 2010, I got another one for a second remote site. Nicely made loop, made and sold in the States.

Lloyd
VE3ERQ/VK4ERQ

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> Good resource, but some of the links are way out of date - I even saw a Geocities link on there!
>
> My loop antenna stuff is now at:
>
> http://www.earmark.net/gesr/loop
>
> And I have to admit - some of my links are way out of date, too. But at least the good people at earmark have lent me a reliable hosting site.
>
> --- In loopantennas@yahoogroups.com, loopantennas@yahoogroups.com wrote:
> >
> >
> > Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
> > http://www.ccrane.com/antennas/am-antennas/
> >
> > JLKolb's antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
> > http://jlkolb.cts.com/site/ant.htm
> >
> > Directional Terminated MW/LW Loop by WellBroook (UK)
> > K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
> > http://www.wellbrook.uk.com/K9AY.html
> >
> > Kiwa - High Performance MW Air-Core Loop Antenna
> > High Performance MW Air-Core Loop Antenna by KIWA
> > http://www.kiwa.com/kiwaloop.html
> >
> > Palomar Engineers Loop Antennas LW-MW-SW2
> > Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
> > http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

> >
> > The Quantum loop antennas, now V2.0
> > http://www.dxtools.com/
> >
> > Terk AM loop at Amazon.com
> > Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
> > http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719
> >
> > WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
> > http://wl1030.com/content/
> >
> > C Crane Company
> > They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
> > http://www.ccrane.com
> >
> > Kiwa Electronics
> > Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
> > http://www.kiwa.com
> >
> > Stormwise Ferrite Rods
> > Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
> > http://www.stormwise.com
> >
> > Universal Radio Company
> > They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
> > http://www.rffun.com
> >
> >
> > ALA-1530
> > Find the best UK LF/MF antenna here.
> > http://www.wellbrook.uk.com/
> >
> > AOR
> > This is the site that sells the AOR loop
> > http://www.aorja.com/ant-e.html
> >
> > Kiwa Electronics
> > The maker of the air core loop antenna and other useful items that you may want on your wish list.
> > http://www.kiwa.com
> >
> > LF Engineering Company
> > A group of engineers, who make products for VLF/LF listening even ELF loops!
> > http://www.lfengineering.com
> >

> > Select A Tenna by Intensitronics Corp
> > The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
> > discontinued
> >
> > Terk Technolegies
> > The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
> > http://www.terk.com
> >
> > Torus Tuner Loop Company
> > A very specially made loop that is almost as big as a hula hoop
> > discontinued
> >
> >
> > GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
> > Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
> > Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
> > http://makeashorterlink.com/?Z5F025FE4
> >
> >
> > When considering AM Loop Antennas . . .
> > - - - It all comes down to Time? & Money?
> >
> > How much Time? Are you going to be 'using' the Loop Antenna for
> > DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio
> > Loop).
> >
> > How Much Money? Are you willing to spend for a Loop Antenna to get
> > the kind of better reception you want.
> >
> > TBL: Time and Money translates to the AM Loop Antenna's Value to You.
> >
> >
> > The average radio listener (97%), who wants better AM Radio
> > Reception, can spend $100 or less and get an AM Loop Antenna that
> > meets their needs.
> >
> > Here is a brief list of the more common AM Loop Antennas for $100 or
> > less.
> >
> > * Twin Coil Ferrite AM Loop Antenna (Active)
> > - - - http://www.ccrane.com/antennas/am-antennas/
> >
> > * Torus Tuner 27" Loop Antenna (Passive)
> > - - - discontinued

> >
> > * Select-A-Tenna Model #541M (Passive)
> > - - - discontinued
> >
> > * Terk AM Advantage Loop Antenna (Passive)
> > - - - http://www.terk.com/pdfs/Advantage.pdf
> >
> > * RadioShack AM Loop Antanna # 15-1853 (Passive)
> > - - - Discontinued (Find 'used' on eBay)
> >
> > * MTM Scientific AM Radio Loop Antenna (Passive)
> > * http://www.mtmscientific.com/loop.html
> > - - - Starter Kit, Deluxe Kit or Finished Antenna!
> >
> > * * * Home made 'Box' AM Loop Antennas
> > - Usually 20" to 24" in size
> > - - Generally a simple Passive antenna
> > - - - Can be made Active with an add-on amplifier
> >
> >
> > #1. * Justice AM Loop Antenna (Active)
> > > - - - discontinued
> > >
> >
> > #2. * Torus Tuner 27" Loop Antenna (Passive)
> > > - - - website gone
> > >
> >
> > #3. * Select-A-Tenna Model #541M (Passive)
> > > - - - website gone
> > >
> >
> > #4. * Terk AM Advantage Loop Antenna (Passive)
> > > - - - http://www.ccrane.com/antennas/am-antennas/
> > >
> >
> > #5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> > > - - - Discontinued (Find 'used' on eBay)
> > >
> >
> > >
> > > * MTM Scientific AM Radio Loop Antenna (Passive)
> > > * http://www.mtmscientific.com/loop.html
> > > - - - Starter Kit, Deluxe Kit or Finished Antenna!
> > >
> > > * * * Home made 'Box' AM Loop Antennas
> > > - Usually 20" to 24" in size
> > > - - Generally a simple Passive antenna
> > > - - - Can be made Active with an add-on amplifier
> > >

> > >
> > > NOTE: Beyond $100 in the $200 to $400 range are the
> > >
> >
> > #1.a. Kiwa MW Air Loop Antenna
> >
> > #1.b. Quantum Loop Antennas
> >
> > . . . #3. Palomar Loop Antenna
> >
> >
> > Basic Wire Back Yard Loop Antennas
> > Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
> > http://www.radioworks.com/nloop.html
> >
> > K9AY: How to Build the K9AY Loop Receiving Antenna
> > AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
> > http://www.aytechnologies.com/Products/products.htm
> >
> > Six Foot Square by Six Turn Loop Antenna
> > New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
> > http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm
> >
> > Ten Foot Receiveing Loop for Low-Frequency DXing
> > A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
> > http://members.shaw.ca/ve7sl/loop.html
> >
> >
> > Dave's HomeMade Loop Antennas
> > This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
> > http://www.schmarder.com/radios/misc-stuff/loops.htm
> >
> > 4 Foot Box loop antenna
> > Heres a 4 foot loop project by Bruce
> > http://www.mindspring.com/~brucec/loop2.htm
> >
> > ATL-3 Loop Antenna by Graham Maynard (UK)
> > Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
> > http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm
> >
> > Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
> > The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom

presented by RadioIntel.Com.
> > http://www.radiointel.com/anthooploop.htm
> >
> > DXers Tool Box - DIY - Tuned Loop Antenna
> > The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
> > http://www.geocities.com/SunsetStrip/Underground/8585/loop.html
> >
> > Embrodary Loops
> > While these loop are for crafts, they can be a craft of art for improved AM radio reception!
> > http://www.craftking.com/crafthtml/embroidery_loops.htm
> >
> > Hard Core DXing
> > Here's what nordic dx has to offer in their discription of loops in this website
> > http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html
> >
> > K5DKZ - Three Foot Box Loop Antenna Kit
> > Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
> > http://www.k5dkz.com/4loop1.html
> >
> > KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
> > KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
> > http://www.mtmscientific.com/loop.html
> >
> > Long LoopStick Antenna for MW DXing
> > Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
> > http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm
> >
> > TL Loop Receiving Antenna 10 KHz - 30 MHz
> > The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
> > http://ecforster.netfirms.com/LpAnt/Doc1.html
> >
> >
> > W2BRI Xmit Loops Contributed by n3hkn
> > Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
> > http://www.standpipe.com/w2bri/index.htm
> >
> > "AM Loop Antenna Calculator" - by Bruce Carter
> > Here is a Great Tool for those Loop Antenna => "What Ifs...."
> > http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

> >
> > "Loop Antennas 101" Read This First
> > Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
> > http://www.frontiernet.net/~jadale/Loop.htm
> >
> > * NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
> > Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
> > http://www.mindspring.com/~loop_antenna/
> >
> > Loop Antennas at Hard Core DX
> > TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
> > http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
> >
> > Loops and Rods =&= The Ferrite Rod Antenna
> > Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
> > http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html
> >
> > Modify the common AM Radio Loop Antenna
> > Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
> > http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
> >
> > Sensitivity of Multi Turn Receiving Loops
> > LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
> > http://www.vlf.it/octoloop/rlt-n4ywk.htm
> >
> > Using the Small Loop Antenna by Joe Carr
> > DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
> > http://www.dxing.com/tnotes/tnote09.pdf
> >
> >
> > How to Get Better AM Radio Reception
> > Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
> > http://geocities.com/SunsetStrip/Towers/3332/amradio.html
> >
> > Introduction to Broadcast Band AM/BCB/MW DXing
> > The International Radio Club of America (IRCA) WebPages
> > http://www.geocities.com/Heartland/5792/bcbdx.htm
> >
> >

> > ** Radio-Antenna-PRO ** H.Hertz-Forum
> > Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
> > http://groups.yahoo.com/group/Hz/
> >
> >
> > Radio DXing with The Interference Problem
> > This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
> > http://groups.yahoo.com/group/RadioDx/
> >
> >
> > "3805er" 80-Meter balanced coax loop
> > Small shielded rx only loop for 80 meters
> > http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm
> >
> > Magnetic Loop Antennas Receiving - by W8JI
> > This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
> > http://www.w8ji.com/magnetic_receiving_loops.htm
> >
> > Radiation and Fields (Magnetic Loop Antennas) - by W8JI
> > This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
> > http://www.w8ji.com/radiation_and_fields.htm
> >
> > Shielded-Loop Receiving Antenna by N5FC
> > Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
> > http://www.io.com/~n5fc/loop_ant.html
> >
> > Antique Electronic Supply
> > A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
> > http://www.tubesandmore.com
> >
> > Fair Radio Sales
> > A wide variety of electronic components, radios, and variable capacitors for your loop antenna
> > http://www.fairradio.com/
> >
> > Ocean State Electronics
> > Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
> > http://www.oselectronics.com/ose_p96.htm
> >
> > The Crystal Set Society
> > Here are some capacitor available from a club that devotes to Crystal Set Radio

> > http://www.midnightscience.com/catalog5.html
> >
> > The Surplus Sales of Nebraska
> > This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
> > http://www.surplussales.com/Variables/AirVariables/AirVar1.html
> >
> >
> > Dan Small Parts and Kits
> > Dan's wide selection from Canada.
> > http://www.danssmallpartsandkits.net/
> >
> >
> > American Science and Surplus
> > A big spool of wire here just about for AM
> > http://www.sciplus.com/category.cfm?subsection=15&category=150
> >
> > DigiKey.com
> > For ribbon cable and other sorts of wire.
> > http://www.digikey.com
> >
> > Femco Magnet Wire
> > Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
> > http://www.femcomagnetwire.com/
> >
> > Litz-Wire,com
> > Welcome to Litz-Wire.com!
> > http://www.litz-wire.com/
> >
> > MCM electronics
> > They do sell wire and magnet wire here
> > http://www.mcmelectronics.com
> >
> > MWS Industries
> > A place for all sorts of wire for business and industry
> > http://www.mwswire.com
> >
> > Magnet Wire from Radio Shack
> > This is what I use often
> > http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345
> >
> > Mouser Electronics
> > Mouser has the biggest spools here for a great price, that makes sense
> > http://www.mouser.com
> >
> > Ocean State Electronics
> > magnet wire at a good price
> > http://www.oselectronics.com

> >
> > WIRE "Flex-Weave" Antenna Wire
> > "Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
> > http://www.radio-ware.com/products/fw.htm
> >
> > WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
> > "QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
> > http://www.antennasmore.com/wire&.htm
> >
> > Scanning, Ham Radio and Public Safety Resources
> > - Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
> > http://myweb.accessus.net/~090/resources-ps.html
> >
> > Amidon Ferrite rods, bars, plates, and tubes.
> > https://www.amidoncorp.com/
> >
> > Bytemark Ferrite rods, bars, plates, and tubes.
> > http://www.bytemark.com/products/rod1.htm
> >
>

8693. MFJ1788

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-10 19:40:34 UTC
From: Steve Roberts
Topic: 8693 Message: 8693

My MFJ1788 has arrived after a wait of 6 months and 3 days (Ordered April 4th).
Out of the box it looks good and the manual seems more than adequate.
Now the fun begins ~ erection and testing

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

[Non-text portions of this message have been removed]

8694. Re: [loopantennas] MFJ1788

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-11 01:12:17 UTC
From: dreagin@q.com
Topic: 8693 Message: 8694

Please give us on the group here your review of the MFJ 1788.I have been looking closely at the MFJ 1786 myself..73..D.Reagin W7KB.

----- Original Message -----
From: Steve Roberts <sr888@...>
To: loopantennas@yahoogroups.com
Sent: Mon, 10 Oct 2011 15:40:34 -0400 (EDT)
Subject: [loopantennas] MFJ1788

My MFJ1788 has arrived after a wait of 6 months and 3 days (Ordered April

4th).

Out of the box it looks good and the manual seems more than adequate.

Now the fun begins ~ erection and testing

Regards,

Steve Roberts VE3LEH

Professional Engineer

2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7

Tel 905-827-8462

Fax 905-827-1467

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE

PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail

message and/or any attachments thereto may be confidential, legally

privileged, and/or exempt from disclosure under applicable law. If you are

not the intended recipient, please notify me immediately by return email,

and delete this message from your system. Thank you. Note: We have taken

precautions against viruses, but take no responsibility for loss or damage

caused by any virus present.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8695. Re: [loopantennas] MFJ1788

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-11 06:10:19 UTC
From: Steve, g4vbd
Topic: 8693 Message: 8695

Hi D
There is a review on eham.net if you can't wait for Steves' review - seems more people love it rather than hate it !

http://www.eham.net/reviews/detail/2992

regards
Steve,g4vbd

On Tue, Oct 11, 2011 at 2:12 AM, <dreagin@...> wrote:

> **
>
>
> Please give us on the group here your review of the MFJ 1788.I have been
> looking closely at the MFJ 1786 myself..73..D.Reagin W7KB.
>
> ----- Original Message -----
> From: Steve Roberts <sr888@cogeco.ca>
> To: loopantennas@yahoogroups.com
> Sent: Mon, 10 Oct 2011 15:40:34 -0400 (EDT)
> Subject: [loopantennas] MFJ1788
>
> My MFJ1788 has arrived after a wait of 6 months and 3 days (Ordered April
>
> 4th).
>
> Out of the box it looks good and the manual seems more than adequate.
>
> Now the fun begins ~ erection and testing
>
> Regards,
>
> Steve Roberts VE3LEH
>
> Professional Engineer
>
> 2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
>
> Tel 905-827-8462
>
> Fax 905-827-1467
>
> --
>
> ----

>
> THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE
>
> PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail
>
> message and/or any attachments thereto may be confidential, legally
>
> privileged, and/or exempt from disclosure under applicable law. If you are
>
> not the intended recipient, please notify me immediately by return email,
>
> and delete this message from your system. Thank you. Note: We have taken
>
> precautions against viruses, but take no responsibility for loss or damage
>
> caused by any virus present.
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

8696. Re: [loopantennas] MFJ1788

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-11 14:27:10 UTC
From: dreagin@q.com
Topic: 8693 Message: 8696

Thanks,Steve...I have read the reviews on both the MFJ 1788 & 1786 models on eham.net reviews a few times over and also the G4TPH website on mag loops.The more I hear about them the better.You are right,the majority of reviews on this product have been very favorable along with the Alex Walkham loop.73...W7KB.
----- Original Message -----
From: g4vbd Steve <steve.g4vbd@...>
To: loopantennas@yahoogroups.com
Sent: Tue, 11 Oct 2011 02:10:19 -0400 (EDT)
Subject: Re: [loopantennas] MFJ1788

Hi D
There is a review on eham.net if you can't wait for Steves' review - seems
more people love it rather than hate it !

http://www.eham.net/reviews/detail/2992

regards
Steve,g4vbd

On Tue, Oct 11, 2011 at 2:12 AM, <dreagin@...> wrote:

> **
>
>
> Please give us on the group here your review of the MFJ 1788.I have been
> looking closely at the MFJ 1786 myself..73..D.Reagin W7KB.
>
> ----- Original Message -----
> From: Steve Roberts <sr888@...>
> To: loopantennas@yahoogroups.com
> Sent: Mon, 10 Oct 2011 15:40:34 -0400 (EDT)
> Subject: [loopantennas] MFJ1788
>
> My MFJ1788 has arrived after a wait of 6 months and 3 days (Ordered April
>
> 4th).
>
> Out of the box it looks good and the manual seems more than adequate.
>
> Now the fun begins ~ erection and testing
>
> Regards,
>
> Steve Roberts VE3LEH
>
> Professional Engineer

>
> 2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
>
> Tel 905-827-8462
>
> Fax 905-827-1467
>
> --
>
> ----
>
> THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE
>
> PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail
>
> message and/or any attachments thereto may be confidential, legally
>
> privileged, and/or exempt from disclosure under applicable law. If you are
>
> not the intended recipient, please notify me immediately by return email,
>
> and delete this message from your system. Thank you. Note: We have taken
>
> precautions against viruses, but take no responsibility for loss or damage
>
> caused by any virus present.
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

8697. MFJ1788

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-12 21:35:55 UTC
From: Steve Roberts
Topic: 8693 Message: 8697

* My main column is 1-3/4" diameter thick wall aluminum but MFJ1788
only accepts 1-1/2"diameter so decided as this loop is partially directional
to introduce a new rotor that I had in stock for some time..
* Quick trip to metal supper market and obtained 1-1/2"diameter thick
walled tube stub length to go in top portion of rotor. Squared the ends in
the lathe and chamfered ends.
* The first problem (and hope the only one) to come to light was that
the hole centers of the antenna clamping hardware did not match the threaded
mounting holes in the loop body. With a suitable carbide end mill in the
milling machine elongated the holes and rectified the problem. This could
have been done with a round file but there are twelve holes to rectify and
it would have been tedious by hand.
* Assembled rotor to main pole column and assembled loop antenna to
the rotor using the new stub tube.
* Raised the assembly (wobbly as I am old and weak) with column end on
ground into main clamping hardware of bracket.
* Wired rotor (70 feet from house)
* RAIN STOPPED PLAY!!!! Will wire antenna and push column up into the
air on a sunny day.

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE
PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail
message and/or any attachments thereto may be confidential, legally
privileged, and/or exempt from disclosure under applicable law. If you are
not the intended recipient, please notify me immediately by return email,
and delete this message from your system. Thank you. Note: We have taken
precautions against viruses, but take no responsibility for loss or damage
caused by any virus present.

[Non-text portions of this message have been removed]

8698. Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-28 01:13:52 UTC
From: vtnn43e48073
Topic: 8698 Message: 8698

I have a Pixel loop that I want to get up before the snow starts to fly. Since I need a light duty rotor to turn it I was wondering what is considered to be a reliable one to buy? Took a look at the reviews on eham and there are not a lot of TV rotors available anymore and the Channel Master 9521A gets pretty bad reviews.

So if you were to buy a new TV type rotor which one would you suggest?

73
Zack
N8FNR

8699. Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-28 02:23:43 UTC
From: Steve Roberts
Topic: 8698 Message: 8699

Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top of it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788 is not very directional but more about that later.

Regards,
Steve Roberts VE3LEH
.2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
.--

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

[Non-text portions of this message have been removed]

8700. Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-28 05:42:34 UTC
From: Bill McGraw
Topic: 8698 Message: 8700

--- On Thu, 10/27/11, Steve Roberts <sr888@...> wrote:

Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top of
it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788
is not very directional but more about that later.

Steve,

What arrangement for a tower do you have and is it 70 feet away or up from your home?

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8701. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-28 18:05:21 UTC
From: Steve Roberts
Topic: 8698 Message: 8701

Hello Bill,
No tower involved Bill (I had to give up tower and yagi antennas 4 years ago when we downsized, I got old!). The MFJ1788 is pipe mounted on a garden shed and is 16 feet up in the air. I have another 4 feet sticking out bottom of bracket so with help I can get it 20 feet up in the air.
I have constructed SM0VPO Harry Lythall 80 meter 5 turn loop antenna and ready to test this coming week.
I can send you photographs if you so wish.
I worked in Chicago back in 1965 on loan from England for a very large press company, enjoyed that time.
Cheers Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Bill McGraw
Sent: October 28, 2011 1:43 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

--- On Thu, 10/27/11, Steve Roberts <sr888@...
<mailto:sr888%40cogeco.ca> > wrote:

Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top of it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788 is not very directional but more about that later.

Steve,

What arrangement for a tower do you have and is it 70 feet away or up from your home?

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8702. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-28 20:47:26 UTC
From: Steve Roberts
Topic: 8698 Message: 8702

Hi Bill,
Attached is a digi pic of the 5 turn loop. I am currently assembling the 25 pf variable capacitor and the drive motor. I have yet to thread in the 1/2 turn transmitting loop with coax connector..
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Bill McGraw
Sent: October 28, 2011 1:43 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

--- On Thu, 10/27/11, Steve Roberts <sr888@...
<mailto:sr888%40cogeco.ca> > wrote:

Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top of it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788 is not very directional but more about that later.

Steve,

What arrangement for a tower do you have and is it 70 feet away or up from your home?

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8703. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-28 20:49:34 UTC
From: Steve Roberts
Topic: 8698 Message: 8703

Hi Bill,
Here are two digi pics of the MFJ1788.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Bill McGraw
Sent: October 28, 2011 1:43 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

--- On Thu, 10/27/11, Steve Roberts <sr888@...
<mailto:sr888%40cogeco.ca> > wrote:

Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top of it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788 is not very directional but more about that later.

Steve,

What arrangement for a tower do you have and is it 70 feet away or up from your home?

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8704. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-28 21:04:48 UTC
From: dreagin@q.com
Topic: 8698 Message: 8704

Hello,Steve...I was wondering if you could offer your own review of the MFJ-1788 mag loop antenna...Does this loop work well for you mounted at this height above ground?.. And the power level you are running it at?...I have been doing some recent research on the MFJ-1786 model.I have read some great eham.net reviews on both models and was curious of your findings.73...Dennis Reagin W7KB.

----- Original Message -----
From: Steve Roberts <sr888@cogeco.ca>
To: loopantennas@yahoogroups.com
Cc: loopantennas@...m
Sent: Fri, 28 Oct 2011 14:05:21 -0400 (EDT)
Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Hello Bill,

No tower involved Bill (I had to give up tower and yagi antennas 4 years ago

when we downsized, I got old!). The MFJ1788 is pipe mounted on a garden shed

and is 16 feet up in the air. I have another 4 feet sticking out bottom of

bracket so with help I can get it 20 feet up in the air.

I have constructed SM0VPO Harry Lythall 80 meter 5 turn loop antenna and

ready to test this coming week.

I can send you photographs if you so wish.

I worked in Chicago back in 1965 on loan from England for a very large

press company, enjoyed that time.

Cheers Steve Roberts VE3LEH

-----Original Message-----

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On

Behalf Of Bill McGraw

Sent: October 28, 2011 1:43 AM

To: loopantennas@yahoogroups.com

Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

--- On Thu, 10/27/11, Steve Roberts <sr888@...

<mailto:sr888%40cogeco.ca> > wrote:

Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top of it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788 is not very directional but more about that later.

Steve,

What arrangement for a tower do you have and is it 70 feet away or up from your home?

Bill McGraw, KF5FJZ, NRA Life

"Somewhere South of Chicago"

Greenville, Mississippi

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8705. Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-28 22:03:09 UTC
From: Sam Morgan
Topic: 8698 Message: 8705

I would like photos and any other info you have on the loop, please

TIA

GB & 73
K5OAI
Sam Morgan

On 10/28/2011 1:05 PM, Steve Roberts wrote:
> Hello Bill,
> No tower involved Bill (I had to give up tower and yagi antennas 4 years ago
> when we downsized, I got old!). The MFJ1788 is pipe mounted on a garden shed
> and is 16 feet up in the air. I have another 4 feet sticking out bottom of
> bracket so with help I can get it 20 feet up in the air.
> I have constructed SM0VPO Harry Lythall 80 meter 5 turn loop antenna and
> ready to test this coming week.
> I can send you photographs if you so wish.
> I worked in Chicago back in 1965 on loan from England for a very large
> press company, enjoyed that time.
> Cheers Steve Roberts VE3LEH
>
> -----Original Message-----
> From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
> Behalf Of Bill McGraw
> Sent: October 28, 2011 1:43 AM
> To: loopantennas@yahoogroups.com
> Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop
>

> --- On Thu, 10/27/11, Steve Roberts<sr888@...
> <mailto:sr888%40cogeco.ca> > wrote:
>
>
>
> Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top of
> it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788
> is not very directional but more about that later.
>
> Steve,
>
> What arrangement for a tower do you have and is it 70 feet away or up from
> your home?
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi

>

8706. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-29 01:37:50 UTC
From: Steve Roberts
Topic: 8698 Message: 8706

Hello Sam,
I have attached two digi pics of the 5 turn loop. I have to add the 1/2 turn transmitting loop and build the variable capacitor with motor gearbox. I hope to test this next week.
I have also attached the picture of the MFJ1788 loop mounted on my garden shed. This is a hard antenna to work with as its tuning is so narrow. I am learning some tricks and hope to improve.

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467
Cell 416-786-7485

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Sam Morgan
Sent: October 28, 2011 6:03 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

I would like photos and any other info you have on the loop, please

TIA

GB & 73
K5OAI
Sam Morgan

On 10/28/2011 1:05 PM, Steve Roberts wrote:
> Hello Bill,
> No tower involved Bill (I had to give up tower and yagi antennas 4 years ago
> when we downsized, I got old!). The MFJ1788 is pipe mounted on a garden

shed
> and is 16 feet up in the air. I have another 4 feet sticking out bottom of
> bracket so with help I can get it 20 feet up in the air.
> I have constructed SM0VPO Harry Lythall 80 meter 5 turn loop antenna and
> ready to test this coming week.
> I can send you photographs if you so wish.
> I worked in Chicago back in 1965 on loan from England for a very large
> press company, enjoyed that time.
> Cheers Steve Roberts VE3LEH
>
> -----Original Message-----
> From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
[mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
] On
> Behalf Of Bill McGraw
> Sent: October 28, 2011 1:43 AM
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel
loop
>

> --- On Thu, 10/27/11, Steve Roberts<sr888@...
<mailto:sr888%40cogeco.ca>
> <mailto:sr888%40cogeco.ca> > wrote:
>
>
>
> Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top
of
> it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788
> is not very directional but more about that later.
>
> Steve,
>
> What arrangement for a tower do you have and is it 70 feet away or up from
> your home?
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>

[Non-text portions of this message have been removed]

8707. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-29 02:00:55 UTC
From: Steve Roberts
Topic: 8698 Message: 8707

Hello Dennis,
I am a complete beginner relative to loop antenna's but I tend to go overboard every time I venture into new territory and this is the case with this project!
Per your request I have attached two digi pics, one shows the 5 turn loop to which I have to ad a 1/2 turn transmitting loop. The other digi pic is the build of the variable capacitor with the motor and gearbox together with the waterproof box.
Also I attached a picture of the MFJ1788.
I work with an Icom 756PRO2 which has 100 watts HOWEVER the tuning of the MFJ1788 has to be done at low power 1 to 20 watts. I find the tuning frustrating so far but hope to learn a few tricks. The problem is I am used to cruising the entire band using Yagi and when one finds a station just responding right away. Not so with a loop antenna as the tuning is so narrow and you can cruise to receive but you can not transmit on what you find until you have retuned. Mind you for an antenna only 36" in diameter I suppose one can not complain.
I have not yet learned how to upload pictures so sort of hope these go out to others at the same time.

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of dreagin@...
Sent: October 28, 2011 5:05 PM
To: loopantennas@yahoogroups.com
Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Hello,Steve...I was wondering if you could offer your own review of the MFJ-1788 mag loop antenna...Does this loop work well for you mounted at this height above ground?.. And the power level you are running it at?...I have been doing some recent research on the MFJ-1786 model.I have read some great eham.net reviews on both models and was curious of your findings.73...Dennis Reagin W7KB.

----- Original Message -----
.

[Non-text portions of this message have been removed]

8708. Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-29 02:15:15 UTC
From: Jim Miller
Topic: 8698 Message: 8708

Attachments to Yahoogroups get stripped. Please post in photos area.

Jim

[Non-text portions of this message have been removed]

8709. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-29 05:06:49 UTC
From: dreagin@q.com
Topic: 8698 Message: 8709

Thanks,Steve for your input...Yes,patience is in order here tuning the loop antennas,sort of like working QRP.I guess that is why it is called a "Hi-Q" loop antenna with it's narrow bandwith.This should also help to eliminate some adjacent interference working near others on the bands and being somewhat directional it will also help on the receive side.I do though,like the fact that one can push up to 150 watts into it,making it an efficient radiator.73....Dennis W7KB.

----- Original Message -----
From: Steve Roberts <sr888@...>
To: loopantennas@yahoogroups.com
Sent: Fri, 28 Oct 2011 22:00:55 -0400 (EDT)
Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Hello Dennis,

I am a complete beginner relative to loop antenna's but I tend to go

overboard every time I venture into new territory and this is the case with

this project!

Per your request I have attached two digi pics, one shows the 5 turn loop to

which I have to ad a 1/2 turn transmitting loop. The other digi pic is the

build of the variable capacitor with the motor and gearbox together with the

waterproof box.

Also I attached a picture of the MFJ1788.

I work with an Icom 756PRO2 which has 100 watts HOWEVER the tuning of the

MFJ1788 has to be done at low power 1 to 20 watts. I find the tuning

frustrating so far but hope to learn a few tricks. The problem is I am used

to cruising the entire band using Yagi and when one finds a station just

responding right away. Not so with a loop antenna as the tuning is so narrow

and you can cruise to receive but you can not transmit on what you find

until you have retuned. Mind you for an antenna only 36" in diameter I

suppose one can not complain.

I have not yet learned how to upload pictures so sort of hope these go out

to others at the same time.

-----Original Message-----

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of dreagin@...

Sent: October 28, 2011 5:05 PM

To: loopantennas@yahoogroups.com

Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Hello,Steve...I was wondering if you could offer your own review of the MFJ-1788 mag loop antenna...Does this loop work well for you mounted at this height above ground?.. And the power level you are running it at?...I have been doing some recent research on the MFJ-1786 model.I have read some great eham.net reviews on both models and was curious of your findings.73...Dennis Reagin W7KB.

----- Original Message -----

.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8710. Ferrite rods !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-29 08:06:40 UTC
From: brian nsl
Topic: 8710 Message: 8710

Michael.
Have you viewed this website ????

Ferrite Rod Sale | Ferrite-Rod.SupaPrice.co.uk
ferrite-rod.supaprice.co.uk

72, Brian.

[Non-text portions of this message have been removed]

8711. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-29 07:35:41 UTC
From: Bill McGraw
Topic: 8698 Message: 8711

Steve,

This got my attention, "SM0VPO Harry Lythall 80 meter 5 turn loop antenna and ready to test this coming week."

In time let us know about that one. I have yet to install my home made dipole for 80/75M, old, lazy, sickly and too many irons, shooting club, but will get it done. I'm still studying my ARRL book, the net sites and dealing with family matters that never end.

Thanks.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

--- On Fri, 10/28/11, Steve Roberts <sr888@...> wrote:

Hello Bill,
No tower involved Bill (I had to give up tower and yagi antennas 4 years ago when we downsized, I got old!). The MFJ1788 is pipe mounted on a garden shed and is 16 feet up in the air. I have another 4 feet sticking out bottom of bracket so with help I can get it 20 feet up in the air.
I have constructed SM0VPO Harry Lythall 80 meter 5 turn loop antenna and ready to test this coming week.
I can send you photographs if you so wish.
I worked in Chicago back in 1965 on loan from England for a very large press company, enjoyed that time.
Cheers Steve Roberts VE3LEH

[Non-text portions of this message have been removed]

8712. Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-30 02:41:22 UTC
From: vtnn43e48073
Topic: 8698 Message: 8712

I am confused about the CM 9537 as I cannot find that model on the Channel Master site. There is a 9537 controller but no 9537 rotor.

Which model rotor are you using with the 9537 controller?

Zack
N8FNR

--- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:
>
>
>
>
> --- On Thu, 10/27/11, Steve Roberts <sr888@...> wrote:
>
>
>
>
>
>
>
>
>
> Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top of
> it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788
> is not very directional but more about that later.
>
> Steve,
>
> What arrangement for a tower do you have and is it 70 feet away or up from your home?
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8713. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-30 17:30:25 UTC
From: Steve Roberts
Topic: 8698 Message: 8713

Ahhh thanks Jim I will attempt to upload into photo area.
Cheers
Steve R VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Jim Miller
Sent: October 28, 2011 10:15 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Attachments to Yahoogroups get stripped. Please post in photos area.

Jim

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8714. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-30 17:43:32 UTC
From: Steve Roberts
Topic: 8698 Message: 8714

Hello Jim, Hi Group,
Well thank you Jim as I think I have uploaded two digi pics, one of the 80/160 meter 5 turn loop and the other of the variable capacitor with gear motor gearbox being assembled. Perhaps you would be good enough to confirm that I did indeed succeed???
The MFJ1788 is working wonderfully well today on 10,15 and 20 meters in receive mode. Transmitting works but it is oh so slow tune and respond to a calling station. I will have to work on being much faster somehow. It takes a minimum of 45 seconds to tune for transmit and that does not sound like much but it is.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Jim Miller
Sent: October 28, 2011 10:15 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Attachments to Yahoogroups get stripped. Please post in photos area.

Jim

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8715. RE: [loopantennas] Re: MFJ1788. & home brew loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-30 17:54:01 UTC
From: Steve Roberts
Topic: 8698 Message: 8715

Hello Dennis,
The 10,15 and 20 meter bands are open today and Europe is coming in just fine. The one thing I do notice is the quiet! This antenna has no hash noise. My Yagis used nto be very noisy. I uploaded two digi pics (I think I did it right) so the group can see the 80/160 meter loop I am building.
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of dreagin@...
Sent: October 29, 2011 1:07 AM
To: loopantennas@yahoogroups.com
Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Thanks,Steve for your input...Yes,patience is in order here tuning the loop antennas,sort of like working QRP.I guess that is why it is called a "Hi-Q" loop antenna with it's narrow bandwith.This should also help to eliminate some adjacent interference working near others on the bands and being somewhat directional it will also help on the receive side.I do though,like the fact that one can push up to 150 watts into it,making it an efficient radiator.73....Dennis W7KB.

----- Original Message -----
From: Steve Roberts <sr888@... <mailto:sr888%40cogeco.ca> >
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Sent: Fri, 28 Oct 2011 22:00:55 -0400 (EDT)
Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Hello Dennis,

I am a complete beginner relative to loop antenna's but I tend to go

overboard every time I venture into new territory and this is the case with

this project!

Per your request I have attached two digi pics, one shows the 5 turn loop to

which I have to ad a 1/2 turn transmitting loop. The other digi pic is the

build of the variable capacitor with the motor and gearbox together with the

waterproof box.

Also I attached a picture of the MFJ1788.

I work with an Icom 756PRO2 which has 100 watts HOWEVER the tuning of the

MFJ1788 has to be done at low power 1 to 20 watts. I find the tuning frustrating so far but hope to learn a few tricks. The problem is I am used to cruising the entire band using Yagi and when one finds a station just responding right away. Not so with a loop antenna as the tuning is so narrow and you can cruise to receive but you can not transmit on what you find until you have retuned. Mind you for an antenna only 36" in diameter I suppose one can not complain.

I have not yet learned how to upload pictures so sort of hope these go out to others at the same time.

-----Original Message-----

From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com> [mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>] On

Behalf Of dreagin@... <mailto:dreagin%40q.com>

Sent: October 28, 2011 5:05 PM

To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>

Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Hello,Steve...I was wondering if you could offer your own review of the MFJ-1788 mag loop antenna...Does this loop work well for you mounted at this height above ground?.. And the power level you are running it at?...I have been doing some recent research on the MFJ-1786 model.I have read some great eham.net reviews on both models and was curious of your findings.73...Dennis Reagin W7KB.

----- Original Message -----

.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8716. Re: [loopantennas] Re: MFJ1788. & home brew loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-30 19:43:54 UTC
From: Sam Morgan
Topic: 8698 Message: 8716

ah ha found them in the photos area
I had been looking in the files area, duh, my bad

http://groups.yahoo.com/group/loopantennas/photos/album/1945337814/pic/list?mode=tn&order=ordinal&start=1&dir=asc

may get you there
sometimes links don't work like you think/hope they will

GB & 73
K5OAI
Sam Morgan

On 10/30/2011 12:54 PM, Steve Roberts wrote:
> Hello Dennis,
> The 10,15 and 20 meter bands are open today and Europe is coming in just
> fine. The one thing I do notice is the quiet! This antenna has no hash
> noise. My Yagis used nto be very noisy. I uploaded two digi pics (I think I
> did it right) so the group can see the 80/160 meter loop I am building.
> Steve Roberts VE3LEH
>
> -----Original Message-----
> From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
> Behalf Of dreagin@...
> Sent: October 29, 2011 1:07 AM
> To: loopantennas@yahoogroups.com
> Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop
>
>
>
>
> Thanks,Steve for your input...Yes,patience is in order here tuning the loop
> antennas,sort of like working QRP.I guess that is why it is called a "Hi-Q"
> loop antenna with it's narrow bandwith.This should also help to eliminate
> some adjacent interference working near others on the bands and being
> somewhat directional it will also help on the receive side.I do though,like
> the fact that one can push up to 150 watts into it,making it an efficient
> radiator.73....Dennis W7KB.
>
> ----- Original Message -----
> From: Steve Roberts<sr888@...<mailto:sr888%40cogeco.ca> >
> To: loopantennas@yahoogroups.com<mailto:loopantennas%40yahoogroups.com>
> Sent: Fri, 28 Oct 2011 22:00:55 -0400 (EDT)
> Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop
>
> Hello Dennis,

>
> I am a complete beginner relative to loop antenna's but I tend to go
>
> overboard every time I venture into new territory and this is the case with
>
> this project!
>
> Per your request I have attached two digi pics, one shows the 5 turn loop to
>
> which I have to ad a 1/2 turn transmitting loop. The other digi pic is the
>
> build of the variable capacitor with the motor and gearbox together with the
>
> waterproof box.
>
> Also I attached a picture of the MFJ1788.
>
> I work with an Icom 756PRO2 which has 100 watts HOWEVER the tuning of the
>
> MFJ1788 has to be done at low power 1 to 20 watts. I find the tuning
>
> frustrating so far but hope to learn a few tricks. The problem is I am used
>
> to cruising the entire band using Yagi and when one finds a station just
>
> responding right away. Not so with a loop antenna as the tuning is so narrow
>
> and you can cruise to receive but you can not transmit on what you find
>
> until you have retuned. Mind you for an antenna only 36" in diameter I
>
> suppose one can not complain.
>
> I have not yet learned how to upload pictures so sort of hope these go out
>
> to others at the same time.
>
> -----Original Message-----
>
> From: loopantennas@yahoogroups.com<mailto:loopantennas%40yahoogroups.com>
> [mailto:loopantennas@yahoogroups.com<mailto:loopantennas%40yahoogroups.com>
>] On
>
> Behalf Of dreagin@...<mailto:dreagin%40q.com>
>
> Sent: October 28, 2011 5:05 PM
>
> To: loopantennas@yahoogroups.com<mailto:loopantennas%40yahoogroups.com>
>
> Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

>
> Hello,Steve...I was wondering if you could offer your own review of the
>
> MFJ-1788 mag loop antenna...Does this loop work well for you mounted at this
>
> height above ground?.. And the power level you are running it at?...I have
>
> been doing some recent research on the MFJ-1786 model.I have read some great
>
> eham.net reviews on both models and was curious of your findings.73...Dennis
>
> Reagin W7KB.
>
> ----- Original Message -----
>
> .
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

8717. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-30 21:52:52 UTC
From: Steve Roberts
Topic: 8698 Message: 8717

Hello Zack,
Sorry my fault I turned controller upside down and the drive plus controller number is 9521A (for 110 volts). Nicely made unit and an easy installation. I put it to good use this weekend to cancel out hash while operating the contest. The MFJ1788 itself is not very directional but the rotation does eliminate interference thus the selected signal is easier to hear.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of vtnn43e48073
Sent: October 29, 2011 10:41 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

I am confused about the CM 9537 as I cannot find that model on the Channel Master site. There is a 9537 controller but no 9537 rotor.

Which model rotor are you using with the 9537 controller?

Zack
N8FNR

--- In loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
, Bill McGraw <mcgr3799@...> wrote:
>
>
>
>
> --- On Thu, 10/27/11, Steve Roberts <sr888@...> wrote:
>
>
>
>
>
>
>
>
>
> Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top
of
> it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788
> is not very directional but more about that later.
>
> Steve,
>

> What arrangement for a tower do you have and is it 70 feet away or up from
your home?
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

8718. RE: [loopantennas] Re: MFJ1788. & home brew loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-30 22:00:07 UTC
From: Steve Roberts
Topic: 8698 Message: 8718

Great so glad to hear they uploaded. Should I have uploaded them into the file section???
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Sam Morgan
Sent: October 30, 2011 3:44 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: MFJ1788. & home brew loop

ah ha found them in the photos area
I had been looking in the files area, duh, my bad

http://groups.yahoo.com/group/loopantennas/photos/album/1945337814/pic/list?mode=tn
<http://groups.yahoo.com/group/loopantennas/photos/album/1945337814/pic/list?mode=tn&order=ordinal&start=1&dir=asc> &order=ordinal&start=1&dir=asc

may get you there
sometimes links don't work like you think/hope they will

GB & 73
K5OAI
Sam Morgan

On 10/30/2011 12:54 PM, Steve Roberts wrote:
> Hello Dennis,
> The 10,15 and 20 meter bands are open today and Europe is coming in just
> fine. The one thing I do notice is the quiet! This antenna has no hash
> noise. My Yagis used nto be very noisy. I uploaded two digi pics (I think
I
> did it right) so the group can see the 80/160 meter loop I am building.
> Steve Roberts VE3LEH
>
> -----Original Message-----
> From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
[mailto:loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
] On
> Behalf Of dreagin@... <mailto:dreagin%40q.com>
> Sent: October 29, 2011 1:07 AM
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel
loop
>

>
>
>
> Thanks,Steve for your input...Yes,patience is in order here tuning the
loop
> antennas,sort of like working QRP.I guess that is why it is called a
"Hi-Q"
> loop antenna with it's narrow bandwith.This should also help to eliminate
> some adjacent interference working near others on the bands and being
> somewhat directional it will also help on the receive side.I do
though,like
> the fact that one can push up to 150 watts into it,making it an efficient
> radiator.73....Dennis W7KB.
>
> ----- Original Message -----
> From: Steve Roberts<sr888@... <mailto:sr888%40cogeco.ca>
<mailto:sr888%40cogeco.ca> >
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
<mailto:loopantennas%40yahoogroups.com>
> Sent: Fri, 28 Oct 2011 22:00:55 -0400 (EDT)
> Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel
loop
>
> Hello Dennis,
>
> I am a complete beginner relative to loop antenna's but I tend to go
>
> overboard every time I venture into new territory and this is the case
with
>
> this project!
>
> Per your request I have attached two digi pics, one shows the 5 turn loop
to
>
> which I have to ad a 1/2 turn transmitting loop. The other digi pic is the
>
> build of the variable capacitor with the motor and gearbox together with
the
>
> waterproof box.
>
> Also I attached a picture of the MFJ1788.
>
> I work with an Icom 756PRO2 which has 100 watts HOWEVER the tuning of the
>
> MFJ1788 has to be done at low power 1 to 20 watts. I find the tuning
>
> frustrating so far but hope to learn a few tricks. The problem is I am
used

>
> to cruising the entire band using Yagi and when one finds a station just
>
> responding right away. Not so with a loop antenna as the tuning is so
narrow
>
> and you can cruise to receive but you can not transmit on what you find
>
> until you have retuned. Mind you for an antenna only 36" in diameter I
>
> suppose one can not complain.
>
> I have not yet learned how to upload pictures so sort of hope these go out
>
> to others at the same time.
>
> -----Original Message-----
>
> From: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
<mailto:loopantennas%40yahoogroups.com>
> [mailto:loopantennas@yahoogroups.com
<mailto:loopantennas%40yahoogroups.com>
<mailto:loopantennas%40yahoogroups.com>
>] On
>
> Behalf Of dreagin@... <mailto:dreagin%40q.com> <mailto:dreagin%40q.com>
>
> Sent: October 28, 2011 5:05 PM
>
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
<mailto:loopantennas%40yahoogroups.com>
>
> Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel
loop
>
> Hello,Steve...I was wondering if you could offer your own review of the
>
> MFJ-1788 mag loop antenna...Does this loop work well for you mounted at
this
>
> height above ground?.. And the power level you are running it at?...I have
>
> been doing some recent research on the MFJ-1786 model.I have read some
great
>
> eham.net reviews on both models and was curious of your
findings.73...Dennis
>
> Reagin W7KB.
>

> ----- Original Message -----
>
> .
>
> [Non-text portions of this message have been removed]
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

8719. Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-10-30 23:15:56 UTC
From: vtnn43e48073
Topic: 8698 Message: 8719

Thanks Steve for clearing that up. Think that I will give one of those a try.

Zack
N8FNR

--- In loopantennas@yahoogroups.com, "Steve Roberts" <sr888@...> wrote:
>
> Hello Zack,
> Sorry my fault I turned controller upside down and the drive plus controller
> number is 9521A (for 110 volts). Nicely made unit and an easy installation.
> I put it to good use this weekend to cancel out hash while operating the
> contest. The MFJ1788 itself is not very directional but the rotation does
> eliminate interference thus the selected signal is easier to hear.
> Cheers
> Steve Roberts VE3LEH
>
> -----Original Message-----
> From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
> Behalf Of vtnn43e48073
> Sent: October 29, 2011 10:41 PM
> To: loopantennas@yahoogroups.com
> Subject: [loopantennas] Re: Light duty rotor suggestions for Pixel loop
>
>
>
>
> I am confused about the CM 9537 as I cannot find that model on the Channel
> Master site. There is a 9537 controller but no 9537 rotor.
>
> Which model rotor are you using with the 9537 controller?
>
> Zack
> N8FNR
>
> --- In loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> , Bill McGraw <mcgr3799@> wrote:
> >
> >
> >
> >
> > --- On Thu, 10/27/11, Steve Roberts <sr888@> wrote:
> >
> >
> >
> >

> >
> >
> >
> >
> > Hi, I purchased a Channel Master model 9537 and put a MFJ1788 loop on top
> of
> > it. It is 70 feet from the house and works perfectly. Mind you the MFJ1788
> > is not very directional but more about that later.
> >
> > Steve,
> >
> > What arrangement for a tower do you have and is it 70 feet away or up from
> your home?
> >
> > Bill McGraw, KF5FJZ, NRA Life
> > "Somewhere South of Chicago"
> > Greenville, Mississippi
> >
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8720. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-01 16:18:27 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 8720

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

8721. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-01 16:18:27 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 8721

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

8722. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-01 17:19:31 UTC
From: feinstei@frontier.com
Topic: 5136 Message: 8722

I've got an original Kiwa AM loop that I'd like to get rid of. E-mail me off-line if interested.

Fred E.
feinstei@...

8723. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-02 13:01:26 UTC
From: kd8phx
Topic: 5136 Message: 8723

GREAT list!!!! Thanx - Bob

--- In loopantennas@yahoogroups.com, loopantennas@yahoogroups.com wrote:
>
>
> Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
> http://www.ccrane.com/antennas/am-antennas/
>
> JLKolb's antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
> http://jlkolb.cts.com/site/ant.htm
>
> Directional Terminated MW/LW Loop by WellBroook (UK)
> K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
> http://www.wellbrook.uk.com/K9AY.html
>
> Kiwa - High Performance MW Air-Core Loop Antenna
> High Performance MW Air-Core Loop Antenna by KIWA
> http://www.kiwa.com/kiwaloop.html
>
> Palomar Engineers Loop Antennas LW-MW-SW2
> Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
> http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html
>
> The Quantum loop antennas, now V2.0
> http://www.dxtools.com/
>
> Terk AM loop at Amazon.com
> Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
> http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719
>
> WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
> http://wl1030.com/content/
>
> C Crane Company
> They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
> http://www.ccrane.com
>
> Kiwa Electronics
> Kwia makes the best products for you and your radio equipment, and also improves things

that needed improvement a long time ago.
> http://www.kiwa.com
>
> Stormwise Ferrite Rods
> Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
> http://www.stormwise.com
>
> Universal Radio Company
> They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
> http://www.rffun.com
>
>
> ALA-1530
> Find the best UK LF/MF antenna here.
> http://www.wellbrook.uk.com/
>
> AOR
> This is the site that sells the AOR loop
> http://www.aorja.com/ant-e.html
>
> Kiwa Electronics
> The maker of the air core loop antenna and other useful items that you may want on your wish list.
> http://www.kiwa.com
>
> LF Engineering Company
> A group of engineers, who make products for VLF/LF listening even ELF loops!
> http://www.lfengineering.com
>
> Select A Tenna by Intensitronics Corp
> The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
> discontinued
>
> Terk Technolegies
> The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
> http://www.terk.com
>
> Torus Tuner Loop Company
> A very specially made loop that is almost as big as a hula hoop
> discontinued
>
>
> GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
> Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
> Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert

these webpages to English.
> http://makeashorterlink.com/?Z5F025FE4
>
>
> When considering AM Loop Antennas . . .
> - - - It all comes down to Time? & Money?
>
> How much Time? Are you going to be 'using' the Loop Antenna for
> DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio
> Loop).
>
> How Much Money? Are you willing to spend for a Loop Antenna to get
> the kind of better reception you want.
>
> TBL: Time and Money translates to the AM Loop Antenna's Value to You.
>
>
> The average radio listener (97%), who wants better AM Radio
> Reception, can spend $100 or less and get an AM Loop Antenna that
> meets their needs.
>
> Here is a brief list of the more common AM Loop Antennas for $100 or
> less.
>
> * Twin Coil Ferrite AM Loop Antenna (Active)
> - - - http://www.ccrane.com/antennas/am-antennas/
>
> * Torus Tuner 27" Loop Antenna (Passive)
> - - - discontinued
>
> * Select-A-Tenna Model #541M (Passive)
> - - - discontinued
>
> * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>
> * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)
>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> #1. * Justice AM Loop Antenna (Active)
> > - - - discontinued

> >
>
> #2. * Torus Tuner 27" Loop Antenna (Passive)
> > - - - website gone
> >
>
> #3. * Select-A-Tenna Model #541M (Passive)
> > - - - website gone
> >
>
> #4. * Terk AM Advantage Loop Antenna (Passive)
> > - - - http://www.ccrane.com/antennas/am-antennas/
> >
>
> #5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> > - - - Discontinued (Find 'used' on eBay)
>
>
> >
> > * MTM Scientific AM Radio Loop Antenna (Passive)
> > * http://www.mtmscientific.com/loop.html
> > - - - Starter Kit, Deluxe Kit or Finished Antenna!
> >
> > * * * Home made 'Box' AM Loop Antennas
> > - Usually 20" to 24" in size
> > - - Generally a simple Passive antenna
> > - - - Can be made Active with an add-on amplifier
> >
> >
> > NOTE: Beyond $100 in the $200 to $400 range are the
> >
>
> #1.a. Kiwa MW Air Loop Antenna
>
> #1.b. Quantum Loop Antennas
>
> . . . #3. Palomar Loop Antenna
>
>
> Basic Wire Back Yard Loop Antennas
> Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
> http://www.radioworks.com/nloop.html
>
> K9AY: How to Build the K9AY Loop Receiving Antenna
> AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
> http://www.aytechnologies.com/Products/products.htm
>

> Six Foot Square by Six Turn Loop Antenna
> New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
> http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm
>
> Ten Foot Receiveing Loop for Low-Frequency DXing
> A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
> http://members.shaw.ca/ve7sl/loop.html
>
>
> Dave's HomeMade Loop Antennas
> This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
> http://www.schmarder.com/radios/misc-stuff/loops.htm
>
> 4 Foot Box loop antenna
> Heres a 4 foot loop project by Bruce
> http://www.mindspring.com/~brucec/loop2.htm
>
> ATL-3 Loop Antenna by Graham Maynard (UK)
> Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
> http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm
>
> Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
> The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
> http://www.radiointel.com/anthooploop.htm
>
> DXers Tool Box - DIY - Tuned Loop Antenna
> The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
> http://www.geocities.com/SunsetStrip/Underground/8585/loop.html
>
> Embrodary Loops
> While these loop are for crafts, they can be a craft of art for improved AM radio reception!
> http://www.craftking.com/crafthtml/embroidery_loops.htm
>
> Hard Core DXing
> Here's what nordic dx has to offer in their discription of loops in this website
> http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html
>
> K5DKZ - Three Foot Box Loop Antenna Kit
> Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
> http://www.k5dkz.com/4loop1.html
>

> KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
> KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
> http://www.mtmscientific.com/loop.html
>
> Long LoopStick Antenna for MW DXing
> Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
> http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm
>
> TL Loop Receiving Antenna 10 KHz - 30 MHz
> The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
> http://ecforster.netfirms.com/LpAnt/Doc1.html
>
>
> W2BRI Xmit Loops Contributed by n3hkn
> Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
> http://www.standpipe.com/w2bri/index.htm
>
> "AM Loop Antenna Calculator" - by Bruce Carter
> Here is a Great Tool for those Loop Antenna => "What Ifs...."
> http://www.mindspring.com/~loop_antenna/amloop_calc4.htm
>
> "Loop Antennas 101" Read This First
> Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
> http://www.frontiernet.net/~jadale/Loop.htm
>
> * NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
> Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
> http://www.mindspring.com/~loop_antenna/
>
> Loop Antennas at Hard Core DX
> TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Loops and Rods =&= The Ferrite Rod Antenna
> Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
> http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

>
> Modify the common AM Radio Loop Antenna
> Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Sensitivity of Multi Turn Receiving Loops
> LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
> http://www.vlf.it/octoloop/rlt-n4ywk.htm
>
> Using the Small Loop Antenna by Joe Carr
> DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
> http://www.dxing.com/tnotes/tnote09.pdf
>
>
> How to Get Better AM Radio Reception
> Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
> http://geocities.com/SunsetStrip/Towers/3332/amradio.html
>
> Introduction to Broadcast Band AM/BCB/MW DXing
> The International Radio Club of America (IRCA) WebPages
> http://www.geocities.com/Heartland/5792/bcbdx.htm
>
>
> ** Radio-Antenna-PRO ** H.Hertz-Forum
> Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
> http://groups.yahoo.com/group/Hz/
>
>
> Radio DXing with The Interference Problem
> This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
> http://groups.yahoo.com/group/RadioDx/
>
>
> "3805er" 80-Meter balanced coax loop
> Small shielded rx only loop for 80 meters
> http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm
>
> Magnetic Loop Antennas Receiving - by W8JI
> This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna

Fields - Radiation - Loop Shielding and Balance - by W8JI
> http://www.w8ji.com/magnetic_receiving_loops.htm
>
> Radiation and Fields (Magnetic Loop Antennas) - by W8JI
> This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
> http://www.w8ji.com/radiation_and_fields.htm
>
> Shielded-Loop Receiving Antenna by N5FC
> Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
> http://www.io.com/~n5fc/loop_ant.html
>
> Antique Electronic Supply
> A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
> http://www.tubesandmore.com
>
> Fair Radio Sales
> A wide variety of electronic components, radios, and variable capacitors for your loop antenna
> http://www.fairradio.com/
>
> Ocean State Electronics
> Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
> http://www.oselectronics.com/ose_p96.htm
>
> The Crystal Set Society
> Here are some capacitor available from a club that devotes to Crystal Set Radio
> http://www.midnightscience.com/catalog5.html
>
> The Surplus Sales of Nebraska
> This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
> http://www.surplussales.com/Variables/AirVariables/AirVar1.html
>
>
> Dan Small Parts and Kits
> Dan's wide selection from Canada.
> http://www.danssmallpartsandkits.net/
>
>
> American Science and Surplus
> A big spool of wire here just about for AM
> http://www.sciplus.com/category.cfm?subsection=15&category=150
>
> DigiKey.com
> For ribbon cable and other sorts of wire.
> http://www.digikey.com
>
> Femco Magnet Wire

> Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
> http://www.femcomagnetwire.com/
>
> Litz-Wire,com
> Welcome to Litz-Wire.com!
> http://www.litz-wire.com/
>
> MCM electronics
> They do sell wire and magnet wire here
> http://www.mcmelectronics.com
>
> MWS Industries
> A place for all sorts of wire for business and industry
> http://www.mwswire.com
>
> Magnet Wire from Radio Shack
> This is what I use often
> http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345
>
> Mouser Electronics
> Mouser has the biggest spools here for a great price, that makes sense
> http://www.mouser.com
>
> Ocean State Electronics
> magnet wire at a good price
> http://www.oselectronics.com
>
> WIRE "Flex-Weave" Antenna Wire
> "Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
> http://www.radio-ware.com/products/fw.htm
>
> WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
> "QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
> http://www.antennasmore.com/wire&.htm
>
> Scanning, Ham Radio and Public Safety Resources
> - Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
> http://myweb.accessus.net/~090/resources-ps.html
>
> Amidon Ferrite rods, bars, plates, and tubes.

> https://www.amidoncorp.com/
>
> Bytemark Ferrite rods, bars, plates, and tubes.
> http://www.bytemark.com/products/rod1.htm
>

8724. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-04 11:30:37 UTC
From: Sam Morgan
Topic: 5136 Message: 8724

fyi bad links on http://groups.yahoo.com/group/loopantennas/links

G3LZH Mini-Loop for 5-30 MHz
Fun and Games with the G3LZH Miniature Loop Antenna. A 12" diameter loop with an unusual coupling method.
http://www.carc.org.uk/html/archive16.html

Keep It Simple Stupid Loop Aeriel Efficiency
Hand Arithmetic for Loop Aeriel Efficiency
http://members.shaw.ca/yehudi2/loop.html

===

GB & 73
K5OAI
Sam Morgan

8725. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-04 11:43:32 UTC
From: brian nsl
Topic: 5773 Message: 8725

Sam,
I thought it would be interesting to see the loop details !!!!!
It was, the link brought up a dating agency hi!
Several other ' routes ' came up with the same answer.

72, Brian, G0NSL-QRP.

----- Original Message -----
From: "Sam Morgan" <k5oai.sam@...>
To: <loopantennas@yahoogroups.com>
Sent: Friday, November 04, 2011 11:30 AM
Subject: Re: [loopantennas] File - Links.txt

>

8726. Re: [loopantennas] File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-05 10:23:04 UTC
From: Bill McGraw
Topic: 5136 Message: 8726

I'm getting "page not found."

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

8727. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-05 14:52:01 UTC
From: RichardH
Topic: 5136 Message: 8727

Copy and past the URL at the web site http://www.archive.org/ and you shall get you web site. The other one is still not available.
--- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:
>
> I'm getting "page not found."
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>

8728. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-09 23:29:28 UTC
From: AlienRelics
Topic: 5136 Message: 8728

Please don't do that. If you have something to say, don't do so by responding to something unrelated.

Start up a new email. If you reply to a post, even if you had changed the subject line, Yahoogroups still attaches it to the original thread.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, feinstei@... wrote:
>
> I've got an original Kiwa AM loop that I'd like to get rid of. E-mail me off-line if interested.
>
> Fred E.
> feinstei@...
>

8729. Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-13 13:48:58 UTC
From: dj_philonline
Topic: 8729 Message: 8729

Hi, I have started using loops since moving into a new qth in a deep valley town in Northumberland with lots of overhead domestic 240v and telephone cable networks making HF work nearly impossible, my vertical loop which is big enough (6m x 3 in a delta config.) to cause a stir with the elderly locals is great for 20 to 10m bands but with 5w from my FT-817ND the tuner losses are so great on 40m it is hard to get a good swr reading, I have come up with a plan to put a horizontal loop just inside the top lip of my plastic guttering which surrounds my semi-detached house. Looking for 40m and 80m work on this antenna.
Questions
1: would the loop coming through the loft at the house attached end reduce its performance much?
2: would the 4:1 balun be better located in the loft or outside at the unattached end of the house?
3: would I be better having it as a horizontal dipole centre fed at the unattached end of the house and coming back on itself around either side of the building and not feeding into the loft at all?

I hope these questions are understandable or I will have to try and do drawings and that will not be good, I would rather stick to the loop idea if possible as the reduced noise floor level is fantastic compared to all other types of antennas tried at this location.
Hope somebody can advise.
regards
Phil M6MRP

8730. 2 element 30 meter magnetic loop beam?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-13 20:14:59 UTC
From: Brian Burns
Topic: 8634 Message: 8730

Hello All,

Anyone ever heard of someone’s trying to build a two element beam from a couple of magnetic loops?

I got the idea for a 30 meter version the other morning, and try as I do to forget it, it won’t go away! No doubt the problem with such a lash-up for most bands would be having to do synchronized remote tuning of the capacitors for the reflector and driven element.

Virtually all the 30 meter CW activity that I hear is in the lowest 25khz of the 50khz wide band. It might be possible to tune the two loops for minimum swr at 10.112 mhz, and make no attempt to re-tune the antenna for small frequency changes.

I would appreciate any input on the idea, especially to have someone shoot it down so that I can stop thinking about it (;->)…

Cheers,

Brian Burns

Craftsman Graphics

18000 George's Lane

Fort Bragg, CA 95437

Toll free: 866-214-9472

Website: www.lessonsinlutherie.com

I love to teach...it's a socially acceptable form of bragging (;->)...

[Non-text portions of this message have been removed]

8731. Re: [loopantennas] 2 element 30 meter magnetic loop beam?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-13 22:08:37 UTC
From: Don Sanders
Topic: 8634 Message: 8731

The loops would have to be in the same plane and spaced about 12 feet
apart. you could feed them both wih proper phasing ot have the second as a
parasitic element.
They are too small too space them broadside as that is the null space.
perhaps spacing one loop 1/8 wave in front of a plane reflector will do the
same as a 2 element beam and focus all the radiation in the direction from
the reflector.
let us know your results.
Dr Don W4BWS

On Sun, Nov 13, 2011 at 3:14 PM, Brian Burns <burnsguitar@...> wrote:

> **
>
>
> Hello All,
>
> Anyone ever heard of someone?s trying to build a two element beam from a
> couple of magnetic loops?
>
> I got the idea for a 30 meter version the other morning, and try as I do
> to forget it, it won?t go away! No doubt the problem with such a lash-up
> for most bands would be having to do synchronized remote tuning of the
> capacitors for the reflector and driven element.
>
> Virtually all the 30 meter CW activity that I hear is in the lowest 25khz
> of the 50khz wide band. It might be possible to tune the two loops for
> minimum swr at 10.112 mhz, and make no attempt to re-tune the antenna for
> small frequency changes.
>
> I would appreciate any input on the idea, especially to have someone shoot
> it down so that I can stop thinking about it (;->)?
>
> Cheers,
>
> Brian Burns
>
> Craftsman Graphics
>
> 18000 George's Lane
>
> Fort Bragg, CA 95437
>
> Toll free: 866-214-9472
>

> Website: www.lessonsinlutherie.com
>
> I love to teach...it's a socially acceptable form of bragging (;->)...
>
> [Non-text portions of this message have been removed]
>
>
>

[Non-text portions of this message have been removed]

8732. Re: [loopantennas] 2 element 30 meter magnetic loop beam?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-13 22:25:29 UTC
From: brian nsl
Topic: 8634 Message: 8732

Brian,
Many years ago in Rad Comm's Technical Topics there was
an item on a Racal system used by the military where a self-supporting
driven loop and many parasitic ones were used by just standing them in line,
a bit like traffic cones.
Someone may remember more about it.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Brian Burns
To: loopantennas@yahoogroups.com
Sent: Sunday, November 13, 2011 8:14 PM
Subject: [loopantennas] 2 element 30 meter magnetic loop beam?

[Non-text portions of this message have been removed]

8733. Re: [loopantennas] 2 element 30 meter magnetic loop beam?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-13 22:47:21 UTC
From: Dale Parfitt
Topic: 8634 Message: 8733

I would think that getting the proper electrical length (tuning) for the parasite would be a nighmare. Then it seems that for most useful arrangements, Rrad of the drive loop could drop even lower as a reuslt of mutual Z coupling. Finally, given any moisture and the resultant detuning would throw the whole thing off again.

Dale
----- Original Message -----
From: brian nsl
To: loopantennas@yahoogroups.com
Sent: Sunday, November 13, 2011 5:25 PM
Subject: Re: [loopantennas] 2 element 30 meter magnetic loop beam?

Brian,
Many years ago in Rad Comm's Technical Topics there was
an item on a Racal system used by the military where a self-supporting
driven loop and many parasitic ones were used by just standing them in line,
a bit like traffic cones.
Someone may remember more about it.
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Brian Burns
To: loopantennas@yahoogroups.com
Sent: Sunday, November 13, 2011 8:14 PM
Subject: [loopantennas] 2 element 30 meter magnetic loop beam?

[Non-text portions of this message have been removed]

No virus found in this message.
Checked by AVG - www.avg.com
Version: 10.0.1411 / Virus Database: 2092/4014 - Release Date: 11/13/11

[Non-text portions of this message have been removed]

8734. Slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-13 20:11:34 UTC
From: m0zsa@btinternet.com
Topic: 8734 Message: 8734

Hi Guys
This is my first post.
look for me "M0ZSA" on QRZ.COM and you will find all the info to build my Slinky loop.
You can use it for TX and RX
This one works
Tom

8735. Re: 2 element 30 meter magnetic loop beam?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-14 15:45:59 UTC
From: Alex P
Topic: 8634 Message: 8735

Your idea is analyzed in many of the standard professional/academic engineering antenna books and applied to practice as documented in several IEEE papers over the years.

--- In loopantennas@yahoogroups.com, "Brian Burns" <burnsguitar@...> wrote:
>
> Hello All,
>
>
>
> Anyone ever heard of someoneâ□□s trying to build a two element beam from a couple of magnetic loops?
>
>
>
> I got the idea for a 30 meter version the other morning, and try as I do to forget it, it wonâ□□t go away! No doubt the problem with such a lash-up for most bands would be having to do synchronized remote tuning of the capacitors for the reflector and driven element.
>
>
>
> Virtually all the 30 meter CW activity that I hear is in the lowest 25khz of the 50khz wide band. It might be possible to tune the two loops for minimum swr at 10.112 mhz, and make no attempt to re-tune the antenna for small frequency changes.
>
>
>
> I would appreciate any input on the idea, especially to have someone shoot it down so that I can stop thinking about it (;->)â□¦
>
>
>
> Cheers,
>
>
>
> Brian Burns
>
>
>
> Craftsman Graphics
>
> 18000 George's Lane
>
> Fort Bragg, CA 95437
>

>
>
> Toll free: 866-214-9472
>
>
>
> Website: www.lessonsinlutherie.com
>
>
>
> I love to teach...it's a socially acceptable form of bragging (;->)...
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8736. LW RX Loop impedance matching

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-14 20:06:29 UTC
From: Benoît Mangin
Topic: 8736 Message: 8736

Good evening all,

Using rjeloop3 (downloadable on the "zerobeat" page), I modelled a reasonably performant RX single-turn loop for LW, centered on RXing onthe 2200m Band (137kHz).
It is made of diameter 16mm copper tube, is square in its form with side lengths of 250cm (fixed antenna). By changing capacitors networks, I could tune it on our future 472kHz band, and possibly even on 160 meters.

Capacitors values given are:

For 137kHz: 135723pF.
For 475kHz: 11279pF.
For 1825kHz: 752pF.

But the problem I have is with impedance matching: For 137kHz I've got to cope with 3,8KOhms, on 475kHz with 24,5KOhms and on 1825kHz with 180,6KOhms !!!

Do I read something badly ? Aren't loop antennas known to be low impedance antennas ?

If not (the numbers I gave you being correct measurements...), how do you cope with such impedance mismatch ?

Friendly,

de F8GRY/Ben

[Non-text portions of this message have been removed]

8737. Re: [loopantennas] LW RX Loop impedance matching

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-14 20:30:04 UTC
From: Robert Costa, KB6QXM
Topic: 8737 Message: 8737

How about some numbers for the 1750 meter lowfer band of 160-190 khz?

----- Reply message -----
From: "Benoît Mangin" <mangin.benoit@...>
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>,
"gccloopantennas@yahoogroups.com" <gccloopantennas@yahoogroups.com>
Subject: [loopantennas] LW RX Loop impedance matching
Date: Mon, Nov 14, 2011 12:06 pm
Good evening all,

Using rjeloop3 (downloadable on the "zerobeat" page), I modelled a reasonably performant RX single-turn loop for LW, centered on RXing onthe 2200m Band (137kHz).

It is made of diameter 16mm copper tube, is square in its form with side lengths of 250cm (fixed antenna). By changing capacitors networks, I could tune it on our future 472kHz band, and possibly even on 160 meters.

Capacitors values given are:

For 137kHz: 135723pF.

For 475kHz: 11279pF.

For 1825kHz: 752pF.

But the problem I have is with impedance matching: For 137kHz I've got to cope with 3,8KOhms, on 475kHz with 24,5KOhms and on 1825kHz with 180,6KOhms !!!

Do I read something badly ? Aren't loop antennas known to be low impedance antennas ?

If not (the numbers I gave you being correct measurements...), how do you cope with such impedance mismatch ?

Friendly,

de F8GRY/Ben

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8738. Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-14 22:15:40 UTC
From: w9ifz
Topic: 8738 Message: 8738

I want to build a loop antenna that I can connect to my 50 ohm input shortwave receiver and use it for HF (1.8 MHz - 30 MHz).

I guess I will have to tune it. But would really like it just to be broad band. So if I tune it what would be a reasonable Q for the coil?

I am thinking along the lines of a loop that is 12 inchs to 18 inches square. Not magnetic.

Have done several web searches but guess I need better search words.

any suggestions

Stan AK0B

8739. Re: [loopantennas] Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-14 22:22:48 UTC
From: brian nsl
Topic: 8738 Message: 8739

Stan,
Have a read of this e-book,

[PDF] Using the Small Loop Antennawww.dxing.com/tnotes/tnote09.pdf
File Format: PDF/Adobe Acrobat - Quick View
by JJ Carr - Cited by 1 - Related articles
Joe Carr's Radio Tech-Notes. Using the Small ... Small loop antennas have an ...

72, Brian, G0NSL-QRP.
----- Original Message -----
From: w9ifz
To: loopantennas@yahoogroups.com
Sent: Monday, November 14, 2011 10:15 PM
Subject: [loopantennas] Does a loop have to be resonant?

http://groups.yahoo.com/group/loopantennas/files

[Non-text portions of this message have been removed]

8740. Re : [loopantennas] LW RX Loop impedance matching

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-14 22:59:21 UTC
From: Benoît Mangin
Topic: 8737 Message: 8740

After reading a bit further, such high impedances seems to be a common thing for antennas this type. My mistake...

About lowfer band: 99516pF @ 160kHz es 70571pF @ 190kHz

Which makes quite a large capacity range... Probably needing a switchable capacitors network.

And, little hope of getting something from lowfer band here in France. What kind of maximum ERP do you enjoy in this band ?

Plus, I'm relatively close to our France Inter LW broadcast transmitter, which has 2MW (1MW at night) on 162kHz... Nulling it with the loop will probably not be enough I fear.

73,

Ben

De : "Robert Costa, KB6QXM" <kb6qxm@...m>
À : loopantennas@yahoogroups.com
Envoyé le : Lundi 14 Novembre 2011 21h30
Objet : Re: [loopantennas] LW RX Loop impedance matching

How about some numbers for the 1750 meter lowfer band of 160-190 khz?

----- Reply message -----
From: "Benoît Mangin" <mangin.benoit@...>
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>, "gccloopantennas@yahoogroups.com" <gccloopantennas@yahoogroups.com>
Subject: [loopantennas] LW RX Loop impedance matching
Date: Mon, Nov 14, 2011 12:06 pm
Good evening all,

Using rjeloop3 (downloadable on the "zerobeat" page), I modelled a reasonably performant RX single-turn loop for LW, centered on RXing onthe 2200m Band (137kHz).

It is made of diameter 16mm copper tube, is square in its form with side lengths of 250cm (fixed antenna). By changing capacitors networks, I could tune it on our future 472kHz band, and possibly even on 160 meters.

Capacitors values given are:

For 137kHz: 135723pF.

For 475kHz: 11279pF.

For 1825kHz: 752pF.

But the problem I have is with impedance matching: For 137kHz I've got to cope with 3,8KOhms, on 475kHz with 24,5KOhms and on 1825kHz with 180,6KOhms !!!

Do I read something badly ? Aren't loop antennas known to be low impedance antennas ?

If not (the numbers I gave you being correct measurements...), how do you cope with such impedance mismatch ?

Friendly,

de F8GRY/Ben

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8741. Re: [loopantennas] Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-14 23:03:37 UTC
From: John Kolb
Topic: 8738 Message: 8741

Correct address seems to be http://www.dxing.com/tnotes/tnote09.pdf

http://www.dxing.com/tnotes.htm is a page with links to 9 of Joe
Carr's tech notes.

John
KK6IL

At 02:22 PM 11/14/2011, you wrote:
>Stan,
> Have a read of this e-book,
>
>[PDF] Using the Small Loop Antennawww.dxing.com/tnotes/tnote09.pdf
>File Format: PDF/Adobe Acrobat - Quick View
>by JJ Carr - Cited by 1 - Related articles
>Joe Carr's Radio Tech-Notes. Using the Small ... Small loop antennas
>have an ...
>
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: w9ifz
> To: loopantennas@yahoogroups.com
> Sent: Monday, November 14, 2011 10:15 PM
> Subject: [loopantennas] Does a loop have to be resonant?
>
>
> http://groups.yahoo.com/group/loopantennas/files
>
>
>[Non-text portions of this message have been removed]
>
>
>
>----------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>http://ph.groups.yahoo.com/group/loopantennas/photos
>

>And please trim all this when replying!Yahoo! Groups Links
>
>
>

8742. Re: [loopantennas] Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-14 23:24:39 UTC
From: Chris Trask
Topic: 8738 Message: 8742

>
> I want to build a loop antenna that I can connect to my 50 ohm input
> shortwave receiver and use it for HF (1.8 MHz - 30 MHz).
>
> I guess I will have to tune it. But would really like it just to be
> broad band. So if I tune it what would be a reasonable Q for the coil?
>
> I am thinking along the lines of a loop that is 12 inchs to 18 inches
> square. Not magnetic.
>
> Have done several web searches but guess I need better search words.
>
> any suggestions
>

Here are some suitable papers:

http://www.home.earthlink.net/~christrask/Paper009.html

http://www.home.earthlink.net/~christrask/Paper011.html

http://www.home.earthlink.net/~christrask/Paper018.html

There is also a tutorial paper on shielded loops in the group files
section.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8743. Re : [loopantennas] LW RX Loop impedance matching

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-15 01:14:39 UTC
From: Robert Costa, KB6QXM
Topic: 8737 Message: 8743

Thank you for your reply. In the US the part 15 law states that lowfer transmitters can only have 1 watt of DC input and an antenna no longer than 15 meters in overall length including feedline.

The lowdown website is the longwave club of America. It is a good resource of low frequency information.

73

Robert

----- Reply message -----
From: "Benoît Mangin" <mangin.benoit@...>
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>
Subject: Re : [loopantennas] LW RX Loop impedance matching
Date: Mon, Nov 14, 2011 2:59 pm
After reading a bit further, such high impedances seems to be a common thing for antennas this type. My mistake...

About lowfer band: 99516pF @ 160kHz es 70571pF @ 190kHz

Which makes quite a large capacity range... Probably needing a switchable capacitors network.

And, little hope of getting something from lowfer band here in France. What kind of maximum ERP do you enjoy in this band ?

Plus, I'm relatively close to our France Inter LW broadcast transmitter, which has 2MW (1MW at night) on 162kHz... Nulling it with the loop will probably not be enough I fear.

73,

Ben

De : "Robert Costa, KB6QXM" <kb6qxm@...>

À : loopantennas@yahoogroups.com

Envoyé le : Lundi 14 Novembre 2011 21h30

Objet : Re: [loopantennas] LW RX Loop impedance matching

How about some numbers for the 1750 meter lowfer band of 160-190 khz?

----- Reply message -----

From: "Benoît Mangin" <mangin.benoit@...>

To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>, "gccloopantennas@yahoogroups.com" <gccloopantennas@yahoogroups.com>

Subject: [loopantennas] LW RX Loop impedance matching

Date: Mon, Nov 14, 2011 12:06 pm

Good evening all,

Using rjeloop3 (downloadable on the "zerobeat" page), I modelled a reasonably performant RX single-turn loop for LW, centered on RXing onthe 2200m Band (137kHz).

It is made of diameter 16mm copper tube, is square in its form with side lengths of 250cm (fixed antenna). By changing capacitors networks, I could tune it on our future 472kHz band, and possibly even on 160 meters.

Capacitors values given are:

For 137kHz: 135723pF.

For 475kHz: 11279pF.

For 1825kHz: 752pF.

But the problem I have is with impedance matching: For 137kHz I've got to cope with 3,8KOhms, on 475kHz with 24,5KOhms and on 1825kHz with 180,6KOhms !!!

Do I read something badly ? Aren't loop antennas known to be low impedance antennas ?

If not (the numbers I gave you being correct measurements...), how do you cope with such impedance mismatch ?

Friendly,

de F8GRY/Ben

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8744. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-15 15:09:56 UTC
From: tenorman1952
Topic: 8738 Message: 8744

--- In loopantennas@yahoogroups.com, "w9ifz" <w9ifz@...> wrote:
>
> I want to build a loop antenna that I can connect to my 50 ohm input shortwave receiver and use it for HF (1.8 MHz - 30 MHz).
>
> I guess I will have to tune it. But would really like it just to be broad band. So if I tune it what would be a reasonable Q for the coil?
>
> I am thinking along the lines of a loop that is 12 inchs to 18 inches square. Not magnetic.
>
> Have done several web searches but guess I need better search words.
>
> any suggestions
>
> Stan AK0B
>

Here are two articles from Don Keith N4KC you should read:

http://www.donkeith.com/n4kc/article.php?p=12

http://www.donkeith.com/n4kc/article.php?p=13

73
Paul - AE5JU

8745. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-15 15:34:39 UTC
From: Alex P
Topic: 8738 Message: 8745

Stan,

No.

A simple untuned 12 inch by 12 inch loop will pick up RF energy and you should expect to be able to hear signals with your receiver with it. There is a natural resonance for this loop which is greater than 50 MHz. The coupling means and transmission line used may tend to lower this resonance. I have a 6 ft diameter untuned loop made of copper 3/8 inch diameter water tubing I had on the roof for a couple of years that worked quite nicely. As I recall, the natural resonant frequency was measured at about 50 MHz. A major advantage was the reduction of powerline noise which was significantly reduced. Used a minicircuits 1:4 transformer at the ends of the loop to a 75 ohm or 50 ohm coax to the shack.

Alex

--- In loopantennas@yahoogroups.com, "w9ifz" <w9ifz@...> wrote:
>
> I want to build a loop antenna that I can connect to my 50 ohm input shortwave receiver and use it for HF (1.8 MHz - 30 MHz).
>
> I guess I will have to tune it. But would really like it just to be broad band. So if I tune it what would be a reasonable Q for the coil?
>
> I am thinking along the lines of a loop that is 12 inchs to 18 inches square. Not magnetic.
>
> Have done several web searches but guess I need better search words.
>
> any suggestions
>
> Stan AK0B
>

8746. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-15 17:16:51 UTC
From: vbifyz
Topic: 8738 Message: 8746

I used a 4ft piece of RG-58 coax cable plugged into my FT-817 with an alligator clip at the end of the center conductor hooked to the ground lug on the back of the radio, forming a loop. The shield end is unconnected.

Just walking around with this "antenna", finding the place and orientation in the house where the coupling to the powerline noise is minimal. The signal is fairly low, but because I can null the noise, this setup gives me much better S/N than a wire inside the house.

This loop is definitely magnetic, because the center conductor inside the cable is electrically shielded and is much shorter than the signal wavelength. The definition of the magnetic loop is that it is sensitive to the magnetic component of the wave.

73, Mike.

--- In loopantennas@yahoogroups.com, "Alex P" <winston376@...> wrote:
>
>
>
>
> Stan,
>
> No.
>
> A simple untuned 12 inch by 12 inch loop will pick up RF energy and you should expect to be able to hear signals with your receiver with it. There is a natural resonance for this loop which is greater than 50 MHz. The coupling means and transmission line used may tend to lower this resonance. I have a 6 ft diameter untuned loop made of copper 3/8 inch diameter water tubing I had on the roof for a couple of years that worked quite nicely. As I recall, the natural resonant frequency was measured at about 50 MHz. A major advantage was the reduction of powerline noise which was significantly reduced. Used a minicircuits 1:4 transformer at the ends of the loop to a 75 ohm or 50 ohm coax to the shack.
>
> Alex
>
> --- In loopantennas@yahoogroups.com, "w9ifz" <w9ifz@> wrote:
> >
> > I want to build a loop antenna that I can connect to my 50 ohm input shortwave receiver and use it for HF (1.8 MHz - 30 MHz).
> >
> > I guess I will have to tune it. But would really like it just to be broad band. So if I tune it what would be a reasonable Q for the coil?
> >
> > I am thinking along the lines of a loop that is 12 inchs to 18 inches square. Not magnetic.
> >
> > Have done several web searches but guess I need better search words.

> >
> > any suggestions
> >
> > Stan AK0B
> >
>

8747. Re : [loopantennas] LW RX Loop impedance matching

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-15 18:37:01 UTC
From: Benoît Mangin
Topic: 8737 Message: 8747

The lowdown seems indeed to be a nice source of info. I'll have to subscribe soon.

How about 472kHz in the US ? Does as little amateur think about QRV as in France ? The WD2XSH experiments having been a real success (some of them audible in my QTH, and QRSS "OOO" copy !), I hope trans-atlantic QSOs will soon be regular...

Personally, 137 es 472 are my top priority, as a newly licensed Ham. Hope CU later on the grabber or in 600m CW !

73

de F8GRY/Ben

De : "Robert Costa, KB6QXM" <kb6qxm@...>
À : loopantennas@yahoogroups.com
Envoyé le : Mardi 15 Novembre 2011 2h14
Objet : Re : [loopantennas] LW RX Loop impedance matching

Thank you for your reply. In the US the part 15 law states that lowfer transmitters can only have 1 watt of DC input and an antenna no longer than 15 meters in overall length including feedline.

The lowdown website is the longwave club of America. It is a good resource of low frequency information.

73

Robert

----- Reply message -----
From: "Benoît Mangin" <mangin.benoit@...>
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>
Subject: Re : [loopantennas] LW RX Loop impedance matching
Date: Mon, Nov 14, 2011 2:59 pm
After reading a bit further, such high impedances seems to be a common thing for antennas this type. My mistake...

About lowfer band: 99516pF @ 160kHz es 70571pF @ 190kHz

Which makes quite a large capacity range... Probably needing a switchable capacitors network.

And, little hope of getting something from lowfer band here in France. What kind of maximum ERP do you enjoy in this band ?

Plus, I'm relatively close to our France Inter LW broadcast transmitter, which has 2MW (1MW at night) on 162kHz... Nulling it with the loop will probably not be enough I fear.

73,

Ben

De : "Robert Costa, KB6QXM" <kb6qxm@...>

À : loopantennas@yahoogroups.com

Envoyé le : Lundi 14 Novembre 2011 21h30

Objet : Re: [loopantennas] LW RX Loop impedance matching

How about some numbers for the 1750 meter lowfer band of 160-190 khz?

----- Reply message -----

From: "Benoît Mangin" <mangin.benoit@...>

To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>, "gccloopantennas@yahoogroups.com" <gccloopantennas@yahoogroups.com>

Subject: [loopantennas] LW RX Loop impedance matching

Date: Mon, Nov 14, 2011 12:06 pm

Good evening all,

Using rjeloop3 (downloadable on the "zerobeat" page), I modelled a reasonably performant RX single-turn loop for LW, centered on RXing onthe 2200m Band (137kHz).

It is made of diameter 16mm copper tube, is square in its form with side lengths of 250cm (fixed antenna). By changing capacitors networks, I could tune it on our future 472kHz band, and possibly even on 160 meters.

Capacitors values given are:

For 137kHz: 135723pF.

For 475kHz: 11279pF.

For 1825kHz: 752pF.

But the problem I have is with impedance matching: For 137kHz I've got to cope with 3,8KOhms, on 475kHz with 24,5KOhms and on 1825kHz with 180,6KOhms !!!

Do I read something badly ? Aren't loop antennas known to be low impedance antennas ?

If not (the numbers I gave you being correct measurements...), how do you cope with such impedance mismatch ?

Friendly,

de F8GRY/Ben

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8748. Re : [loopantennas] LW RX Loop impedance matching

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-15 18:38:52 UTC
From: Benoît Mangin
Topic: 8737 Message: 8748

How about High-Impedance Loop matching ? Do some of you use capacitors network ? Do some of you use FET matching (such as with J310 ?)

If that's the case, any personal experiences to be shared ?

de F8GRY/Ben

De : "Robert Costa, KB6QXM" <kb6qxm@...>
À : loopantennas@yahoogroups.com
Envoyé le : Mardi 15 Novembre 2011 2h14
Objet : Re : [loopantennas] LW RX Loop impedance matching

Thank you for your reply. In the US the part 15 law states that lowfer transmitters can only have 1 watt of DC input and an antenna no longer than 15 meters in overall length including feedline.

The lowdown website is the longwave club of America. It is a good resource of low frequency information.

73

Robert

----- Reply message -----
From: "Benoît Mangin" <mangin.benoit@...>
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>
Subject: Re : [loopantennas] LW RX Loop impedance matching
Date: Mon, Nov 14, 2011 2:59 pm
After reading a bit further, such high impedances seems to be a common thing for antennas this type. My mistake...

About lowfer band: 99516pF @ 160kHz es 70571pF @ 190kHz

Which makes quite a large capacity range... Probably needing a switchable capacitors network.

And, little hope of getting something from lowfer band here in France. What kind of maximum ERP do you enjoy in this band ?

Plus, I'm relatively close to our France Inter LW broadcast transmitter, which has 2MW (1MW at night) on 162kHz... Nulling it with the loop will probably not be enough I fear.

73,

Ben

De : "Robert Costa, KB6QXM" <kb6qxm@...>

À : loopantennas@yahoogroups.com

Envoyé le : Lundi 14 Novembre 2011 21h30

Objet : Re: [loopantennas] LW RX Loop impedance matching

How about some numbers for the 1750 meter lowfer band of 160-190 khz?

----- Reply message -----

From: "Benoît Mangin" <mangin.benoit@...>

To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>,
"gccloopantennas@yahoogroups.com" <gccloopantennas@yahoogroups.com>

Subject: [loopantennas] LW RX Loop impedance matching

Date: Mon, Nov 14, 2011 12:06 pm

Good evening all,

Using rjeloop3 (downloadable on the "zerobeat" page), I modelled a reasonably performant RX single-turn loop for LW, centered on RXing onthe 2200m Band (137kHz).

It is made of diameter 16mm copper tube, is square in its form with side lengths of 250cm (fixed antenna). By changing capacitors networks, I could tune it on our future 472kHz band, and possibly even on 160 meters.

Capacitors values given are:

For 137kHz: 135723pF.

For 475kHz: 11279pF.

For 1825kHz: 752pF.

But the problem I have is with impedance matching: For 137kHz I've got to cope with 3,8KOhms, on 475kHz with 24,5KOhms and on 1825kHz with 180,6KOhms !!!

Do I read something badly ? Aren't loop antennas known to be low impedance antennas ?

If not (the numbers I gave you being correct measurements...), how do you cope with such impedance mismatch ?

Friendly,

de F8GRY/Ben

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8749. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-15 23:45:58 UTC
From: W1AEX
Topic: 8738 Message: 8749

Hi Stan,

While my contribution is short on theory, it works very well from the bottom of the broadcast band to about 14 MHz without any tuning or preamplifier. With a preamp at the feedpoint the loop will work well at higher frequencies as well. I use my two loops all the time on the BCB and frequently use them to receive while operating from 160 - 40 meters.

http://www.w1aex.com/loop/loop.html

Rob W1AEX

--- In loopantennas@yahoogroups.com, "w9ifz" <w9ifz@...> wrote:
>
> I want to build a loop antenna that I can connect to my 50 ohm input shortwave receiver and use it for HF (1.8 MHz - 30 MHz).
>
>
> any suggestions
>
> Stan AK0B
>

8750. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-16 00:27:33 UTC
From: james
Topic: 8738 Message: 8750

Hello Rob are u running separate receivers and if so will the 2 back to back diodes give enough protection for the #2 receiver,, Thanks Harold n5tog

[Non-text portions of this message have been removed]

8751. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-16 15:08:20 UTC
From: W1AEX
Topic: 8738 Message: 8751

Hi Harold,

The loops are connected to the RX ANT inputs of a Flex 5000A and a Kenwood TS-590S. Previously, they were used with the RX ANT input of an ICOM Pro III. The Flex and Kenwood use an internal relay to ground the RX ANT input when transmitting, so there is a built-in safety factor there. I do not know if the Pro III grounded its RX ANT while transmitting.

With a second RX option (which I do not have) I am unsure how that is handled, but since the Flex allows full duplex operation when the option is installed, it does give some pause for thought.

No ill effects have been experienced and I do run the full 1500 watt power level frequently. There is about 50 feet of separation between the E-W loop and the transmitting inverted vee, and about 100 feet of separation between the N-S loop and the transmitting antenna. I have not lost a diode yet, so it seems to be enough. That being said, it seemed prudent to wind a 1:1 transformer for isolation purposes, with back-to-back diodes installed, to be used right at the RX ANT input of the Flex and the Kenwood. It's probably over-kill since the original diodes out at the loop feedpoint have never failed, but it was cheap insurance!

73,

Rob W1AEX

--- In loopantennas@yahoogroups.com, "james" <n5tog@...> wrote:
>
> Hello Rob are u running separate receivers and if so will the 2 back to back diodes give enough protection for the #2 receiver,, Thanks Harold n5tog
>
> [Non-text portions of this message have been removed]
>

8752. RE: [loopantennas] Slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-16 16:44:31 UTC
From: Brian Burns
Topic: 8734 Message: 8752

Hello Tom,

Could you post a link in the links section? QRZ seems to have lost you somewhere in cyberspace.

Cheers,

Brian Burns

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of m0zsa@...
Sent: Sunday, November 13, 2011 12:12 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Slinky loop

Hi Guys
This is my first post.
look for me "M0ZSA" on QRZ.COM and you will find all the info to build my Slinky loop.
You can use it for TX and RX
This one works
Tom

[Non-text portions of this message have been removed]

8753. Re: [loopantennas] Slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-16 16:59:52 UTC
From: Dale Parfitt
Topic: 8734 Message: 8753

M0ZSA is fine on QRZ. MoZSA of course is not.
Dale W4OP

----- Original Message -----
From: Brian Burns
To: loopantennas@yahoogroups.com
Sent: Wednesday, November 16, 2011 11:44 AM
Subject: RE: [loopantennas] Slinky loop

Hello Tom,

Could you post a link in the links section? QRZ seems to have lost you somewhere in cyberspace.

Cheers,

Brian Burns

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of m0zsa@...
Sent: Sunday, November 13, 2011 12:12 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Slinky loop

Hi Guys
This is my first post.
look for me "M0ZSA" on QRZ.COM and you will find all the info to build my Slinky loop.
You can use it for TX and RX
This one works
Tom

[Non-text portions of this message have been removed]

No virus found in this message.
Checked by AVG - www.avg.com
Version: 10.0.1411 / Virus Database: 2092/4020 - Release Date: 11/16/11

[Non-text portions of this message have been removed]

8754. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-17 13:51:36 UTC
From: Bruce Carter
Topic: 8738 Message: 8754

It does not have to be resonant. But a broadband loop will lose 40 to 50 dB of gain - or more.

--- In loopantennas@yahoogroups.com, "w9ifz" <w9ifz@...> wrote:
>
> I want to build a loop antenna that I can connect to my 50 ohm input shortwave receiver and use it for HF (1.8 MHz - 30 MHz).
>
> I guess I will have to tune it. But would really like it just to be broad band. So if I tune it what would be a reasonable Q for the coil?
>
> I am thinking along the lines of a loop that is 12 inchs to 18 inches square. Not magnetic.
>
> Have done several web searches but guess I need better search words.
>
> any suggestions
>
> Stan AK0B
>

8755. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-17 18:06:32 UTC
From: vbifyz
Topic: 8738 Message: 8755

Well, the next logical step is to connect an amplifier to it.
This is not as simple as it sounds, but this is what Wellbrook, Pixel Tech. and others do.

73, Mike

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> It does not have to be resonant. But a broadband loop will lose 40 to 50 dB of gain - or more.
>

8756. Re: Slinky loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-18 11:23:08 UTC
From: joop_l
Topic: 8734 Message: 8756

direct link:
http://www.qrz.com/db/M0ZSA

The slinky types I bought have a DC resistance of several ohms. I did not get around to use them in an antenna. For a dipole this might not be too much of a problem. But with a magnetic loop the radiation resistance is very low. I can imagine the additional slinky loss makes this a far from optimal TX antenna. Getting to SWR 1:1 will be easier with a lot of loss too.

Can you measure the voltage on the Jennings capacitor? I doubt if it will reach the multi-kilovolts a high-Q loop usually has.
One other thing that you could do is to measure the loop bandwidth. If it is not narrow, this will tell you something as well.

Cheers,
Joop

8757. HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-20 22:58:02 UTC
From: Steve Roberts
Topic: 8502 Message: 8757

Hello Group,
Yes I know this is a loop group and I do have one but it is so slow to tune decided to have a backup.
I have installed a 43 foot vertical and no problems with that item.
I purchased a MFJ2910 80/160 meter high efficiency matching network that is hose clamped between the actual 43" antenna and the support pipe (in the ground). No structural problems there, it all fits perfectly
Now comes the problem, the tuning instructions (this is done with the cover off exposing the relays and coils). With regard to the 160 meter they do not illustrate or mention which coil to tune (using a clamp tap provided). I am guessing it is the longest coil. The instruction manual says the (flexible) tap will tune the place on the band and the shunt tap will adjust the impedance at resonance. I see no shunt tap?
Now with regard to the 80 meter coil which I assume is the shortest (of the two coils) they again describe the tap but on this coil I have three flexible clamp taps.
A call to technical support at MFJ only gets me to voice mail and no call back so far. Probably my location in Toronto area is a problem for them.
Does anyone have experience with the MFJ2910. I can post close up high quality digital photographs if it helps.
Any help on this matter will be sincerely appreciated

Regards,
Steve Roberts VE3LEH
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

[Non-text portions of this message have been removed]

8758. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-21 15:40:18 UTC
From: W1AEX
Topic: 8738 Message: 8758

I really like the idea of the Wellbrook and Pixel broadband-preamplified loops. Unfortunately, it's unclear to me how well they do with moderately weak to borderline signals on 160 - 40 meters. The video of the Pixel loop demonstrating reception on the broadcast band is impressive in its SNR performance, but I wonder about the small capture area of the untuned loops on those lower amateur bands.

Has anyone found a video that demonstrates performance on the lower ham and shortwave bands? I have not seen anything on YouTube showing this. Maybe someone who has one of these would be willing to make a brief video?

Thanks,

Rob W1AEX

--- In loopantennas@yahoogroups.com, "vbifyz" <3ym3ym@...> wrote:
>
> Well, the next logical step is to connect an amplifier to it.
> This is not as simple as it sounds, but this is what Wellbrook, Pixel Tech. and others do.
>
> 73, Mike

8759. Full wave loop for 10mtrs

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-22 15:44:57 UTC
From: Richard
Topic: 8759 Message: 8759

Hi Guys, a long while since my last posting.
If you look at my little antenna farm on qrz.com, this might make sense.

I've now got a vertical rectangular loop running between the 1st & 2nd director of the 6mtr yagi , up to the grp cross boom supporting the 2mtr and 70 cms antennas, the back down to the 6 mtrs yagi between directors 1 & 2.
I've used the formula of 1008/freq,
which for 28.5 MHz came out at 34'
So far I've had to add another 2 mtrs to the length to get it back down to 30 MHz as it was resonant at 36 MHz.
The extra length has had to be coiled on a 19mm GRP rod as I'm out of space.
I would have expected capacitive loading making it shorter, not longer, not the opposite .
My antenna experience is all VHF upwards, I always thought loops were tolerant to surrounding antennas etc.

Any ideas ?

73 Richard G8JVM

8760. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-22 16:48:56 UTC
From: ilya_4z1uf
Topic: 8738 Message: 8760

I also liked the idea of these antennas and purchased Pixel about 1 year ago.
Mainly tried to use it for 160m, several times for 80m. Till now my 1/4L TX inverted GP works better for RX. I don't have video or even didn't make a complete scientific comparison between these two (TX vertical and Pixel loop installed on a top of the tower with "Christmas tree", overall height above the ground- 45m) but my 30 years experience says that COULD BE that the loop performs slightly better only for relatively short distances (up to 3000km). I never ever heard with it something, that I didn't hear with TX antenna while opposite is quite often.
I must admit that Pixel's loop's preamp is really good: when I already hear something- it sounds extremely clear (it still has gain head over!), the filtering and distortion sounds similar to good DSP:-) I'm planning to use this preamp for some other RX antenna.
73! Ilya 4Z1UF

--- In loopantennas@yahoogroups.com, "W1AEX" <w1aex.fn31@...> wrote:
>
>
>
> I really like the idea of the Wellbrook and Pixel broadband-preamplified loops. Unfortunately, it's unclear to me how well they do with moderately weak to borderline signals on 160 - 40 meters. The video of the Pixel loop demonstrating reception on the broadcast band is impressive in its SNR performance, but I wonder about the small capture area of the untuned loops on those lower amateur bands.
>
> Has anyone found a video that demonstrates performance on the lower ham and shortwave bands? I have not seen anything on YouTube showing this. Maybe someone who has one of these would be willing to make a brief video?
>
> Thanks,
>
> Rob W1AEX
>
> --- In loopantennas@yahoogroups.com, "vbifyz" <3ym3ym@> wrote:
> >
> > Well, the next logical step is to connect an amplifier to it.
> > This is not as simple as it sounds, but this is what Wellbrook, Pixel Tech. and others do.
> >
> > 73, Mike
>

8761. Re: HELP

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-22 17:08:45 UTC
From: AlienRelics
Topic: 8502 Message: 8761

http://groups.yahoo.com/group/ham-antennas/

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "Steve Roberts" <sr888@...> wrote:
>
> Hello Group,
> Yes I know this is a loop group and I do have one but it is so slow to tune
> decided to have a backup.
> I have installed a 43 foot vertical and no problems with that item.
> I purchased a MFJ2910 80/160 meter high efficiency matching network that is
> hose clamped between the actual 43" antenna and the support pipe (in the
> ground). No structural problems there, it all fits perfectly
> Now comes the problem, the tuning instructions (this is done with the cover
> off exposing the relays and coils). With regard to the 160 meter they do not
> illustrate or mention which coil to tune (using a clamp tap provided). I am
> guessing it is the longest coil. The instruction manual says the (flexible)
> tap will tune the place on the band and the shunt tap will adjust the
> impedance at resonance. I see no shunt tap?
> Now with regard to the 80 meter coil which I assume is the shortest (of the
> two coils) they again describe the tap but on this coil I have three
> flexible clamp taps.
> A call to technical support at MFJ only gets me to voice mail and no call
> back so far. Probably my location in Toronto area is a problem for them.
> Does anyone have experience with the MFJ2910. I can post close up high
> quality digital photographs if it helps.
> Any help on this matter will be sincerely appreciated
>
>
>
> Regards,
> Steve Roberts VE3LEH
> 2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
> Tel 905-827-8462
> Fax 905-827-1467
> --
> ----
> THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE
> PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail
> message and/or any attachments thereto may be confidential, legally
> privileged, and/or exempt from disclosure under applicable law. If you are
> not the intended recipient, please notify me immediately by return email,
> and delete this message from your system. Thank you. Note: We have taken
> precautions against viruses, but take no responsibility for loss or damage
> caused by any virus present.

>
>
>
> [Non-text portions of this message have been removed]
>

8762. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 09:41:39 UTC
From: lz1aq
Topic: 8738 Message: 8762

I have put 2 papers about wideband loops on my home page.

Wideband Active Small Magnetic Loop Antenna

http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.\
htm
<http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna\
.htm>

Wideband Active Small Magnetic Loop Antenna. Protection from Strong
Electromagnetic Fields

http://www.lz1aq.signacor.com/docs/Wide_Mag_loop_prot_v1/wideband_mag_lo\
op_protection.htm
<http://www.lz1aq.signacor.com/docs/Wide_Mag_loop_prot_v1/wideband_mag_l\
oop_protection.htm>

73 Chavdar LZ1AQ

lz1aq@... <mailto:lz1aq@...> , www.lz1aq.signacor.com

[Non-text portions of this message have been removed]

8763. Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 12:36:38 UTC
From: nir_4x6fk
Topic: 8763 Message: 8763

Hello group,
I'm looking for Loop antenna that will cover 20Khz-30Mhz.
Antenna must be an high quality. something like wellbrook ALA1530L.
with low noise at the VLF part, an minimum intermode.
Any help?

Regards
Nir 4X6FK

8764. Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 14:50:20 UTC
From: Jim Whitaker
Topic: 8763 Message: 8764

“Hello group,
I'm looking for Loop antenna that will cover 20Khz-30Mhz.
Antenna must be an high quality. something like wellbrook ALA1530L.
with low noise at the VLF part, an minimum intermode.
Any help?”

No loop will cover that much spectrum without swapping out the coil. This is the closest antenna that will meet your needs.

http://www.universal-radio.com/catalog/sw_ant/0445.html

73 DE N8XYN JIm

[Non-text portions of this message have been removed]

8765. Pixel Technologies and Wellbrook Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 17:08:43 UTC
From: thinkdx
Topic: 8765 Message: 8765

Since commercial loops from Pixel Technologies and Wellbrook Communications have been mentioned recently, I thought I'd post a link to my review of the RF PRO-1A and ALA1530, which some may not have read previously.

Look in the "Links" section of the group for the article titled "The Pixel Technologies RF PRO-1A and Wellbrook Communications ALA1530 Active Loop Antennas Compared".

This detailed comparison used the markers feature of the Perseus SDR receiver to measure S/N ratios of many signals heard on both antennas from longwave through 13 meters. The summary data is presented via bar and pie charts. Original Excel source file and comparison MP3 audio files are available for download from a link within the article.

Thanks to Colin Newell of DXer.ca <http://www.dxer.ca/> and Mika Mäkeläinen of DXing.info <http://www.dxing.info/> for hosting this review on their web sites.

73, Guy

[Non-text portions of this message have been removed]

8766. RE: [loopantennas] Pixel Technologies and Wellbrook Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 17:19:57 UTC
From: Fredric J. Einstein
Topic: 8765 Message: 8766

Can you please just post the link within a message? Thanks!

Since commercial loops from Pixel Technologies and Wellbrook Communications have been mentioned recently, I thought I'd post a link to my review of the RF PRO-1A and ALA1530, which some may not have read previously.

Look in the "Links" section of the group for the article titled "The Pixel Technologies RF PRO-1A and Wellbrook Communications ALA1530 Active Loop Antennas Compared".

[Non-text portions of this message have been removed]

8767. Re: Does a loop have to be resonant?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 18:00:20 UTC
From: W1AEX
Topic: 8738 Message: 8767

Chavdar,

Thank you for documenting all the detailed work you have done! There's a wealth of information there!

73,

Rob W1AEX

--- In loopantennas@yahoogroups.com, "lz1aq" <lz1aq@...> wrote:
>
>
>
> I have put 2 papers about wideband loops on my home page.
>
>
> 73 Chavdar LZ1AQ
>

8768. Re: Pixel Technologies and Wellbrook Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 18:19:18 UTC
From: W1AEX
Topic: 8765 Message: 8768

Guy,

Thanks for posting your article in the "Links" section. The collection of mp3 files in the zip archive demonstrates some dramatic differences in reception capability between the two loop systems. Well done!

Rob W1AEX

--- In loopantennas@yahoogroups.com, "thinkdx" <dx@...> wrote:
>
> Look in the "Links" section of the group for the article titled "The
> Pixel Technologies RF PRO-1A and Wellbrook Communications ALA1530 Active
> Loop Antennas Compared".
>

8769. Re: [loopantennas] Pixel Technologies and Wellbrook Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 18:23:43 UTC
From: Sam Morgan
Topic: 8765 Message: 8769

aw... for shame, and miss out all that scrolling through the links section, lol

since it's a long one:
http://www.dxer.ca/component/content/article/74/88-the-pixel-technologies-rf-pro-1a-and-wellbrook-communications-ala1530-active-loop-antennas-compared

how about just a tinyurl for the link:
http://tinyurl.com/3wrz9v6

enjoy
--
GB & 73
K5OAI
Sam Morgan

On 11/23/2011 11:19 AM, Fredric J. Einstein wrote:
> Can you please just post the link within a message? Thanks!
>
>
>
> Since commercial loops from Pixel Technologies and Wellbrook
> Communications have been mentioned recently, I thought I'd post a link
> to my review of the RF PRO-1A and ALA1530, which some may not have read
> previously.
>
> Look in the "Links" section of the group for the article titled "The
> Pixel Technologies RF PRO-1A and Wellbrook Communications ALA1530 Active
> Loop Antennas Compared".

8770. Re: Pixel Technologies and Wellbrook Loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 19:03:05 UTC
From: thinkdx
Topic: 8765 Message: 8770

Thanks for your comments Rob, and I'm glad the MP3 audio samples were of interest too.

I see that Pixel Technologies has a newer "B" model antenna available now. Perhaps this version is an improvement.

73, Guy

--- In loopantennas@yahoogroups.com, "W1AEX" <w1aex.fn31@...> wrote:
>
> Guy,
>
> Thanks for posting your article in the "Links" section. The collection of mp3 files in the zip archive demonstrates some dramatic differences in reception capability between the two loop systems. Well done!
>
> Rob W1AEX
>

8771. Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-23 20:55:48 UTC
From: nir_4x6fk
Topic: 8763 Message: 8771

Hello Jim,
Thank you for the info.
I so the ALA1530L at some SDR-radio users, and it looks that it work's not bade at all. It just expensive for me, and I think to build something like.

73's
Nir 4X6FK

--- In loopantennas@yahoogroups.com, "Jim Whitaker" <jimawhitaker@...> wrote:
>
> â□□Hello group,
> I'm looking for Loop antenna that will cover 20Khz-30Mhz.
> Antenna must be an high quality. something like wellbrook ALA1530L.
> with low noise at the VLF part, an minimum intermode.
> Any help?â□□
>
> No loop will cover that much spectrum without swapping out the coil. This is the closest antenna that will meet your needs.
>
> http://www.universal-radio.com/catalog/sw_ant/0445.html
>
> 73 DE N8XYN JIm
>
>
>
>
> [Non-text portions of this message have been removed]
>

8772. Re: [loopantennas] Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-24 23:00:07 UTC
From: Chris Trask
Topic: 8763 Message: 8772

>
> Hello Jim,
> Thank you for the info.
> I so the ALA1530L at some SDR-radio users, and it looks that it work's
> not bade at all. It just expensive for me, and I think to build
> something like.
>

Well, here's an amplifier that is capable of better performance than the Pixel or Wellbrook:

http://www.home.earthlink.net/~christrask/Paper009.html

which can be used in place of the tuner section in this loop antenna:

http://www.home.earthlink.net/~christrask/Paper011.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8773. Re: [loopantennas] Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-25 00:34:33 UTC
From: Jim Whitaker
Topic: 8763 Message: 8773

>
> Hello Jim,
> Thank you for the info.
> I so the ALA1530L at some SDR-radio users, and it looks that it work's
> not bade at all. It just expensive for me, and I think to build
> something like.

Building a magnetic loop is simple, but covering that much spectrum is tricky. You will need a substantial coil for 20 kHz, that same coil cant be resonant at 30 mHz. With a large amount of capacitance you could use a much smaller coil but it will be so inefficient as to be useless. You could build taps into the coil hooked to a rotary switch. Either way it will be tricky and a study in patience. Here's a simple magnetic loop calculator, just plug in the numbers and tri a number of values.

http://www.66pacific.com/calculators/small_tx_loop_calc.aspx

73 DE N8XYN Jim

[Non-text portions of this message have been removed]

8774. Re: [loopantennas] Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-25 09:57:18 UTC
From: Helge Kyndbo
Topic: 8763 Message: 8774

Hi Chris,
I can't get the amplifier link (paper009.html) to work,
can you help ?
Helge

2011/11/25 Chris Trask <christrask@...>

> **
>
>
>
> >
> > Hello Jim,
> > Thank you for the info.
> > I so the ALA1530L at some SDR-radio users, and it looks that it work's
> > not bade at all. It just expensive for me, and I think to build
> > something like.
> >
>
> Well, here's an amplifier that is capable of better performance than the
> Pixel or Wellbrook:
>
> http://www.home.earthlink.net/~christrask/Paper009.html
>
> which can be used in place of the tuner section in this loop antenna:
>
> http://www.home.earthlink.net/~christrask/Paper011.html
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>
>
>

[Non-text portions of this message have been removed]

8775. Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-25 19:29:25 UTC
From: nir_4x6fk
Topic: 8763 Message: 8775

Hi Jim,

Thank you for the link, It looks very helpful, I will give it a tray.

73'a
Nir 4X6FK

--- In loopantennas@yahoogroups.com, "Jim Whitaker" <jimawhitaker@...> wrote:
>
> >
> > Hello Jim,
> > Thank you for the info.
> > I so the ALA1530L at some SDR-radio users, and it looks that it work's
> > not bade at all. It just expensive for me, and I think to build
> > something like.
>
> Building a magnetic loop is simple, but covering that much spectrum is tricky. You will need a substantial coil for 20 kHz, that same coil cant be resonant at 30 mHz. With a large amount of capacitance you could use a much smaller coil but it will be so inefficient as to be useless. You could build taps into the coil hooked to a rotary switch. Either way it will be tricky and a study in patience. Here's a simple magnetic loop calculator, just plug in the numbers and tri a number of values.
>
>
> http://www.66pacific.com/calculators/small_tx_loop_calc.aspx
>
> 73 DE N8XYN Jim
>
>
>
> [Non-text portions of this message have been removed]
>

8776. Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-27 03:33:06 UTC
From: kcmuthumani
Topic: 8763 Message: 8776

Hi,

I have been wanting to build the loop described at
http://www.home.earthlink.net/~christrask/Paper009.html

but I have been have not found a source for the Fair-Rite 2861000102 balun core in the US, google search only give me a back order option on a number of component suppliers.

Does anyone know where to buy a small quantity of them also would like to know if there is a place where I can get all the cores for this project ie FairRite 2861000102 , 2843002402 , 2843002402. The paper states that mini circuit transformers can be used for the last 2 cores but I would prefer to wind my own transformers.

73

Kelvin

8777. Re: [loopantennas] Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-27 15:48:31 UTC
From: Chris Trask
Topic: 8763 Message: 8777

>
> I have been wanting to build the loop described at
> http://www.home.earthlink.net/~christrask/Paper009.html
>
> but I have been have not found a source for the Fair-Rite
> 2861000102 balun core in the US, google search only give me
> a back order option on a number of component suppliers.
>

You can also use a 2861000202, which is just a little shorter. It and the other cores can be purchased from W8DIZ:

http://www.kitsandparts.com/toroids.php

They are listed at the bottom of the page.

>
> Does anyone know where to buy a small quantity of them also
> would like to know if there is a place where I can get all
> the cores for this project ie FairRite 2861000102 ,
> 2843002402 , 2843002402.
>

See the above.

>
> The paper states that mini circuit transformers can be used
> for the last 2 cores but I would prefer to wind my own
> transformers.
>

And you'll be better off for doing so. The Mini-Circuits transformers are a compromise of size, performance, and cost. The performance suffers greatly.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8778. Re: [loopantennas] Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-27 15:51:29 UTC
From: Jack Smith
Topic: 8763 Message: 8778

Have you tried Amidon? https://www.amidoncorp.com/

The Fair-Rite part numbers will have to be translated to "ham radio" part numbers if you look on their web site.

28 indicates it's a multi-aperture core, which is a "BN" designator at Amidon. The next two digits are the core material, 61 for example. This will be a BN61 core at Amidon. Then, the last 4 digits are an identifier of the physical core dimensions and are carried through. So a Fair-Rite PN 2843002402 will be a BN43-2402 in Amidon's catalog. And, you will probably find this particular core identified as a BN43-2402 more often than as a 2843002402 core in construction articles.

If you can't find all the particular cores you are looking for at Amidon's web page, I would also send Amidon an E-mail and ask if they are available as not all their stock is reflected in the on-line pages. Some of the less popular cores may have a minimum purchase requirement though.

Jack K8ZOA

On 11/26/2011 10:33 PM, kcmuthumani wrote:
>
> Hi,
>
> I have been wanting to build the loop described at
> http://www.home.earthlink.net/~christrask/Paper009.html
> <http://www.home.earthlink.net/%7Echristrask/Paper009.html>
>
> but I have been have not found a source for the Fair-Rite 2861000102
> balun core in the US, google search only give me a back order option
> on a number of component suppliers.
>
> Does anyone know where to buy a small quantity of them also would like
> to know if there is a place where I can get all the cores for this
> project ie FairRite 2861000102 , 2843002402 , 2843002402. The paper
> states that mini circuit transformers can be used for the last 2 cores
> but I would prefer to wind my own transformers.
>
> 73
>
> Kelvin
>
>

[Non-text portions of this message have been removed]

8779. Re: [loopantennas] Re: Looking for high quality magnetic loop antenna.

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-27 16:03:54 UTC
From: Chris Trask
Topic: 8763 Message: 8779

Speaking of high-quality amplifiers, I just posted a new paper on transformer feedback amplifiers on my web page at:

<http://www.home.earthlink.net/~christrask/Transformer%20Feedback%20Amplifiers%20Rev%200.pdf>

or

<http://www.home.earthlink.net/~christrask/Paper025.html>

Soon to be at a theatre near you.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8780. Re: Full wave loop for 10mtrs

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-27 23:22:13 UTC
From: Richard
Topic: 8759 Message: 8780

On Wed, 23 Nov 2011 23:41:51 +0000 (GMT)
phil blast <dj_philonline@...> wrote:

> Hi Richard, your calculations are correct and yes loops are very tollerant to surrounding objects
> enough for me to once have a 31ft all metal vertical HF up in the centre with no effect, after a lot
> of messing around with vertical loops myself due to being in a very poor rf zone I found that
> rectangles gave me the worst results of all and the actual wire guage is very important in getting
> resonance (and making it stick when lifted from ground) to a particular band, I also found that unlike
> other HF antennas (dont want to get into the age old argument here hihi) coax length is a huge factor
> in the use of delta loops, I opted for mill spec green kevlar impregnated dipole wire clansman type in
> a true delta triangle shape with a total size of 45ft due to my mounting style (two fishing poles) and
> wanting to stay out of band non resonant to use with a MFJ tuner for other bands as recomended, in the
> garden laid flat about 3ft from ground it was non resonant on any band as I wanted and receiving
> better than any other antenna I have tried at this qth but once erected vertical and on a shorter coax
> run up on the wall bracket it was totaly different and had a very good swr on both 21mhz and 24mhz?
> which does not comprehend at all, I use a toroidial 4:1 ballun, all in all still the best antenna Ive
> ever used here with a very low noise floor level and good signals from stations not otherwise easily
> heard, tunes easily from 10 to 40m and even with the tiny 5w from my little FT-817nd it gives
> respectable reports from Ireland on 10m fm and around the globe 10m usb (I am in Hexham Northumberland
> in a deep river valley) If a rectangle is your only option rather than triangle, circle or (diamond as
> a last resort) I found the home brew Hentenna is a better option and easier to build and tune hanging
> from a boom with thinner wire gauge, two short spreaders and an adjustable tunning wire that shorts
> across the rectangle itself, noise floor is slightly higher but so is the gain from what I remember.
> good luck with it as I nearly purchased an analyser it baffled me so much. regards 73s de Phil M6MRP

>
Hi Phil all noted , I've put this re[ply back on the list from what I've found.
the formula 1008/f(MHz) is OK when the sides on a quad or delta loop, especially the delta loop if all
sides are approximately equal in length.

However as the side lengths become irregular the length of the overall loop increases to achieve
resonance. On a 10 mtr Delta loop I found a variation of 2mtrs , 6 foot, depending on the shape, the same
with an irregular sided quad, the impedance also changes.

I'm now using a delta loop corner fed with equal sides mounted in the horizontal plane , mounted at
roof height, and it works well.

Now tempted for one for 20 mtrs as I can suspend that horizontally over the top of the roof.
--
Best wishes / 73
Richard Bown

e-mail: richard@... or richard.bown@...

nil carborundum a illegitemis
##
Ham Call G8JVM . OS Debian Wheezy/Sid amd64 on a Dual core AMD Athlon 5200, 4 GB RAM
Maidenhead QRA: IO82SP38, LAT. 52 39.720' N LONG. 2 28.171 W (degs mins)
QRV HF + VHF Microwave 23 cms:140W,13 cms:100W,6 cms:10W & 3 cms:5W
##

8781. Re: [loopantennas] Re: Full wave loop for 10mtrs

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-28 11:01:05 UTC
From: Bill McGraw
Topic: 8759 Message: 8781

--- On Sun, 11/27/11, Richard <richard.bown@...> wrote:

"Hi Phil all noted , I've put this re[ply back on the list from what I've found.
the formula 1008/f(MHz) is OK when the sides on a quad or delta loop, especially the delta loop if all
sides are approximately equal in length.

However as the side lengths become irregular the length of the overall loop increases to achieve
resonance. On a 10 mtr Delta loop I found a variation of 2mtrs , 6 foot, depending on the shape, the same
with an irregular sided quad, the impedance also changes."

Richard,
I don't follow your answer of variation of 2M, 6 foot for the 10M Delta Loop. What was the length?

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8782. Re: [loopantennas] Re: Full wave loop for 10mtrs

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-28 12:30:14 UTC
From: Richard
Topic: 8759 Message: 8782

On Mon, 28 Nov 2011 03:01:05 -0800 (PST)
Bill McGraw <mcgr3799@...t> wrote:

>
> --- On Sun, 11/27/11, Richard <richard.bown@blueyonder.co.uk> wrote:
>
>
> "Hi Phil all noted , I've put this re[ply back on the list from what I've found.
> the formula 1008/f(MHz) is OK when the sides on a quad or delta loop, especially the delta loop if all
> sides are approximately equal in length.
>
> However as the side lengths become irregular the length of the overall loop increases to achieve
> resonance. On a 10 mtr Delta loop I found a variation of 2mtrs , 6 foot, depending on the shape, the
> same with an irregular sided quad, the impedance also changes."
>
> Richard,
> I don't follow your answer of variation of 2M, 6 foot for the 10M Delta Loop. What was the length?
>
>
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>
>
>
> [Non-text portions of this message have been removed]
>

Hi Bill
I started with 35' 4" ans with irregular sides that resonated at 34 MHz, adding 6' bought that down but
the vswr was greater than 2.5:1.
I then tried in a diamond configuration which again resonated much higher again around 34 MHz.

After that I removed the loop from the tower and strung it from the house to a support. I found again
that 35' 4" resonated hight in a non equilateral formation , I added about 4' to get it to resonate
@28.5 MHz.
After a bit of restringing to get a delta loop with equal sides, that it resonated at the

wanted
frequency with about 35' and the impedance moved to around 130 ohms. It gives a vswr of less than 1.5:1
with a 4:1 balun from 28.3 to 28.6 MHz

--
Best wishes / 73
Richard Bown

e-mail: richard@... or richard.bown@...

nil carborundum a illegitemis
##
Ham Call G8JVM . OS Debian Wheezy/Sid amd64 on a Dual core AMD Athlon 5200, 4 GB RAM
Maidenhead QRA: IO82SP38, LAT. 52 39.720' N LONG. 2 28.171 W (degs mins)
QRV HF + VHF Microwave 23 cms:140W,13 cms:100W,6 cms:10W & 3 cms:5W
##

8783. Re: [loopantennas] Re: Full wave loop for 10mtrs

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-28 15:48:28 UTC
From: dreagin@q.com
Topic: 8759 Message: 8783

Somehow,I thought it would be a pair when I first saw this e-mail.It might make one want to commit a few felonies just to have a "pat down" search from this good looking woman!...Thanks,Dennis.

----- Original Message -----
From: Richard <richard.bown@...>
To: phil blast <dj_philonline@yahoo.co.uk>
Cc: loopantennas@yahoogroups.com
Sent: Sun, 27 Nov 2011 18:22:13 -0500 (EST)
Subject: [loopantennas] Re: Full wave loop for 10mtrs

On Wed, 23 Nov 2011 23:41:51 +0000 (GMT)

phil blast <dj_philonline@...> wrote:

> Hi Richard, your calculations are correct and yes loops are very tollerant to surrounding objects

> enough for me to once have a 31ft all metal vertical HF up in the centre with no effect, after a lot

> of messing around with vertical loops myself due to being in a very poor rf zone I found that

> rectangles gave me the worst results of all and the actual wire guage is very important in getting

> resonance (and making it stick when lifted from ground) to a particular band, I also found that unlike

> other HF antennas (dont want to get into the age old argument here hihi) coax length is a huge factor

> in the use of delta loops, I opted for mill spec green kevlar impregnated dipole wire clansman type in

> a true delta triangle shape with a total size of 45ft due to my mounting style (two fishing poles) and

> wanting to stay out of band non resonant to use with a MFJ tuner for other bands as recomended, in the

> garden laid flat about 3ft from ground it was non resonant on any band as I wanted and receiving

> better than any other antenna I have tried at this qth but once erected vertical and on a shorter coax

> run up on the wall bracket it was totaly different and had a very good swr on both 21mhz and 24mhz?

> which does not comprehend at all, I use a toroidial 4:1 ballun, all in all still the best antenna Ive

> ever used here with a very low noise floor level and good signals from stations not otherwise easily

> heard, tunes easily from 10 to 40m and even with the tiny 5w from my little FT-817nd it gives

> respectable reports from Ireland on 10m fm and around the globe 10m usb (I am in Hexham Northumberland

> in a deep river valley) If a rectangle is your only option rather than triangle, circle or (diamond as

> a last resort) I found the home brew Hentenna is a better option and easier to build and tune hanging

> from a boom with thinner wire gauge, two short spreaders and an adjustable tunning wire that shorts

> across the rectangle itself, noise floor is slightly higher but so is the gain from what I remember.

> good luck with it as I nearly purchased an analyser it baffled me so much. regards 73s de Phil M6MRP

>

Hi Phil all noted , I've put this re[ply back on the list from what I've found.

the formula 1008/f(MHz) is OK when the sides on a quad or delta loop, especially the delta loop if all

sides are approximately equal in length.

However as the side lengths become irregular the length of the overall loop increases to achieve

resonance. On a 10 mtr Delta loop I found a variation of 2mtrs , 6 foot, depending on the shape, the same

with an irregular sided quad, the impedance also changes.

I'm now using a delta loop corner fed with equal sides mounted in the horizontal plane , mounted at

roof height, and it works well.

Now tempted for one for 20 mtrs as I can suspend that horizontally over the top of the roof.

--

Best wishes / 73

Richard Bown

e-mail: richard@... or richard.bown@...

nil carborundum a illegitemis

##

Ham Call G8JVM . OS Debian Wheezy/Sid amd64 on a Dual core AMD Athlon 5200, 4 GB RAM

Maidenhead QRA: IO82SP38, LAT. 52 39.720' N LONG. 2 28.171 W (degs mins)

QRV HF + VHF Microwave 23 cms:140W,13 cms:100W,6 cms:10W & 3 cms:5W

##

[Non-text portions of this message have been removed]

8784. HF Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-28 16:54:11 UTC
From: Craig Cochran
Topic: 8784 Message: 8784

I am looking for plans for a relatively simple varactor tuned loop for about 3-14 MHz, receive only. Any suggestions?

8785. Re: [loopantennas] HF Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-28 21:28:51 UTC
From: Rick Karlquist
Topic: 8784 Message: 8785

Craig Cochran wrote:
> I am looking for plans for a relatively simple varactor tuned loop for
> about 3-14 MHz, receive only. Any suggestions?
>

You could scale up my loop described in the ARRL National Contest
Journal 2 years ago (also available at www.n6rk.com). You would
need to divide the range into two ranges, 3 to 6.5 MHz and 6.5 to 14
MHz. For the first range, use only one varactor instead of two.
For the second range, use two varactors in series. Also, the
circumference for the first range should be about 12 feet and
the circumference for the second range should be about 6 feet.
I still have blank PC boards available (see www.n6rk.com).

Rick N6Rk

8786. Re: [loopantennas] HF Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-28 22:07:02 UTC
From: Chris Trask
Topic: 8784 Message: 8786

>
> I am looking for plans for a relatively simple varactor tuned loop
> for about 3-14 MHz, receive only. Any suggestions?
>

Easily done for outdoor remote:

http://www.home.earthlink.net/~christrask/Varactor%20Tuned%20Loop%20Antenna.
pdf

or indoor:

http://www.home.earthlink.net/~christrask/Indoor%20Loop%20Antenna.pdf

You'll need two loop elements, one at 1.5m diameter and the other at
0.75m diameter to cover that entire frequency range.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8787. Re: [loopantennas] HF Loop for receiving

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-29 09:30:16 UTC
From: Tom Haylock
Topic: 8787 Message: 8787

Hi Craig
Have a look at my call on QRZ.com (M0ZSA)
I have had some Technical boffins who have poopoed this antenna without trying it.

They question the radiating ability because of the steel slinky coil, copper would be better in this design but is not practical. All I do know is I have tried many commercial stealth antennas that one can use in an environment were no antennas are aloud and this loop outworks them all. And it can be put together in your kitchen.

Tom

----- Original Message -----
From: Craig Cochran
To: loopantennas@yahoogroups.com
Sent: Monday, November 28, 2011 4:54 PM
Subject: [loopantennas] HF Loop

I am looking for plans for a relatively simple varactor tuned loop for about 3-14 MHz, receive only. Any suggestions?

[Non-text portions of this message have been removed]

8788. Stormwise ferrite products - Or equivalents

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-30 17:38:14 UTC
From: Benoît Mangin
Topic: 8788 Message: 8788

Good evening from France,

Does anyone of you know how to get stormwise ferrite products in Europe ? They apparently only ship inside of the US... ?

If not, would anybody indicate me a source for similar characteristics products (LF and VLF ferrites) ?

Friendly,

de F8GRY/Ben

[Non-text portions of this message have been removed]

8789. Re: [loopantennas] Stormwise ferrite products - Or equivalents

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-11-30 21:14:14 UTC
From: Tim Hills
Topic: 8788 Message: 8789

Amidon Corp. <https://www.amidoncorp.com/> Has a good selection of rods, torroids and other cores and they do ship international. The 75 and 77 materials are best suited to LF/VLF operation.

Tim Hills
Sioux Falls, SD

On 11/30/2011 11:38, Benoît Mangin wrote:
>
> Good evening from France,
>
> Does anyone of you know how to get stormwise ferrite products in
> Europe ? They apparently only ship inside of the US... ?
>
> If not, would anybody indicate me a source for similar characteristics
> products (LF and VLF ferrites) ?
>
> Friendly,
>
> de F8GRY/Ben
>

[Non-text portions of this message have been removed]

8790. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-01 13:21:01 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 8790

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

8791. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-01 13:21:01 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 8791

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

8792. RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-05 01:17:17 UTC
From: Steve Roberts
Topic: 8698 Message: 8792

In case you are wondering I am still fiddling with it. The mechanics of the antenna are complete and it is wired ready for the 75 pf variable capacitor. I am waiting for a good weather day and I will temporary rig the antenna and try it out on receive and if all seems in order I will give it a transmit try out at low wattage and proceed from there.
Because the loop (1788) was so slow in tuning I decided to install a back up 43' MFJ vertical antenna 6 to 160 meters as shown on the attached picture. Wonderful results, nearly as good as the yagi beams I gave up four years ago when I moved location.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Bill McGraw
Sent: October 29, 2011 3:36 AM
To: loopantennas@yahoogroups.com
Subject: RE: [loopantennas] Re: Light duty rotor suggestions for Pixel loop

Steve,

This got my attention, "SM0VPO Harry Lythall 80 meter 5 turn loop antenna and
ready to test this coming week."

In time let us know about that one. I have yet to install my home made dipole for 80/75M, old, lazy, sickly and too many irons, shooting club, but will get it done. I'm still studying my ARRL book, the net sites and dealing with family matters that never end.

Thanks.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

--- On Fri, 10/28/11, Steve Roberts <sr888@...
<mailto:sr888%40cogeco.ca> > wrote:

Hello Bill,
No tower involved Bill (I had to give up tower and yagi antennas 4 years ago when we downsized, I got old!). The MFJ1788 is pipe mounted on a garden shed and is 16 feet up in the air. I have another 4 feet sticking out bottom of bracket so with help I can get it 20 feet up in the air.
I have constructed SM0VPO Harry Lythall 80 meter 5 turn loop antenna and ready to test this coming week.
I can send you photographs if you so wish.

I worked in Chicago back in 1965 on loan from England for a very large press company, enjoyed that time.
Cheers Steve Roberts VE3LEH

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8794. Looking For Varactor tuning diodes

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-10 02:13:31 UTC
From: Adam E
Topic: 8794 Message: 8794

I am looking for varactor tuning diodes that cover 20 pF to 450 pF, because air variable's and polyfilms are getting hard to find. Plus I am going to build a tuner circuit that will remotely tune my large loop antenna that is in the living room. Part numbers are MVAM108, 109, and anything that would be good for LW/MW and Shortwave Use. Also I have 2 new radios that work great on loop antennas and they are the KA-1103 and S450DLX.

Adam Ebel
Virginia Beach, Virginia

8795. Re: [loopantennas] Looking For Varactor tuning diodes

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-10 08:23:14 UTC
From: Rick Karlquist
Topic: 8794 Message: 8795

Adam E wrote:
>
> I am looking for varactor tuning diodes that cover 20 pF to 450 pF,
> because air variable's and polyfilms are getting hard to find. Plus I am
> going to build a tuner circuit that will remotely tune my large loop
> antenna that is in the living room. Part numbers are MVAM108, 109, and
> anything that would be good for LW/MW and Shortwave Use. Also I have 2
> new radios that work great on loop antennas and they are the KA-1103 and
> S450DLX.
>
> Adam Ebel
> Virginia Beach, Virginia
>

Basically, the only AM radio type varactor you can get now is
the NTE-618 available from Mouser (526-NTE-618). It will replace
the MVAM-109 series.

Rick N6RK

8796. RE: [loopantennas] Looking For Varactor tuning diodes

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-10 16:14:50 UTC
From: Nota Real
Topic: 8794 Message: 8796

http://www.kitsandparts.com/parts.php
has MVAM109s

> To: loopantennas@yahoogroups.com
> From: richard@...
> Date: Sat, 10 Dec 2011 00:23:14 -0800
> Subject: Re: [loopantennas] Looking For Varactor tuning diodes
>
> Adam E wrote:
> >
> > I am looking for varactor tuning diodes that cover 20 pF to 450 pF,
> > because air variable's and polyfilms are getting hard to find. Plus I am
> > going to build a tuner circuit that will remotely tune my large loop
> > antenna that is in the living room. Part numbers are MVAM108, 109, and
> > anything that would be good for LW/MW and Shortwave Use. Also I have 2
> > new radios that work great on loop antennas and they are the KA-1103 and
> > S450DLX.
> >
> > Adam Ebel
> > Virginia Beach, Virginia
> >
>
>
> Basically, the only AM radio type varactor you can get now is
> the NTE-618 available from Mouser (526-NTE-618). It will replace
> the MVAM-109 series.
>
>
> Rick N6RK
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>

> And please trim all this when replying!Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

8797. Re: Looking For Varactor tuning diodes

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-13 14:23:35 UTC
From: Bruce Carter
Topic: 8794 Message: 8797

They are listed as "not recommended for new design", which means they are in danger of being discontinued. They have a couple of thousand left at $2.70 each. I'd get my "lifetime buy" in now before they are gone!!!!

--- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>
> Adam E wrote:
> >
> > I am looking for varactor tuning diodes that cover 20 pF to 450 pF,
> > because air variable's and polyfilms are getting hard to find. Plus I am
> > going to build a tuner circuit that will remotely tune my large loop
> > antenna that is in the living room. Part numbers are MVAM108, 109, and
> > anything that would be good for LW/MW and Shortwave Use. Also I have 2
> > new radios that work great on loop antennas and they are the KA-1103 and
> > S450DLX.
> >
> > Adam Ebel
> > Virginia Beach, Virginia
> >
>
>
> Basically, the only AM radio type varactor you can get now is
> the NTE-618 available from Mouser (526-NTE-618). It will replace
> the MVAM-109 series.
>
>
> Rick N6RK
>

8798. Re: [loopantennas] Re: Looking For Varactor tuning diodes

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-14 17:49:19 UTC
From: Rick Karlquist
Topic: 8794 Message: 8798

In many cases, this simply means that it is being superceded with
a lead free version. I might also mean that it is being superceded
with a surface mount version. Or it could mean what you said,
the end of the line.

Rick N6RK

Bruce Carter wrote:
> They are listed as "not recommended for new design", which means they are
> in danger of being discontinued. They have a couple of thousand left at
> $2.70 each. I'd get my "lifetime buy" in now before they are gone!!!!
>
> --- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>>
>> Adam E wrote:
>> >
>> > I am looking for varactor tuning diodes that cover 20 pF to 450 pF,
>> > because air variable's and polyfilms are getting hard to find. Plus I
>> am
>> > going to build a tuner circuit that will remotely tune my large loop
>> > antenna that is in the living room. Part numbers are MVAM108, 109,
>> and
>> > anything that would be good for LW/MW and Shortwave Use. Also I have
>> 2
>> > new radios that work great on loop antennas and they are the KA-1103
>> and
>> > S450DLX.
>> >
>> > Adam Ebel
>> > Virginia Beach, Virginia
>> >
>>
>>
>> Basically, the only AM radio type varactor you can get now is
>> the NTE-618 available from Mouser (526-NTE-618). It will replace
>> the MVAM-109 series.
>>
>>
>> Rick N6RK
>>
>
>
>

8799. weather band loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-16 17:39:53 UTC
From: Kenny
Topic: 8799 Message: 8799

happy holidays all. I would like some construction ideas for a weather band loop. any help would be of great help. Thanks

8800. Re: [loopantennas] weather band loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-16 18:52:51 UTC
From: kevin asato
Topic: 8799 Message: 8800

The 160MHz weatherband is normally very accessible using a vertical antenna or outside TV antenna. Loop antennas for this frequency are normally a full wavelength of wire; about 64" of wire or about 18" per side. Shortened loops at this frequency are not worth the effort as the loops tend to be lossy.

Search on "quad antenna calculator" for ideas. http://n6ach.com/calc/quad.html is one such link.

73,
kevin
kc6pob

_____
From: Kenny <ktb304@...>
To: loopantennas@yahoogroups.com
Sent: Friday, December 16, 2011 9:39 AM
Subject: [loopantennas] weather band loop

happy holidays all. I would like some construction ideas for a weather band loop. any help would be of great help. Thanks

[Non-text portions of this message have been removed]

8801. Re: weather band loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-16 18:07:43 UTC
From: Adam E
Topic: 8799 Message: 8801

A 2 foot loop with 1 turn like a UHF loop antenna will work for a weather band loop at 162 to 163 MHz you will need a 300 ohm to 75 ohm
transformer to connect to the receiver. You can connect a variable tuning capacitor in series with the loop antenna to the telescoping rod of the receiver. Don't worry 50 ohm connections will still work with 75 ohm connections.

Adam Ebel
Virginia Beach, Virginia

--- In loopantennas@yahoogroups.com, "Kenny" <ktb304@...> wrote:
>
> happy holidays all. I would like some construction ideas for a weather band loop. any help would be of great help. Thanks
>

8802. Re: Looking For Varactor tuning diodes

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-17 14:26:26 UTC
From: Bruce Carter
Topic: 8794 Message: 8802

I think it is the end of the line. They don't seem to have anything else:

http://www.nteinc.com/diodes/varactors.php?a=12

--- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>
> In many cases, this simply means that it is being superceded with
> a lead free version. I might also mean that it is being superceded
> with a surface mount version. Or it could mean what you said,
> the end of the line.
>
> Rick N6RK
>
>
> Bruce Carter wrote:
> > They are listed as "not recommended for new design", which means they are
> > in danger of being discontinued. They have a couple of thousand left at
> > $2.70 each. I'd get my "lifetime buy" in now before they are gone!!!!
> >
> > --- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@> wrote:
> >>
> >> Adam E wrote:
> >> >
> >> > I am looking for varactor tuning diodes that cover 20 pF to 450 pF,
> >> > because air variable's and polyfilms are getting hard to find. Plus I
> >> am
> >> > going to build a tuner circuit that will remotely tune my large loop
> >> > antenna that is in the living room. Part numbers are MVAM108, 109,
> >> and
> >> > anything that would be good for LW/MW and Shortwave Use. Also I have
> >> 2
> >> > new radios that work great on loop antennas and they are the KA-1103
> >> and
> >> > S450DLX.
> >> >
> >> > Adam Ebel
> >> > Virginia Beach, Virginia
> >> >
> >>
> >>
> >> Basically, the only AM radio type varactor you can get now is
> >> the NTE-618 available from Mouser (526-NTE-618). It will replace
> >> the MVAM-109 series.
> >>
> >>

> >> Rick N6RK
> >>
> >
> >
> >
>

8803. MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-19 04:07:10 UTC
From: kj6ddf
Topic: 8803 Message: 8803

MFJ-1786
10-30 MHz Hi-Q Deluxe Loop Antenna

Does anyone have this this antenna, and can tell me what kind of reception they have with it.
I have it and I'm trying to determine if mine is working properly or if it has a problem.

8804. Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-19 20:58:42 UTC
From: Tom Haylock
Topic: 8803 Message: 8804

Hi Stephen
I got mine second hand looked like new but would not tune.
After many hours of trying to get it to work, I ordered a new inner loop and board and now it works.
I still think the tuner is a pain in the but.
I am very happy with it now.
There is nothing like an antenna up high.
Tom
m0zsa

----- Original Message -----
From: kj6ddf
To: loopantennas@yahoogroups.com
Sent: Monday, December 19, 2011 4:07 AM
Subject: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

MFJ-1786
10-30 MHz Hi-Q Deluxe Loop Antenna

Does anyone have this this antenna, and can tell me what kind of reception they have with it.
I have it and I'm trying to determine if mine is working properly or if it has a problem.

[Non-text portions of this message have been removed]

8805. Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-20 02:41:58 UTC
From: Bill McGraw
Topic: 8803 Message: 8805

--- On Sun, 12/18/11, kj6ddf <kj6ddf@...> wrote:

MFJ-1786
10-30 MHz Hi-Q Deluxe Loop Antenna

Does anyone have this this antenna, and can tell me what kind of reception they have with it.
I have it and I'm trying to determine if mine is working properly or if it has a problem.

Go to eHam.net reviews showing a wide extreme.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8806. RE: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-20 04:11:22 UTC
From: Steve Roberts
Topic: 8803 Message: 8806

As I think you know Bill I have the MFJ-1788 Super Hi-Q loop antenna and I have very mixed feelings about it. The reception is actually good with overseas such as Italy etc coming in at 5 and 9 and the 20,15 and 10 meter bands are very quiet compared to the beams I used to have. My reservations are with the transmitting in that it is a slow process to tune it, sort of frustrating. You hear a station calling CQ, you move to the side of him to tune which takes 45 seconds and you move on his frequency by which time someone else has made contact with him.I attach picture. Mine is mounted on a rotor but there again the loop is not very directional.
The end result is that I purchased a MFJ-2990 43 foot self supporting vertical antenna 160-6 meters and this does an excellent job.
I would be willing to sell the 1788 for half what I paid for it about three months ago if you are interested. Shipping would e at your cost.
Cheers

Regards,
Steve Roberts VE3LEH
Professional Engineer
2200 Blackbird Court, Oakville, Ontario, Canada L6M 5E7
Tel 905-827-8462
Fax 905-827-1467

THE INFORMATION CONTAINED IN THIS E-MAIL MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE DESIGNATED RECIPIENTS. This e-mail message and/or any attachments thereto may be confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, please notify me immediately by return email, and delete this message from your system. Thank you. Note: We have taken precautions against viruses, but take no responsibility for loss or damage caused by any virus present.

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Bill McGraw
Sent: December 19, 2011 9:42 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

--- On Sun, 12/18/11, kj6ddf <kj6ddf@... <mailto:kj6ddf%40yahoo.com> > wrote:

MFJ-1786
10-30 MHz Hi-Q Deluxe Loop Antenna

Does anyone have this this antenna, and can tell me what kind of reception they have with it.
I have it and I'm trying to determine if mine is working properly or if it has a problem.

Go to eHam.net reviews showing a wide extreme.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8807. RE: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-20 10:03:29 UTC
From: Bill McGraw
Topic: 8803 Message: 8807

Robert,
No thanks, really, I don't want to deal with something difficult to use or beyond my ability as my TS-2000 manual is now a reference book rather than an unreadable manual. I solicit help is on the Kenwood site. I have a dipole, made up at a ham meeting for me two months ago and I haven't set it up in the yard yet. Lazy me.

eHam.net had extremes of experiences with the loop, meaning some of them have gotten theirs to work for them on Tx. I have a crude square loop of about 6' length hanging above a framed photo next to my DX-398 receiver and it works almost as well as a much longer loop around the office. Tx gets involved for loops and I don't have any experience. It has been a long time since I used an end fed long wire outside for the 398 or crystal sets. II have studied antennas for the last 3 years and loops look like what one needs in a portable antenna or in a cramped space outside or inside the home or attic and even then a long wire or di-pole can be placed in the attic or on the roof and the roof may be where I try my dipole.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8808. Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-20 07:52:13 UTC
From: Jeff Arnold
Topic: 8803 Message: 8808

Hello I should have my mfj-1786 up and going in a couple of days. If you haven't heard Anything I'll let you know how mine works.

Jeff AL3Q

On Dec 18, 2011, at 7:07 PM, "kj6ddf" <kj6ddf@...> wrote:

> MFJ-1786
> 10-30 MHz Hi-Q Deluxe Loop Antenna
>
> Does anyone have this this antenna, and can tell me what kind of reception they have with it.
> I have it and I'm trying to determine if mine is working properly or if it has a problem.
>
>

[Non-text portions of this message have been removed]

8809. Pixel Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-21 20:53:05 UTC
From: charles
Topic: 8809 Message: 8809

Would someone comment, on this MW loop?

8810. Re: [loopantennas] Pixel Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-22 01:00:42 UTC
From: PRESTON CLARK
Topic: 8809 Message: 8810

to what i read its good but not as good as the wellbrooke out of england
check it out on eham

http://www.eham.net/reviews/detail/9441
On Wed, Dec 21, 2011 at 2:53 PM, charles <slow2run@...> wrote:

> **
>
>
> Would someone comment, on this MW loop?
>
>
>

[Non-text portions of this message have been removed]

8811. pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-22 05:14:41 UTC
From: Dean Wayman
Topic: 8811 Message: 8811

I have one ,as with everything on the net, i would be cautious about putting to much faith in reviews ,seems to me that one guy's results could be somthing very different for another ,having said that i like my loop ,i hear there is an upgraded version available now .

Dean_0

8812. RE: [loopantennas] Pixel Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-22 08:10:07 UTC
From: Dominique Kremp
Topic: 8809 Message: 8812

Here is a test: Pixel Loop RF Pro vs Wellbrook:
http://tinyurl.com/cwybhgf

Hopefully what you're looking for ...
Good luck !

Dominique
Normandy, France

-----Message d'origine-----
De : loopantennas@...m [mailto:loopantennas@yahoogroups.com] De
la part de charles
Envoyé : mercredi 21 décembre 2011 21:53
À : loopantennas@yahoogroups.com
Objet : [loopantennas] Pixel Loop?

Would someone comment, on this MW loop?

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

8813. Re: pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-22 11:28:21 UTC
From: John
Topic: 8811 Message: 8813

I have a PRO-1A bought early this year. It has permitted me to null the powerline radiated hash, something my decades of DXing with every conceivable wire antenna here at my home wouldn't. The combination of it and my Palstar R30A is a winner - and resurrected my hobby. I often run a splitter off it's output so I can compare the sync AM detector of my Lowe HF-150. It is a decent value, chosen here over the Wellbrook due to it's using modular construction and being US-made. I am well pleased with it! See Eham reviews.

John

--- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@...> wrote:
>
> I have one ,as with everything on the net, i would be cautious about putting to much faith in reviews ,seems to me that one guy's results could be somthing very different for another ,having said that i like my loop ,i hear there is an upgraded version available now .
>
> Dean_0
>

8814. Re: MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-22 13:10:32 UTC
From: i.pryke
Topic: 8803 Message: 8814

Hello,
I have an mfj 1788, I had a few problems with it to begin with and I though it was duff, until I found out the problem was with the coax.
It is also sensitive to placement once that was resolved I'm really pleased with how it functions, especially when you consider its on a desk top in and upstairs bedroom.(based in suffolk uk) I've not tried it on ssb as yet but in digital mode psk31 I have had contacts in Italy on 20 and 40 mtrs at 5 watts. Tuning was difficult to master intialy, tune for noise then fine tune using cw,worked best for me but you may fined you need to fine tune as you move up and down the frequency.
I hope you find this offers some encouragement with yours.
73 M3WYO ian

--- In loopantennas@yahoogroups.com, Jeff Arnold <al3q.jeff@...> wrote:
>
> Hello I should have my mfj-1786 up and going in a couple of days. If you haven't heard Anything I'll let you know how mine works.
>
>
> Jeff AL3Q
>
> On Dec 18, 2011, at 7:07 PM, "kj6ddf" <kj6ddf@...> wrote:
>
> > MFJ-1786
> > 10-30 MHz Hi-Q Deluxe Loop Antenna
> >
> > Does anyone have this this antenna, and can tell me what kind of reception they have with it.
> > I have it and I'm trying to determine if mine is working properly or if it has a problem.
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

8815. Joe Carr's side-by-side Quad

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-23 19:11:06 UTC
From: Brian Burns
Topic: 8815 Message: 8815

Hello All,

I just received my copy of Joe Carr's "Loop Antenna Handbook" from Universal Radio. On page 42 he describes (briefly) the Side-by-Side Quad antenna. It consists of two full wave loops both in the same plane (edge to edge) separated by a quarter wavelength. They are fed 180 degrees out of phase with a 1:1 balun.

There are no other details such as directivity, gain, f/b ratio etc. Anyone know anything about this arrangement, or was it just a thought experiment? There is no mention of it in his practical antenna book.

Cheers,

Brian

See my website at : www.lessonsinlutherie.com

Craftsman Graphics
18000 George's Lane
Fort Bragg, CA 95437

Toll Free: 866-214-9472

8816. Re: Pixel Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-24 06:35:37 UTC
From: Ilya Zozin
Topic: 8809 Message: 8816

That's what I wrote few weeks ago in some other thread:
I also liked the idea of these antennas and purchased Pixel about 1 year ago. Mainly tried to use it for 160m, several times for 80m. Till now my 1/4L TX inverted GP works better for RX. I don't have video or even didn't make a complete scientific comparison between these two (TX vertical and Pixel loop installed on a top of the tower with "Christmas tree", overall height above the ground- 45m) but my 30 years experience says that COULD BE that the loop performs slightly better only for relatively short distances (up to 3000km). I never ever heard with it something, that I didn't hear with TX antenna while opposite is quite often.
I must admit that Pixel's loop's preamp is really good: when I already hear something- it sounds extremely clear (it still has gain head over!), the filtering and distortion sounds similar to good DSP:-) I'm planning to use this preamp for some other RX antenna.
73! Ilya 4Z1UF

[Non-text portions of this message have been removed]

8819. RE: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-24 20:50:53 UTC
From: Steve Roberts
Topic: 8803 Message: 8819

Ah good, I have the MFJ-1788 so we can compare notes. I am interested to learn what your opinion is of the tuning proceedure.
Cheers
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Jeff Arnold
Sent: December 20, 2011 2:52 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Hello I should have my mfj-1786 up and going in a couple of days. If you haven't heard Anything I'll let you know how mine works.

Jeff AL3Q

On Dec 18, 2011, at 7:07 PM, "kj6ddf" <kj6ddf@...
<mailto:kj6ddf%40yahoo.com> > wrote:

> MFJ-1786
> 10-30 MHz Hi-Q Deluxe Loop Antenna
>
> Does anyone have this this antenna, and can tell me what kind of reception they have with it.
> I have it and I'm trying to determine if mine is working properly or if it has a problem.
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8821. Re: pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-24 20:17:51 UTC
From: fvdv_mission
Topic: 8811 Message: 8821

I have one as well and am very happy with it. Don't put too much stock in the comparison to the Wellbrook test you see online. I suspect that with the Pixel Pro's deeper null and using rotors on both antennas to optimize for each frequency, the Pixel Pro will hold it's own.

--- In loopantennas@yahoogroups.com, "John" <JRTOW3RD@...> wrote:
>
> I have a PRO-1A bought early this year. It has permitted me to null the powerline radiated hash, something my decades of DXing with every conceivable wire antenna here at my home wouldn't. The combination of it and my Palstar R30A is a winner - and resurrected my hobby. I often run a splitter off it's output so I can compare the sync AM detector of my Lowe HF-150. It is a decent value, chosen here over the Wellbrook due to it's using modular construction and being US-made. I am well pleased with it! See Eham reviews.
> >
> > John
> >
> > --- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@> wrote:
> > >
> > > I have one ,as with everything on the net, i would be cautious about putting to much faith in reviews ,seems to me that one guy's results could be somthing very different for another ,having said that i like my loop ,i hear there is an upgraded version available now .
> > >
> > > Dean_0
> > >
> >

8824. Re: pixel loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2011-12-25 23:37:14 UTC
From: thinkdx
Topic: 8811 Message: 8824

It's very possible that the newer "B" version of the Pixel loop is the competitive product to the Wellbrook loop that I had hoped the original one would be. My comparison article was based on the first RF PRO-1A model. Also, the testing of each loop's nulling ability using my antenna rotor etc. was out of the scope of my review. It was enough effort by itself to methodically capture and calculate S/N ratio data for each antenna with the Perseus SDR (ie, determining the best loop on the desired signal without the added variable of nulling unwanted signals or noise).

73,

Guy

--- In loopantennas@yahoogroups.com, "fvdv_mission" <caddisfrank@...> wrote:
>
> I have one as well and am very happy with it. Don't put too much stock in the comparison to the Wellbrook test you see online. I suspect that with the Pixel Pro's deeper null and using rotors on both antennas to optimize for each frequency, the Pixel Pro will hold it's own.
>
>

8826. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-01 13:21:53 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 8826

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

8827. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-01 13:21:53 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 8827

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

8828. Re: Looking For Varactor tuning diodes

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-03 05:51:47 UTC
From: Mvs
Topic: 8794 Message: 8828

--- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>
> In many cases, this simply means that it is being superceded with
> a lead free version. I might also mean that it is being superceded
> with a surface mount version. Or it could mean what you said,
> the end of the line.
>
> Rick N6RK
>
>
> Bruce Carter wrote:
> > They are listed as "not recommended for new design", which means they are
> > in danger of being discontinued. They have a couple of thousand left at
> > $2.70 each. I'd get my "lifetime buy" in now before they are gone!!!!
> >
> > --- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@> wrote:
> >>
> >> Adam E wrote:
> >> >
> >> > I am looking for varactor tuning diodes that cover 20 pF to 450 pF,
> >> > because air variable's and polyfilms are getting hard to find. Plus I
> >> am
> >> > going to build a tuner circuit that will remotely tune my large loop
> >> > antenna that is in the living room. Part numbers are MVAM108, 109,
> >> and
> >> > anything that would be good for LW/MW and Shortwave Use. Also I have
> >> 2
> >> > new radios that work great on loop antennas and they are the KA-1103
> >> and
> >> > S450DLX.
> >> >
> >> > Adam Ebel
> >> > Virginia Beach, Virginia
> >> >
> >>
> >>
> >> Basically, the only AM radio type varactor you can get now is
> >> the NTE-618 available from Mouser (526-NTE-618). It will replace
> >> the MVAM-109 series.
> >>
> >>
> >> Rick N6RK
> >>
> >
> >

> >
>
Look for dual am varicap svc389 from www.Farnell.com Presently www.element14.com

8829. Using Diodes as Varicaps

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-03 06:27:00 UTC
From: Adam E
Topic: 8829 Message: 8829

Happy New Year Everyone,

I wanted to share this with everyone who uses varicaps I found out that you can use a ordinary diode such 1N5822 which will put the capacitance up to 490 pF, great for LW and VLF circuits. I have to see what I have in my junk box. I discovered varactor diodes when I was building a SR-2 short wave radio receiver kit from Ramsey Electronics.

http://www.hanssummers.com/varicap/varicapdiode.html

Adam Ebel
Virginia Beach, Virginia

8830. Re: Using Diodes as Varicaps

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-03 08:44:03 UTC
From: Mvs
Topic: 8829 Message: 8830

It is a great news, Adam Ebel !!!

--- In loopantennas@yahoogroups.com, "Adam E" <gccradioscience@...> wrote:
>
> Happy New Year Everyone,
>
> I wanted to share this with everyone who uses varicaps I found out that you can use a ordinary diode such 1N5822 which will put the capacitance up to 490 pF, great for LW and VLF circuits. I have to see what I have in my junk box. I discovered varactor diodes when I was building a SR-2 short wave radio receiver kit from Ramsey Electronics.
>
> http://www.hanssummers.com/varicap/varicapdiode.html
>
> Adam Ebel
> Virginia Beach, Virginia
>

8831. Re: [loopantennas] Using Diodes as Varicaps

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-03 11:54:49 UTC
From: Tim Hills
Topic: 8829 Message: 8831

Most Varactors are Zener diodes with a wide conductive area (die).

Tim Hills
Sioux Falls, SD

On 1/3/2012 0:27, Adam E wrote:
>
> Happy New Year Everyone,
>
> I wanted to share this with everyone who uses varicaps I found out
> that you can use a ordinary diode such 1N5822 which will put the
> capacitance up to 490 pF, great for LW and VLF circuits. I have to see
> what I have in my junk box. I discovered varactor diodes when I was
> building a SR-2 short wave radio receiver kit from Ramsey Electronics.
>
> http://www.hanssummers.com/varicap/varicapdiode.html
>
> Adam Ebel
> Virginia Beach, Virginia
>
>

[Non-text portions of this message have been removed]

8832. RE: [loopantennas] Using Diodes as Varicaps

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-03 14:35:56 UTC
From: David Taylor
Topic: 8829 Message: 8832

Great and useful research!

Your work has opened my eyes to another issue. I use 1N914's to protect my RX320 RF input against lightning (lots of that in Arizona). So I'm gonna have to find the capacitance of these guys is presenting too much reactance to the input.

Thanks again Adam!

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Adam E
Sent: Monday, January 02, 2012 11:27 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] Using Diodes as Varicaps

Happy New Year Everyone,

I wanted to share this with everyone who uses varicaps I found out that you can use a ordinary diode such 1N5822 which will put the capacitance up to 490 pF, great for LW and VLF circuits. I have to see what I have in my junk box. I discovered varactor diodes when I was building a SR-2 short wave radio receiver kit from Ramsey Electronics.

http://www.hanssummers.com/varicap/varicapdiode.html

Adam Ebel
Virginia Beach, Virginia

[Non-text portions of this message have been removed]

8833. Re: [loopantennas] Using Diodes as Varicaps

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-03 14:41:39 UTC
From: Jim Miller
Topic: 8829 Message: 8833

I doubt you'll find much impact from the 1n914 as they are RF small signal diodes and designed for minimal capacitance.

jim ab3cv

[Non-text portions of this message have been removed]

8834. RE: [loopantennas] Using Diodes as Varicaps

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-03 16:43:34 UTC
From: David Taylor
Topic: 8829 Message: 8834

Thanks Jim.

I looked at the datasheet and it indicates 4 pf @ 1 Mhz. Don't think I should be too worried!

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Jim Miller
Sent: Tuesday, January 03, 2012 7:42 AM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Using Diodes as Varicaps

I doubt you'll find much impact from the 1n914 as they are RF small signal diodes and designed for minimal capacitance.

jim ab3cv

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8835. RF SYSTEMS DX1 PRO

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-05 07:41:58 UTC
From: dfrenchau
Topic: 8835 Message: 8835

Hi all some time last year a guy from the USA bought a RF Systems DX1 Pro.He said he was not impressed with it

Please see the following link, this will be of interest to all.

http://www.rf-systems.nl/illegal-RF-Systems-products.html

I have checked mine and am quite satisfied mine is the true version.
I hope this will help someone out.

Regards
David

8836. Re: Pixel Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-05 12:35:19 UTC
From: shibukiau
Topic: 8809 Message: 8836

I liked my first one which I bought at it's introduction in Dayton a couple of years ago, that I got another one for my remote HF station as a RX antenna. The first one is in the attic as a monitor and the second is outside.

The second one seems to be better as it appears to have less noise, it is however much better mechanically in terms of weather proofing.

Antenna really digs out the weak signals in a noisy environment particularly when compared to a vertical antenna.

For the money they are a great RX antenna, very hard to beat. Low noise and decent rejection off the side.

I'd like to get another one for my station here in OZ but the shipping costs are a real killer!!!

Cheers!
VK4ERQ/VE3ERQ

--- In loopantennas@yahoogroups.com, "charles" <slow2run@...> wrote:
>
> Would someone comment, on this MW loop?
>

8837. Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-09 10:17:46 UTC
From: Jeff Arnold
Topic: 8803 Message: 8837

Finely got a chance to play with the mfj-1786 loop. Works surprisingly well. Except I can't get the swr down below 2.1. I am going to try adjusting the inner loop to see if the swr will go down. As far as tuning I would rather here the noise increase than tx a signal till the loop controller found the lowest swr which it did not find to often. What works best for me is while tuning the loop no tx on the icom 756 pro 3 watching the spectrum scope. I can dial it in really close every time by watching the spectrum scope. I can see if you don't have a spectrum scope and you don't have much noise to listen for tuning might be better to tx tune. Still playing with loop but I think it's going to be a great little antenna.

Jeff AL3Q

On Dec 24, 2011, at 11:50 AM, "Steve Roberts" <sr888@...> wrote:

> Ah good, I have the MFJ-1788 so we can compare notes. I am interested to
> learn what your opinion is of the tuning proceedure.
> Cheers
> Steve Roberts VE3LEH
>
> -----Original Message-----
> From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
> Behalf Of Jeff Arnold
> Sent: December 20, 2011 2:52 AM
> To: loopantennas@yahoogroups.com
> Subject: Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna
>
> Hello I should have my mfj-1786 up and going in a couple of days. If you
> haven't heard Anything I'll let you know how mine works.
>
> Jeff AL3Q
>
> On Dec 18, 2011, at 7:07 PM, "kj6ddf" <kj6ddf@...
> <mailto:kj6ddf%40yahoo.com> > wrote:
>
> > MFJ-1786
> > 10-30 MHz Hi-Q Deluxe Loop Antenna
> >
> > Does anyone have this this antenna, and can tell me what kind of reception
> they have with it.
> > I have it and I'm trying to determine if mine is working properly or if it
> has a problem.
> >
> >
>
> [Non-text portions of this message have been removed]
>

> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

8838. Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-09 10:40:26 UTC
From: Jeff Arnold
Topic: 8803 Message: 8838

I forgot to mention the receive on the mfj-1786 noise floor was about 4 to 5 s units lower than my 20 meter horizontal attic dipole which reads about s9 noise all the time. The snr on the loop is good enough I can make out what people are saying and they can here me. On the 20 meter dipole all I here is static when I switch to the loop I can here people. It's doing what I wanted here at the antenna restricted condo.

Thank you,
Jeff

On Jan 9, 2012, at 1:17 AM, Jeff Arnold <al3q.jeff@...> wrote:

> Finely got a chance to play with the mfj-1786 loop. Works surprisingly well. Except I can't get the swr down below 2.1. I am going to try adjusting the inner loop to see if the swr will go down. As far as tuning I would rather here the noise increase than tx a signal till the loop controller found the lowest swr which it did not find to often. What works best for me is while tuning the loop no tx on the icom 756 pro 3 watching the spectrum scope. I can dial it in really close every time by watching the spectrum scope. I can see if you don't have a spectrum scope and you don't have much noise to listen for tuning might be better to tx tune. Still playing with loop but I think it's going to be a great little antenna.
>
> Jeff AL3Q
>
> On Dec 24, 2011, at 11:50 AM, "Steve Roberts" <sr888@...> wrote:
>
> > Ah good, I have the MFJ-1788 so we can compare notes. I am interested to
> > learn what your opinion is of the tuning proceedure.
> > Cheers
> > Steve Roberts VE3LEH
> >
> > -----Original Message-----
> > From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On
> > Behalf Of Jeff Arnold
> > Sent: December 20, 2011 2:52 AM
> > To: loopantennas@yahoogroups.com
> > Subject: Re: [loopantennas] MFJ-1786 10-30 MHz Hi-Q Deluxe Loop Antenna
> >
> > Hello I should have my mfj-1786 up and going in a couple of days. If you
> > haven't heard Anything I'll let you know how mine works.
> >
> > Jeff AL3Q
> >
> > On Dec 18, 2011, at 7:07 PM, "kj6ddf" <kj6ddf@...
> > <mailto:kj6ddf%40yahoo.com> > wrote:
> >
> > > MFJ-1786

> > > 10-30 MHz Hi-Q Deluxe Loop Antenna
> > >
> > > Does anyone have this this antenna, and can tell me what kind of reception
> > they have with it.
> > > I have it and I'm trying to determine if mine is working properly or if it
> > has a problem.
> > >
> > >
> >
> > [Non-text portions of this message have been removed]
> >
> > [Non-text portions of this message have been removed]
> >
> >
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

8839. Re: Looking For Varactor tuning diodes

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-13 11:34:40 UTC
From: Mvs
Topic: 8794 Message: 8839

RS coponents are selling dualk varicaps sanyo SVC389.
earlier i sadid element14.
here is the Singapore link http://singapore.rs-online.com/web/p/varactor/0546452/
perhaps local RS Componments can check and get for your neeed also
they are cheap at 25 lot costing only sing$0.32 each, that too a dual.

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> They are listed as "not recommended for new design", which means they are in danger of being discontinued. They have a couple of thousand left at $2.70 each. I'd get my "lifetime buy" in now before they are gone!!!!
>
> --- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@> wrote:
> >
> > Adam E wrote:
> > >
> > > I am looking for varactor tuning diodes that cover 20 pF to 450 pF,
> > > because air variable's and polyfilms are getting hard to find. Plus I am
> > > going to build a tuner circuit that will remotely tune my large loop
> > > antenna that is in the living room. Part numbers are MVAM108, 109, and
> > > anything that would be good for LW/MW and Shortwave Use. Also I have 2
> > > new radios that work great on loop antennas and they are the KA-1103 and
> > > S450DLX.
> > >
> > > Adam Ebel
> > > Virginia Beach, Virginia
> > >
> >
> >
> > Basically, the only AM radio type varactor you can get now is
> > the NTE-618 available from Mouser (526-NTE-618). It will replace
> > the MVAM-109 series.
> >
> >
> > Rick N6RK
> >
>

8840. Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-15 00:09:27 UTC
From: Harry
Topic: 8840 Message: 8840

I've got a Kiwa MW Loop antenna that I want to sell. It's in excellent condition and good working order. Anybody have any ideas about what price I should ask? Bought it years ago, but don't remember what it cost then. Saw one on ebay about a month ago but missed seeing what it sold for.

Harry

8841. Re: Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-16 14:15:49 UTC
From: Jim
Topic: 8840 Message: 8841

You could sell it to me for $25!! Universal Radio web site shows two that sold used for $289 each. The original price for a new one was as high as $440. Jim

--- In loopantennas@yahoogroups.com, "Harry" <hmholden69@...> wrote:
>
> I've got a Kiwa MW Loop antenna that I want to sell. It's in excellent condition and good working order. Anybody have any ideas about what price I should ask? Bought it years ago, but don't remember what it cost then. Saw one on ebay about a month ago but missed seeing what it sold for.
>
> Harry
>

8842. Re: [loopantennas] Re: Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-16 16:09:11 UTC
From: Brant Hunt
Topic: 8840 Message: 8842

Dear Jim,
    I have a universal radio catalog from 2000-2003 stating that the loop antenna sold for $389.95 brand new. Note I have seen these Kiwa loop antennas sell for over 500.00 used on ebay if they were in good condition. I hope this will help you out.
  Regards,
   Brant

--- On Mon, 1/16/12, Jim <jim01028@...> wrote:

From: Jim <jim01028@...>
Subject: [loopantennas] Re: Kiwa MW Loop Antenna
To: loopantennas@yahoogroups.com
Date: Monday, January 16, 2012, 9:15 AM

You could sell it to me for $25!! Universal Radio web site shows two that sold used for $289 each. The original price for a new one was as high as $440. Jim

--- In loopantennas@yahoogroups.com, "Harry" <hmholden69@...> wrote:
>
> I've got a Kiwa MW Loop antenna that I want to sell. It's in excellent condition and good working order. Anybody have any ideas about what price I should ask? Bought it years ago, but don't remember what it cost then. Saw one on ebay about a month ago but missed seeing what it sold for.
>
> Harry
>

[Non-text portions of this message have been removed]

8843. RE: Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-16 17:44:18 UTC
From: Guy Atkins
Topic: 8843 Message: 8843

Hi Harry,

I don't think I've ever seen one of these sell for less than $600 USD...
most seem to go for $650 or more.

Guy

[Non-text portions of this message have been removed]

8844. Re: [loopantennas] Re: Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-16 16:14:12 UTC
From: Robert Costa, KB6QXM
Topic: 8844 Message: 8844

What are the specs of this kiwa mw antenna?

73,
Robert
KB6QXM
"Ham Radio Open Conversation"
Yahoo group owner/moderator

----- Reply message -----
From: "Brant Hunt" <branthunt@...>
To: <loopantennas@yahoogroups.com>
Subject: [loopantennas] Re: Kiwa MW Loop Antenna
Date: Mon, Jan 16, 2012 8:09 am
  Dear Jim,

    I have a universal radio catalog from 2000-2003 stating that the loop antenna sold for $389.95 brand new. Note I have seen these Kiwa loop antennas sell for over 500.00 used on ebay if they were in good condition. I hope this will help you out.

  Regards,

   Brant

--- On Mon, 1/16/12, Jim <jim01028@...> wrote:

From: Jim <jim01028@...>

Subject: [loopantennas] Re: Kiwa MW Loop Antenna

To: loopantennas@yahoogroups.com

Date: Monday, January 16, 2012, 9:15 AM

You could sell it to me for $25!! Universal Radio web site shows two that sold used for $289 each. The original price for a new one was as high as $440. Jim

--- In loopantennas@...m, "Harry" <hmholden69@...> wrote:

>

> I've got a Kiwa MW Loop antenna that I want to sell. It's in excellent condition and good working order. Anybody have any ideas about what price I should ask? Bought it years ago, but don't remember what it cost then. Saw one on ebay about a month ago but missed seeing what it sold for.

>

> Harry

>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8845. Re: [loopantennas] Re: Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-16 17:11:46 UTC
From: Dennis Vroom
Topic: 8840 Message: 8845

A KIWA loop recently sold on Ebay a few weeks ago for $600.00. I sold a
Space magnet loop on Ebay last year for $300.00. Good luck with your sale.

Best regards,

Dennis,
Kalama, WA

From: Brant Hunt <branthunt@...>
To: loopantennas@yahoogroups.com
Sent: Monday, January 16, 2012 8:09 AM
Subject: Re: [loopantennas] Re: Kiwa MW Loop Antenna

  Dear Jim,
    I have a universal radio catalog from 2000-2003 stating that the loop antenna sold for $389.95 brand new. Note I have seen these Kiwa loop antennas sell for over 500.00 used on ebay if they were in good condition. I hope this will help you out.
  Regards,
   Brant

--- On Mon, 1/16/12, Jim <jim01028@...> wrote:

From: Jim <jim01028@...>
Subject: [loopantennas] Re: Kiwa MW Loop Antenna
To: loopantennas@yahoogroups.com
Date: Monday, January 16, 2012, 9:15 AM

You could sell it to me for $25!! Universal Radio web site shows two that sold used for $289 each. The original price for a new one was as high as $440. Jim

--- In loopantennas@yahoogroups.com, "Harry" <hmholden69@...> wrote:
>
> I've got a Kiwa MW Loop antenna that I want to sell. It's in excellent condition and good working order. Anybody have any ideas about what price I should ask? Bought it years ago, but don't remember what it cost then. Saw one on ebay about a month ago but missed seeing what it sold for.
>
> Harry
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8846. Re: [loopantennas] RE: Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-16 19:27:24 UTC
From: J Ferrow
Topic: 8843 Message: 8846

RE; Kiwa Loop Antanna:

I had one and while people might be willing to pay 600.00 for a used one on Ebay in my opinion they are way overrated. Most of my interest is in LW and MW dx and I compared the 400.00 kiwa loop (what i paid for it at the time) with a 49.95 (what i paid for it on sale) Ccrane twin ferrite loop and the Ccrane was the equal to or better antenna across the whole MW spectrum - IMHO save your money. I wouldn't pay $150 for one, unless of course i was reselling it for 600.00.

From: Guy Atkins <dx@...>
To: loopantennas@yahoogroups.com
Sent: Monday, January 16, 2012 12:44 PM
Subject: [loopantennas] RE: Kiwa MW Loop Antenna

Hi Harry,

I don't think I've ever seen one of these sell for less than $600 USD...
most seem to go for $650 or more.

Guy

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8847. ham loops for 40 to 6 transmitt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-16 22:06:02 UTC
From: JR
Topic: 8847 Message: 8847

anyone had any experience building this is something easy to build or do i need to build a am broadcast band loop first

thanks
Preston Kf5evv

8849. Re: ham loops for 40 to 6 transmitt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-17 14:29:56 UTC
From: kj4wrk
Topic: 8847 Message: 8849

I built a 40m horizontal loop in my attic. A regular "Skywave" loop that's installed at the proper height is ideal, but I've had good luck with mine in spite of it being 20 feet off the ground (at its lowest point).

Since the space to install my loop was too small (30' X 30') for a normal loop, I had to distort the shape from a square to a star by pulling the sides inwards and upwards so it's vaguely pyramid shaped. All told, I have about 1.25 wavelengths installed and use it with a directly attached Balun Designs 4:1 balun. Signal path is:

FT-897 - 6' RG-8X -> LDG AT100ProII autotuner -> - 30' RG-8X -> 4:1 Balun -> antenna

The balun and tuner are not optional for this type of antenna.

The antenna has four strong lobes at 40m and the TOA improves as the frequency increases. The propagation pattern changes a bit on each frequency. Cebik's site has an article on star-loops and his models show the capabilities of the antenna pretty well. My antenna deviates from his design by raising the pulled-in center about 8 feet so I could avoid my in-attic heat pump and ducting. I'm sure this affects the propagation pattern, but until I model it, I won't know exactly how. I suspect it's helped it from being a cloud burner since my antenna's so close to the ground.

I'm able to get a 1.3:1 or better match on all bands between 40 and 10m and usually 1.5:1 or better on 6m. I've not used it much on 6m, but I'm able to get out very well from the DC area to Asiatic Russia, most of Europe, Southern South America, South
Africa, Alaska and California, usually on 30 watts.

Steve
KJ4WRK

--- In loopantennas@yahoogroups.com, "JR" <kf5evv73@...> wrote:
>
> anyone had any experience building this is something easy to build or do i need to build a am broadcast band loop first
>
> thanks
> Preston Kf5evv
>

8850. Re: ham loops for 40 to 6 transmitt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-17 14:38:42 UTC
From: kj4wrk
Topic: 8847 Message: 8850

Construction was pretty easy. I used 8 insulators, some strong line and 14 gauge coated wire. It took the afternoon. The hardest part of the whole job was pulling the coax down into my shack.

Since I didn't want to crawl out to the edges of my attic, I made some supports from PVC on a long PVC pole and pushed them out into the corners and held it in place by screwing the end of the pole to the joists. The business end of the supports engage between the rafter and the joist and keep the wire in place as I pulled it in.

The job is easier with two people, but if you're smart and do a bit of planning, you can manage it on your own. Just don't fall through the ceiling. We have a two story family room and I tred VERY carefully when I was above it.

Steve
KJ4WRK

8851. Re: ham loops for 40 to 6 transmitt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-17 14:45:41 UTC
From: Jim Whitaker
Topic: 8847 Message: 8851

--- In loopantennas@yahoogroups.com, "kj4wrk" <steve@...> wrote:
>
>
> Construction was pretty easy. I used 8 insulators, some strong line and 14 gauge coated wire. It took the afternoon. The hardest part of the whole job was pulling the coax down into my shack.
>
> Since I didn't want to crawl out to the edges of my attic, I made some supports from PVC on a long PVC pole and pushed them out into the corners and held it in place by screwing the end of the pole to the joists. The business end of the supports engage between the rafter and the joist and keep the wire in place as I pulled it in.
>
> The job is easier with two people, but if you're smart and do a bit of planning, you can manage it on your own. Just don't fall through the ceiling. We have a two story family room and I tred VERY carefully when I was above it.
>
> Steve
> KJ4WRK
>

I've been considering the same antenna, how is it performing compared to your previous? Thats about the limit of the room I have and looks like it might perform well in a limited space.

73 DE N8XYN Jim K

8852. Re: ham loops for 40 to 6 transmitt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-17 15:33:38 UTC
From: kj4wrk
Topic: 8847 Message: 8852

This is my first HF antenna, so I don't have a lot to compare it with. It worked pretty well right off and most of my QSO's have been DX, so I'm pretty tickled overall.

I find I get stepped on by the big hitters when I'm chasing a pileup, but that's probably not unusual. I got very lucky with the way my house is situated. One lobe points straight into Europe and another sweeps eastern South America. It's interesting to display the QTH of all the QSO's with google earth (I use HRD's logging program to see that). You can see that most of the contacts correlate with the prop pattern.

--- In loopantennas@yahoogroups.com, "Jim Whitaker" <jimawhitaker@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "kj4wrk" <steve@> wrote:
> >
> >
> > Construction was pretty easy. I used 8 insulators, some strong line and 14 gauge coated wire. It took the afternoon. The hardest part of the whole job was pulling the coax down into my shack.
> >
> > Since I didn't want to crawl out to the edges of my attic, I made some supports from PVC on a long PVC pole and pushed them out into the corners and held it in place by screwing the end of the pole to the joists. The business end of the supports engage between the rafter and the joist and keep the wire in place as I pulled it in.
> >
> > The job is easier with two people, but if you're smart and do a bit of planning, you can manage it on your own. Just don't fall through the ceiling. We have a two story family room and I tred VERY carefully when I was above it.
> >
> > Steve
> > KJ4WRK
> >
>
> I've been considering the same antenna, how is it performing compared to your previous? Thats about the limit of the room I have and looks like it might perform well in a limited space.
>
>
> 73 DE N8XYN Jim K
>

8853. Re: Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-17 19:35:43 UTC
From: thinkdx
Topic: 8843 Message: 8853

I've been assuming all along that it has been collectors paying these inflated prices.
However, the Kiwa regeneration control (the Quantum Loop has one too) makes it a better antenna than simple ones like Ccrane. Also, the very sturdy construction helps it to stay stable and maintain nulls. The twin ferrite loop has no facility for tilting/rotating.
In the 1990s I sometimes used a Kiwa MW Loop for trans-Pacific MW DXing and it certainly held its own against Beverages my Seattle area DXing pals and I used at Grayland. In fact, the Kiwa's regeneration feature helps improve selectivity and reduce splatter from adjacent channel domestics (for instance, on reception of HLCA Korea on 972 kHz in the shadow of stations on 970). This is a huge help in receiving the foreign stations. We've moved on to specialty antennas like phased ALA100 loops now though, and the selectivity of current SDR receivers need no help from controls like regeneration.
In the 1994-95 Proceedings of Fine Tuning book, the FT staff and I published Werner Funkenhauser's review of the Kiwa MW Loop. It's available here online via Kiwa's web site for anyone interested:http://www.kiwa.com/proceed.html
<http://www.kiwa.com/proceed.html>
Guy AtkinsPuyallup, WA USA

--- In loopantennas@yahoogroups.com, J Ferrow <ferrox4@...> wrote:>> RE; Kiwa Loop Antanna: > > > I had one and while people might be willing to pay 600.00 for a used one on Ebay in my opinion they are way overrated. Most of my interest is in LW and MW dx and I compared the 400.00 kiwa loop (what i paid for it at the time) with a 49.95 (what i paid for it on sale) Ccrane twin ferrite loop and the Ccrane was the equal to or better antenna across the whole MW spectrum - IMHO save your money. I wouldn't pay $150 for one, unless of course i was reselling it for 600.00.>

[Non-text portions of this message have been removed]

8854. Loop amplifier kit and loop theory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-20 10:23:56 UTC
From: timo
Topic: 8854 Message: 8854

I added a link

http://LZ1AQ.signacor.com/

for interesting loop antenna wideband amplifier kit. The kit includes an amplifier and a control unit. You can switch with the control unit between single loop, coplanar loops, crossed loops and dipole antenna. Also loop theory is included.

---timo

8855. Re: Loop amplifier kit and loop theory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-20 17:06:29 UTC
From: vbifyz
Topic: 8854 Message: 8855

Hi Chavdar,

How different is the balanced current amplifier in this kit from your earlier design?
http://lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm

73, Mike

--- In loopantennas@yahoogroups.com, "timo" <timo.nieminen@...> wrote:
>
> I added a link
>
> http://LZ1AQ.signacor.com/
>
> for interesting loop antenna wideband amplifier kit. The kit includes an amplifier and a control unit. You can switch with the control unit between single loop, coplanar loops, crossed loops and dipole antenna. Also loop theory is included.
>
> ---timo
>

8856. RE: [loopantennas] Loop amplifier kit and loop theory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-20 21:14:21 UTC
From: Dominique Kremp
Topic: 8854 Message: 8856

-----Message d'origine-----
De : loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] De la part de timo
Envoyé : vendredi 20 janvier 2012 11:24
À : loopantennas@yahoogroups.com
Objet : [loopantennas] Loop amplifier kit and loop theory

I added a link

http://LZ1AQ.signacor.com/

for interesting loop antenna wideband amplifier kit. The kit includes an amplifier and a control unit. You can switch with the control unit between single loop, coplanar loops, crossed loops and dipole antenna. Also loop theory is included.

---timo

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

8857. Another small loop antenna review--Pixel PRO-1B and Wellbrook ALA1530L

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-21 01:33:34 UTC
From: Steve Ratzlaff
Topic: 8857 Message: 8857

I check Jack Smith K8ZOA's webpage now and then to see if there are any updates or interesting new articles. On a check today I noted that there's some new Update information, about an extensive loop review he recently completed.
http://www.cliftonlaboratories.com/Updates.htm
The review is available at:
<http://www.cliftonlaboratories.com/Documents/Loop%20vs%20Loop%20Final-Final.pdf>
If you have any interest in small active receiving loops, this is definitely worth reading, especially if you've read any other small receiving loop reviews concerning the Pixel and Wellbrook loops.

73,
Steve

8858. Another small loop antenna review--Pixel PRO-1B and Wellbrook ALA1530L

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-21 01:35:43 UTC
From: Steve Ratzlaff
Topic: 8857 Message: 8858

I check Jack Smith K8ZOA's webpage now and then to see if there are any updates or interesting new articles. On a check today I noted that there's some new Update information, about an extensive loop review he recently completed.
http://www.cliftonlaboratories.com/Updates.htm
The review is available at:
<http://www.cliftonlaboratories.com/Documents/Loop%20vs%20Loop%20Final-Final.pdf>
If you have any interest in small active receiving loops, this is definitely worth reading, especially if you've read any other small receiving loop reviews concerning the Pixel and Wellbrook loops.

73,
Steve

8859. Re: Another small loop antenna review--Pixel PRO-1B and Wellbrook ALA1530L

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-22 14:55:43 UTC
From: Ken
Topic: 8857 Message: 8859

--- In loopantennas@yahoogroups.com, "Steve Ratzlaff" <steveratz@...> wrote:
>
> I check Jack Smith K8ZOA's webpage now and then to see if there are any
> updates or interesting new articles. On a check today I noted that there's
> some new Update information, about an extensive loop review he recently
> completed.

Yes, interesting but to tell you the truth I'll wait until I read a
review by someone a little less "involved" with one of the companies.

Ken

8860. Re: [loopantennas] Digest Number 1983

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-20 10:25:45 UTC
From: Michael Evans
Topic: 8860 Message: 8860

I did a google and the price was $400 with $22 for postage when I first came out, they move shop and could not get the large tubing so stopped making them, I would offer half that amount, but I am in England, just an helpfull reply. Michael.

From: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>
To: loopantennas@yahoogroups.com
Sent: Monday, 16 January 2012, 13:19
Subject: [loopantennas] Digest Number 1983

Loop Antenna News and Information Forum
Messages In This Digest (1 Message)
1.
Kiwa MW Loop Antenna From: Harry View All Topics | Create New Topic Message
1.
Kiwa MW Loop Antenna
Posted by: "Harry" hmholden69@... hmholden69
Sun Jan 15, 2012 7:35 am (PST)

I've got a Kiwa MW Loop antenna that I want to sell. It's in excellent condition and good working order. Anybody have any ideas about what price I should ask? Bought it years ago, but don't remember what it cost then. Saw one on ebay about a month ago but missed seeing what it sold for.

Harry

Back to top Reply to sender | Reply to group | Reply via web post
Messages in this topic (1)
Recent Activity
* 11
New MembersVisit Your Group
Yahoo! Groups
Small Business Group
Ask questions,
share experiences
Drive Traffic
Sponsored Search
can help increase
your site traffic.
Yahoo! Finance
It's Now Personal
Guides, news,
advice & more.
Need to Reply?
Click one of the "Reply" links to respond to a specific message in the Daily Digest.
Create New Topic | Visit Your Group on the Web

Messages | Files | Photos | Links | Database | Polls | Calendar
If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!
MARKETPLACE
Stay on top of your group activity without leaving the page you're on - Get the Yahoo! Toolbar now.

Change settings via the Web (Yahoo! ID required)
Change settings via email: Switch delivery to Individual | Switch format to Traditional
Visit Your Group | Yahoo! Groups Terms of Use | Unsubscribe

[Non-text portions of this message have been removed]

8861. RE: [loopantennas] Digest Number 1983

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-22 20:50:39 UTC
From: Gary Saltz
Topic: 8860 Message: 8861

Harry.I had 3 and sold one to a German collector for $600 plus ship last year and he was very grateful. They are beautiful to look at and beat just about anything I have come across in 50 years.will never be made again.

Used ones are very rare.don't sell it for less.as the old saying goes...try to find one!!

Gary

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Michael Evans
Sent: Friday, January 20, 2012 3:26 AM
To: No Reply; loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Digest Number 1983

I did a google and the price was $400 with $22 for postage when I first came out, they move shop and could not get the large tubing so stopped making them, I would offer half that amount, but I am in England, just an helpfull reply. Michael.

From: "loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com> " <loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com> >
To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
Sent: Monday, 16 January 2012, 13:19
Subject: [loopantennas] Digest Number 1983

Loop Antenna News and Information Forum
Messages In This Digest (1 Message)
1.
Kiwa MW Loop Antenna From: Harry View All Topics | Create New Topic Message

1.
Kiwa MW Loop Antenna
Posted by: "Harry" hmholden69@... <mailto:hmholden69%40yahoo.com>
hmholden69
Sun Jan 15, 2012 7:35 am (PST)

I've got a Kiwa MW Loop antenna that I want to sell. It's in excellent condition and good working order. Anybody have any ideas about what price I should ask? Bought it years ago, but don't remember what it cost then. Saw one on ebay about a month ago but missed seeing what it sold for.

Harry

Back to top Reply to sender | Reply to group | Reply via web post
Messages in this topic (1)

Recent Activity
* 11
New MembersVisit Your Group
Yahoo! Groups
Small Business Group
Ask questions,
share experiences
Drive Traffic
Sponsored Search
can help increase
your site traffic.
Yahoo! Finance
It's Now Personal
Guides, news,
advice & more.
Need to Reply?
Click one of the "Reply" links to respond to a specific message in the Daily Digest.
Create New Topic | Visit Your Group on the Web
Messages | Files | Photos | Links | Database | Polls | Calendar
If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!
MARKETPLACE
Stay on top of your group activity without leaving the page you're on - Get the Yahoo! Toolbar now.

Change settings via the Web (Yahoo! ID required)
Change settings via email: Switch delivery to Individual | Switch format to Traditional
Visit Your Group | Yahoo! Groups Terms of Use | Unsubscribe

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8862. Kiwa MW Loop !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-23 09:37:41 UTC
From: brian nsl
Topic: 8862 Message: 8862

Hi,
Following this thread I had a look at the now discontinued model.
it looks very neat.
I have an amount of PVC 5mm wall pipe offcuts from a fume ducting job,
starting at 200 mm dia and up to 600 mm dia, might give the idea a try out
for a MW antenna.
I assume that the ' inner mounted ' box is an amplifier ????
Any owners like to comment please.
Thank you,
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

8863. Antique antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-24 09:55:40 UTC
From: brian nsl
Topic: 8863 Message: 8863

Hi,
Came across this item during a websearch yesterday,

Vintage Zenith Wave Magnet Rotor Early Radio Antenna | eBay
www.ebay.com/itm/Vintage...Early-Radio-Antenna-/380225462293$125.00

Vintage Zenith Wave Magnet Rotor Early Radio Antenna in Collectibles , Radio, ...

72, Bian, G0NSL-QRP.

[Non-text portions of this message have been removed]

8864. Re: [loopantennas] Antique antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-24 10:03:33 UTC
From: Jerry
Topic: 8863 Message: 8864

think that would rotate my 553 foot loop up at 50 ft hi,hi just kidding ,is that used with small indoor loops or an outside larger type
jerry KJ6NTL

From: brian nsl <brian.nsl@btinternet.com>
To: loopantennas@yahoogroups.com
Cc: mwc@...
Sent: Tue, January 24, 2012 1:55:40 AM
Subject: [loopantennas] Antique antenna !!!!!

Hi,
Came across this item during a websearch yesterday,

Vintage Zenith Wave Magnet Rotor Early Radio Antenna | eBay
www.ebay.com/itm/Vintage...Early-Radio-Antenna-/380225462293$125.00

Vintage Zenith Wave Magnet Rotor Early Radio Antenna in Collectibles , Radio, ...

72, Bian, G0NSL-QRP.

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8865. Re: [loopantennas] Antique antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-24 19:36:36 UTC
From: brian nsl
Topic: 8863 Message: 8865

Jerry,
It looks very basic, the ' Wave Magnet ' bit on the box was obviously the selling point hi!
72, Brian, G0NSL-QRP.
----- Original Message -----
From: Jerry
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 24, 2012 10:03 AM
Subject: Re: [loopantennas] Antique antenna !!!!!

[Non-text portions of this message have been removed]

8866. Re: Antique antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-25 17:50:42 UTC
From: tenorman1952
Topic: 8863 Message: 8866

Hey, I'll bet it works better than some of the junk sold today.

Paul C.

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Jerry,
> It looks very basic, the ' Wave Magnet ' bit on the box was obviously the
> selling point hi!
> 72, Brian, G0NSL-QRP.
> ----- Original Message -----
> From: Jerry
> To: loopantennas@yahoogroups.com
> Sent: Tuesday, January 24, 2012 10:03 AM
> Subject: Re: [loopantennas] Antique antenna !!!!!
>
> [Non-text portions of this message have been removed]
>

8867. Re: Pixel Loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-27 08:51:50 UTC
From: Bernard Malet
Topic: 8809 Message: 8867

Dear OM,

To answer your question it is best to go to the website of Jack Smith, K8ZOA, Clifton Laboratories
His website is: http://www.cliftonlaboratories.com/Updates.htm

Download the most recent, excellent and outstanding comparative study, between the Pixel and Wellbrock LOOP

http://www.cliftonlaboratories.com/Documents/Loop% 20vs% 20Final% 20Loop-Final.pdf

Best regards from France

Bernard MALET

--- In loopantennas@yahoogroups.com, "shibukiau" <kubisl@...> wrote:
>
> I liked my first one which I bought at it's introduction in Dayton a couple of years ago, that I got another one for my remote HF station as a RX antenna. The first one is in the attic as a monitor and the second is outside.
>
> The second one seems to be better as it appears to have less noise, it is however much better mechanically in terms of weather proofing.
>
> Antenna really digs out the weak signals in a noisy environment particularly when compared to a vertical antenna.
>
> For the money they are a great RX antenna, very hard to beat. Low noise and decent rejection off the side.
>
> I'd like to get another one for my station here in OZ but the shipping costs are a real killer!!!
>
> Cheers!
> VK4ERQ/VE3ERQ
>
>
> --- In loopantennas@yahoogroups.com, "charles" <slow2run@> wrote:
> >
> > Would someone comment, on this MW loop?
> >
>

8868. which antenna to choose?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-27 09:12:41 UTC
From: Bernard Malet
Topic: 8868 Message: 8868

Dear OM and SWL,

To answer this question, which antenna to choose?

The best solution is to visit the site of Jack Smith, K8ZOA, Clifton Laboratories
His website is: http://www.cliftonlaboratories.com

He has just completed a new an excellent, outstanding and long article and comparison between PIXEL / WALLBROCK

Download the new document:
http://www.cliftonlaboratories.com/Documents/Loop% 20vs% 20Final% 20Loop-Final.pdf

From my side I use as an antenna Z1501D completed its fabulous Long Telescopic Whip of 9.5 feet from home Buddipole: http://www.buddipole.com/lotewh.html

Both U.S. companies have robust and efficient materials.

Best regards to you all from France

8869. Terminated Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-30 19:24:52 UTC
From: g7aqk@btinternet.com
Topic: 8869 Message: 8869

Over the weekend I tried to build a T2FD antenna. This is basically a folded dipole with a load resistor opposite the feedpoint (Google T2FD for more details). This arrangement can produce a very low SWR across the whole of the HF spectrum. Now my version had too much sag at the feedpoint due to the weight of the feeder, but I thought I would give the design a test to see how well it performed. The antenna pulled in loads of stations across the HF spectrum and showed good SWR on all bands except 12m (this may be due to resonance which is something to be avoided with this type of antenna). The delta loop formation is mechanically much easier to feed than the dipole as the 6:1 balun is closer to the ground. Has this arrangement been tried before? I have not been able to find any reference to a loaded delta loop on the web but am very impressed with the results.

Neil
G7AQK

8870. Re: Terminated Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-31 00:17:03 UTC
From: Alex P
Topic: 8869 Message: 8870

Neil,

A terminated delta loop has been tried before and there is info in a variety of ant books. Keep in mind that if you terminate with a non-inductive resistor there is a significant amount of tx power that is converted to heat and is therefore not radiated. This is a tradeoff that you make for an increased bandwidth with this kind of design for a lower tx VSWR. For receive mode, this antenna also 'appears' more 'broadband'. Since it's a variation of an H-field ('magnetic') loop, the signal-to-noise ratio should significantly increase by having an immunity to the locally generated E-field 'noise'. The value of the termination will affect this performance. As a side note, until the Santa Ana's blew it down a few weeks ago, I had a 53 foot circumference delta loop on my tower with the horizontal baseline leg at about 48 ft when extended (about 65 ft total vertical length). This version of the loop did not have any termination. The rx baseband noise went from S7-S9 using a formally installed 20 meter ground plane to about S0-S1 (average measured baseband noise of about -132 to -125 dBm) using this delta loop. Best antenna I've had so far for receive mode. Picked up many LW beacons not formerly heard as well as good dx recently on 10 and 15 meters.
Hope this helps.

Alex

--- In loopantennas@yahoogroups.com, "g7aqk@..." <g7aqk@...> wrote:
>
> Over the weekend I tried to build a T2FD antenna. This is basically a folded dipole with a load resistor opposite the feedpoint (Google T2FD for more details). This arrangement can produce a very low SWR across the whole of the HF spectrum. Now my version had too much sag at the feedpoint due to the weight of the feeder, but I thought I would give the design a test to see how well it performed. The antenna pulled in loads of stations across the HF spectrum and showed good SWR on all bands except 12m (this may be due to resonance which is something to be avoided with this type of antenna). The delta loop formation is mechanically much easier to feed than the dipole as the 6:1 balun is closer to the ground. Has this arrangement been tried before? I have not been able to find any reference to a loaded delta loop on the web but am very impressed with the results.
>
> Neil
> G7AQK
>

8871. Re: [loopantennas] Re: Terminated Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-31 07:22:49 UTC
From: brian nsl
Topic: 8869 Message: 8871

Neil,
This website may interest you,
Content / Antennas / Delta RX Antenna used at FO0AAA - OK1RR
...www.ok1rr.com/e107_plugins/content/content.php?content.119

72, Brian, G0NSL-QRP
----- Original Message -----
From: Alex P
To: loopantennas@yahoogroups.com
Sent: Tuesday, January 31, 2012 12:17 AM
Subject: [loopantennas] Re: Terminated Delta Loop

[Non-text portions of this message have been removed]

8872. Re: Terminated Delta Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-31 15:11:17 UTC
From: tenorman1952
Topic: 8869 Message: 8872

--- In loopantennas@yahoogroups.com, "g7aqk@..." <g7aqk@...> wrote:
>
> Over the weekend I tried to build a T2FD antenna. This is basically a folded dipole with a load resistor opposite the feedpoint (Google T2FD for more details). This arrangement can produce a very low SWR across the whole of the HF spectrum. Now my version had too much sag at the feedpoint due to the weight of the feeder, but I thought I would give the design a test to see how well it performed. The antenna pulled in loads of stations across the HF spectrum and showed good SWR on all bands except 12m (this may be due to resonance which is something to be avoided with this type of antenna). The delta loop formation is mechanically much easier to feed than the dipole as the 6:1 balun is closer to the ground. Has this arrangement been tried before? I have not been able to find any reference to a loaded delta loop on the web but am very impressed with the results.
>
> Neil
> G7AQK
>

Our experience (club) with a T2FD was dismal. Great SWR readings on all bands, just deaf as a post and no output. Could not hear it across town. A great dummy load.

Paul - AE5JU

8873. Re: [loopantennas] RE: Kiwa MW Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-01-31 15:26:56 UTC
From: Jim Bo
Topic: 8843 Message: 8873

I have one for sale for $695 that is in Excellent condition. Never left the house and I have pictures of actual equipment for those that are interested.

Jim
----- Original Message -----
From: Guy Atkins
To: loopantennas@yahoogroups.com
Sent: Monday, January 16, 2012 9:44 AM
Subject: [loopantennas] RE: Kiwa MW Loop Antenna

Hi Harry,

I don't think I've ever seen one of these sell for less than $600 USD...
most seem to go for $650 or more.

Guy

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8874. Re: [loopantennas] Digest Number 1994

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-01 17:43:37 UTC
From: Doug Kniffen
Topic: 8874 Message: 8874

On 2/1/2012 8:23 AM, loopantennas@yahoogroups.com wrote:
> _____
> 1a. Re: Terminated Delta Loop
> Posted by: "tenorman1952" tenorman1952@... tenorman1952
> Date: Tue Jan 31, 2012 7:11 am ((PST))
>
> Our experience (club) with a T2FD was dismal. Great SWR readings on all bands, just deaf as a post and no output. Could not hear it across town. A great dummy load.
>
I wonder why it didn't work for you, maybe you were expecting
something different. T2FD is not a "weak signal" antenna, but it works
very well in high noise environments. I've been using a T2FD (mounted
inverted "V" style) for many years. Really serious noise problems here
and the T2FD was the only one of many antennas tried that would bring in
a clean signal. If your location has off frequency noise on top of
moderately strong desired signals, the T2FD is a "second to none"
antenna choice.
Reducing the local noise level -WILL- allow reception of signals way to
weak to be heard under the noise picked up by other (not resistively
terminated) antenna designs.

Doug Kniffen

8875. Re: Digest Number 1994

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-01 18:14:37 UTC
From: thinkdx
Topic: 8874 Message: 8875

"Ditto" on your comments, Doug. The T2FDs I've built have been quiet antennas and revealed signals that were previously covered up. I never tried transmitting with one, though.
In the early 1990s I wrote a T2FD construction article that may be of interest. It appeared in an early edition of the Fine Tuning's "Proceedings" books, but has been posted on the Hard-Core-DX site for years. The URLs to the pages of the article are:
http://www.hard-core-dx.com/nordicdx/antenna/wire/t2fd.html
<http://www.hard-core-dx.com/nordicdx/antenna/wire/t2fd.html>
http://www.hard-core-dx.com/nordicdx/antenna/wire/t2design.html
<http://www.hard-core-dx.com/nordicdx/antenna/wire/t2design.html>
http://www.hard-core-dx.com/nordicdx/antenna/wire/t2fdcomp.html
<http://www.hard-core-dx.com/nordicdx/antenna/wire/t2fdcomp.html>
My best T2FDs were the ones built from VERY sturdy materials and with the wire pulled VERY taut in order keep the antenna as straight as possible without droop (and to maintain the optimum 30 degree tilt angle). This isn't easy to do with a 90mb tropical bands T2FD that's almost 100 feet long!
Guy KE7MAVPuyallup, WA

--- In loopantennas@yahoogroups.com, Doug Kniffen <dkniffen@...> wrote:
>
> On 2/1/2012 8:23 AM, loopantennas@yahoogroups.com wrote:
> > ____
> > 1a. Re: Terminated Delta Loop
> > Posted by: "tenorman1952" tenorman1952@... tenorman1952
> > Date: Tue Jan 31, 2012 7:11 am ((PST))

> I wonder why it didn't work for you, maybe you were expecting
> something different. T2FD is not a "weak signal" antenna, but it works
> very well in high noise environments. I've been using a T2FD (mounted
> inverted "V" style) for many years. Really serious noise problems here
> and the T2FD was the only one of many antennas tried that would bring
in
> a clean signal. If your location has off frequency noise on top of
> moderately strong desired signals, the T2FD is a "second to none"
> antenna choice.
> Reducing the local noise level -WILL- allow reception of signals way
to
> weak to be heard under the noise picked up by other (not resistively
> terminated) antenna designs.
>
> Doug Kniffen
>

[Non-text portions of this message have been removed]

8876. Book !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-02 09:27:32 UTC
From: brian nsl
Topic: 8876 Message: 8876

Hi,
Members of the group who are interested in the book mentioned
' Wireless Direction Finding ' by Keen can access a digital copy at
Internet Archive: Digital Library of Free Books, Movies, Music ...
www.archive.org/ - Translate this page

There is even a button to press and the book will be read to you hi!
72, Brian, G0NSL-QRP.

[Non-text portions of this message have been removed]

8877. hooking up a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-02 15:40:49 UTC
From: ferrox4
Topic: 8877 Message: 8877

if i were to make a big loop, can i connect it directly to my receiver? where would the positive go and were would the ground go? or would i just use a pick-up coil to magnetically pick up the signal? still even with a p[ick up coild where does the ground go and where does the signal lead go? also when you purchase a wellbrook ala-100 it doesn't come with the actual loop, so what is it that your buying? an amplifier, matching unit? i've never used a loop, always longwires and such, but i would like to try one. thx, john

8878. Re: Digest Number 1994

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-02 16:00:08 UTC
From: tenorman1952
Topic: 8874 Message: 8878

--- In loopantennas@yahoogroups.com, Doug Kniffen <dkniffen@...> wrote:
>
> On 2/1/2012 8:23 AM, loopantennas@yahoogroups.com wrote:
> > _____
> > 1a. Re: Terminated Delta Loop
> > Posted by: "tenorman1952" tenorman1952@... tenorman1952
> > Date: Tue Jan 31, 2012 7:11 am ((PST))
> >
> > Our experience (club) with a T2FD was dismal. Great SWR readings on all bands, just deaf as a post and no output. Could not hear it across town. A great dummy load.
> >
> I wonder why it didn't work for you, maybe you were expecting
> something different. T2FD is not a "weak signal" antenna, but it works
> very well in high noise environments.

(trimmed)
>
> Doug Kniffen

Not a clue, just did not get out. No contacts were made for that Field Day with that antenna, despite trying for several hours. Not one. However the homebrew Buddipole was great. Since then I designed another Field Day antenna that we now use. We made contacts coast to coast on 20 and 15 meters, and all over the south on 40 meters. This was at 50-100 w.

http://www.hamuniverse.com/ae5jufielddayantenna.html

73,
Paul - AE5JU

8879. Re: Digest Number 1994

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-02 16:05:47 UTC
From: bk915
Topic: 8874 Message: 8879

I've got a B&W T2FD, 90', came from an SK. While seeming 'deaf' the reception did seem to have a lower signal level but better S/N ratio. I didn't try to Tx very much, but the modeling I've seen, possibly Cebik, shows lower gain than a standard dipole. It is not meant as a DX antenna. I think the Navy had it developed to be capable of being used anywhere in the HF spectrum. It is used with the systems that hop frequency, also, just can't remember what that's called. A versatile antenna, maybe, high performance? No.

For amateur or swl use it can be a decent Rx only antenna if it's inconvenient to set up something better.

Bill Kulze W2NVD

--- In loopantennas@yahoogroups.com, Doug Kniffen <dkniffen@...> wrote:
>
> > Posted by: "tenorman1952" tenorman1952@... tenorman1952
> > Date: Tue Jan 31, 2012 7:11 am ((PST))
> >
> > Our experience (club) with a T2FD was dismal. Great SWR readings on all bands, just deaf as a post and no output. Could not hear it across town. A great dummy load.
> >
> I wonder why it didn't work for you, maybe you were expecting
> something different. T2FD is not a "weak signal" antenna, but it works
> very well in high noise environments. I've been using a T2FD (mounted
> inverted "V" style) for many years. Really serious noise problems here
> and the T2FD was the only one of many antennas tried that would bring in
> a clean signal. If your location has off frequency noise on top of
> moderately strong desired signals, the T2FD is a "second to none"
> antenna choice.
> Reducing the local noise level -WILL- allow reception of signals way to
> weak to be heard under the noise picked up by other (not resistively
> terminated) antenna designs.
>
> Doug Kniffen
>

8880. Re: [loopantennas] hooking up a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-02 18:23:25 UTC
From: Don
Topic: 8877 Message: 8880

Hi John,

The Wellbrook site explains what you get with each product. For the
ALA-100(x) you get the amplifier module, DC power injection module with
attached coax to connect to your Rx and wall wart. You must supply the
leadin coax and wire for the actual antenna loop as well as the loop
support structure materials.

Don
Upland, CA
34.10 -117.63 1250ft
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 02-Feb-12 07:40, ferrox4 wrote:
> if i were to make a big loop, can i connect it directly to my receiver? where would the positive go and were would the ground go? or would i just use a pick-up coil to magnetically pick up the signal? still even with a p[ick up coild where does the ground go and where does the signal lead go? also when you purchase a wellbrook ala-100 it doesn't come with the actual loop, so what is it that your buying? an amplifier, matching unit? i've never used a loop, always longwires and such, but i would like to try one. thx, john
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>

> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.1913 / Virus Database: 2112/4780 - Release Date: 02/01/12
>
>

8881. Re: [loopantennas] hooking up a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-02 18:46:44 UTC
From: J Ferrow
Topic: 8877 Message: 8881

thx don!

ok with that said would just building a big loop (i.e. without the ala-100 module) and connecting it to my receiver buy anything? i have the room to go high and fairly wide with a loop. how would something like that connect to a receiver? obviously you wouldn't connect the ground and signal lead from the back of the radio all to the loop?

From: Don <stb55@...>
To: loopantennas@yahoogroups.com
Sent: Thursday, February 2, 2012 1:23 PM
Subject: Re: [loopantennas] hooking up a loop antenna

Hi John,

The Wellbrook site explains what you get with each product. For the
ALA-100(x) you get the amplifier module, DC power injection module with
attached coax to connect to your Rx and wall wart. You must supply the
leadin coax and wire for the actual antenna loop as well as the loop
support structure materials.

Don
Upland, CA
34.10 -117.63 1250ft
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 02-Feb-12 07:40, ferrox4 wrote:
> if i were to make a big loop, can i connect it directly to my receiver? where would the positive go and were would the ground go? or would i just use a pick-up coil to magnetically pick up the signal? still even with a p[ick up coild where does the ground go and where does the signal lead go? also when you purchase a wellbrook ala-100 it doesn't come with the actual loop, so what is it that your buying? an amplifier, matching unit? i've never used a loop, always longwires and such, but i would like to try one. thx, john
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than

uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.1913 / Virus Database: 2112/4780 - Release Date: 02/01/12
>
>

[Non-text portions of this message have been removed]

8882. Re: [loopantennas] hooking up a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-02 18:56:13 UTC
From: Don
Topic: 8877 Message: 8882

Don't know what frequencies you are intending to use the loop for but
for SW Rx you'll probably need a un-un/balun at the loop to connect your
coax run into the house. There are "experts" on the list that will
probably explain this in more detail than I can.

Don
Upland, CA
34.10 -117.63 1250ft
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 02-Feb-12 10:46, J Ferrow wrote:
> thx don!
>
> ok with that said would just building a big loop (i.e. without the ala-100 module) and connecting it to my receiver buy anything? i have the room to go high and fairly wide with a loop. how would something like that connect to a receiver? obviously you wouldn't connect the ground and signal lead from the back of the radio all to the loop?
>
>
>
> _____
> From: Don<stb55@...>
> To: loopantennas@yahoogroups.com
> Sent: Thursday, February 2, 2012 1:23 PM
> Subject: Re: [loopantennas] hooking up a loop antenna
>
>
>
> Hi John,
>
> The Wellbrook site explains what you get with each product. For the
> ALA-100(x) you get the amplifier module, DC power injection module with
> attached coax to connect to your Rx and wall wart. You must supply the
> leadin coax and wire for the actual antenna loop as well as the loop
> support structure materials.
>
> Don
> Upland, CA
> 34.10 -117.63 1250ft
> 2x R-75 w/250Hz R-71A w/250Hz R-70
> SDR-IQ SR-AF& LPF DSP599zx

> MFJ-784B HD-1418 AF-1 MSB-1
> PA0RDT Mini-Whip x2 @ 15ft
> LFL1010 ALA100L x2
>
> On 02-Feb-12 07:40, ferrox4 wrote:
>> if i were to make a big loop, can i connect it directly to my receiver? where would the positive go and were would the ground go? or would i just use a pick-up coil to magnetically pick up the signal? still even with a p[ick up coild where does the ground go and where does the signal lead go? also when you purchase a wellbrook ala-100 it doesn't come with the actual loop, so what is it that your buying? an amplifier, matching unit? i've never used a loop, always longwires and such, but i would like to try one. thx, john
>>
>>
>>
>> ------------------------------------
>>
>> If you've got links, post them in the Links section!
>> http://groups.yahoo.com/group/loopantennas/links
>>
>> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
>> http://groups.yahoo.com/group/loopantennas/files
>>
>> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>> http://ph.groups.yahoo.com/group/loopantennas/photos
>>
>> And please trim all this when replying!Yahoo! Groups Links
>>
>>
>>
>>
>>
>> -----
>> No virus found in this message.
>> Checked by AVG - www.avg.com
>> Version: 2012.0.1913 / Virus Database: 2112/4780 - Release Date: 02/01/12
>>
>>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>

> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.1913 / Virus Database: 2112/4781 - Release Date: 02/02/12
>
>
>

8883. Re: [loopantennas] hooking up a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-02 22:08:53 UTC
From: J Ferrow
Topic: 8877 Message: 8883

don, thx again. i'm actually using the PA0RDT Mini-Whip. I built one and it works great. I have it up about 30ft. Beats my longwire especially on LW and MW. Works great on HF also. How does it compare to your ala-100L?

Thanks again, john

From: Don <stb55@verizon.net>
To: loopantennas@yahoogroups.com
Sent: Thursday, February 2, 2012 1:56 PM
Subject: Re: [loopantennas] hooking up a loop antenna

Don't know what frequencies you are intending to use the loop for but
for SW Rx you'll probably need a un-un/balun at the loop to connect your
coax run into the house. There are "experts" on the list that will
probably explain this in more detail than I can.

Don
Upland, CA
34.10 -117.63 1250ft
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 02-Feb-12 10:46, J Ferrow wrote:
> thx don!
>
> ok with that said would just building a big loop (i.e. without the ala-100 module) and connecting it to my receiver buy anything? i have the room to go high and fairly wide with a loop. how would something like that connect to a receiver? obviously you wouldn't connect the ground and signal lead from the back of the radio all to the loop?
>
>
>
> ---
> From: Don<stb55@verizon.net>
> To: loopantennas@yahoogroups.com
> Sent: Thursday, February 2, 2012 1:23 PM
> Subject: Re: [loopantennas] hooking up a loop antenna
>
>
>
> Hi John,
>

> The Wellbrook site explains what you get with each product. For the
> ALA-100(x) you get the amplifier module, DC power injection module with
> attached coax to connect to your Rx and wall wart. You must supply the
> leadin coax and wire for the actual antenna loop as well as the loop
> support structure materials.
>
> Don
> Upland, CA
> 34.10 -117.63 1250ft
> 2x R-75 w/250Hz R-71A w/250Hz R-70
> SDR-IQ SR-AF& LPF DSP599zx
> MFJ-784B HD-1418 AF-1 MSB-1
> PA0RDT Mini-Whip x2 @ 15ft
> LFL1010 ALA100L x2
>
> On 02-Feb-12 07:40, ferrox4 wrote:
>> if i were to make a big loop, can i connect it directly to my receiver? where would the positive go and were would the ground go? or would i just use a pick-up coil to magnetically pick up the signal? still even with a p[ick up coild where does the ground go and where does the signal lead go? also when you purchase a wellbrook ala-100 it doesn't come with the actual loop, so what is it that your buying? an amplifier, matching unit? i've never used a loop, always longwires and such, but i would like to try one. thx, john
>>
>>
>>
>> ------------------------------------
>>
>> If you've got links, post them in the Links section!
>> http://groups.yahoo.com/group/loopantennas/links
>>
>> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
>> http://groups.yahoo.com/group/loopantennas/files
>>
>> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
>> http://ph.groups.yahoo.com/group/loopantennas/photos
>>
>> And please trim all this when replying!Yahoo! Groups Links
>>
>>
>>
>>
>>
>> -----
>> No virus found in this message.
>> Checked by AVG - www.avg.com
>> Version: 2012.0.1913 / Virus Database: 2112/4780 - Release Date: 02/01/12
>>
>>

>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.1913 / Virus Database: 2112/4781 - Release Date: 02/02/12
>
>
>

[Non-text portions of this message have been removed]

8884. Re: [loopantennas] hooking up a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-03 07:15:39 UTC
From: Don
Topic: 8877 Message: 8884

Hi John,

Well, the PA0RDT is more immune to lightning type noise. The output is much lower than the my ALA-100L's as they are so big, 15ft x 30ft. But it is nice on an occasion to have a omnidirectional antenna. My space is restricted here so active antennas are the way to go for me. The first month I had a PA0RDT I logged 62 new NDB's and then took down my random wire antennas. I'm lucky to be able to orient my ALA's almost E/W and N/S.

Don
Upland, CA
34.10 -117.63 1250ft
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 02-Feb-12 14:08, J Ferrow wrote:
> don, thx again. i'm actually using the PA0RDT Mini-Whip. I built one and it works great. I have it up about 30ft. Beats my longwire especially on LW and MW. Works great on HF also. How does it compare to your ala-100L?
>
>
> Thanks again, john
>
>
>
> _____
> From: Don<stb55@...>
> To: loopantennas@yahoogroups.com
> Sent: Thursday, February 2, 2012 1:56 PM
> Subject: Re: [loopantennas] hooking up a loop antenna
>
>
>
> Don't know what frequencies you are intending to use the loop for but
> for SW Rx you'll probably need a un-un/balun at the loop to connect your
> coax run into the house. There are "experts" on the list that will
> probably explain this in more detail than I can.
>
> Don
> Upland, CA
> 34.10 -117.63 1250ft
> 2x R-75 w/250Hz R-71A w/250Hz R-70
> SDR-IQ SR-AF& LPF DSP599zx

> MFJ-784B HD-1418 AF-1 MSB-1
> PA0RDT Mini-Whip x2 @ 15ft
> LFL1010 ALA100L x2
>
> On 02-Feb-12 10:46, J Ferrow wrote:
>> thx don!
>>
>> ok with that said would just building a big loop (i.e. without the ala-100 module) and connecting it to my receiver buy anything? i have the room to go high and fairly wide with a loop. how would something like that connect to a receiver? obviously you wouldn't connect the ground and signal lead from the back of the radio all to the loop?
>>
>>
>>
>> _____
>> From: Don<stb55@...>
>> To: loopantennas@yahoogroups.com
>> Sent: Thursday, February 2, 2012 1:23 PM
>> Subject: Re: [loopantennas] hooking up a loop antenna
>>
>>
>>
>> Hi John,
>>
>> The Wellbrook site explains what you get with each product. For the
>> ALA-100(x) you get the amplifier module, DC power injection module with
>> attached coax to connect to your Rx and wall wart. You must supply the
>> leadin coax and wire for the actual antenna loop as well as the loop
>> support structure materials.
>>
>> Don
>> Upland, CA
>> 34.10 -117.63 1250ft
>> 2x R-75 w/250Hz R-71A w/250Hz R-70
>> SDR-IQ SR-AF& LPF DSP599zx
>> MFJ-784B HD-1418 AF-1 MSB-1
>> PA0RDT Mini-Whip x2 @ 15ft
>> LFL1010 ALA100L x2
>>
>> On 02-Feb-12 07:40, ferrox4 wrote:
>>> if i were to make a big loop, can i connect it directly to my receiver? where would the positive go and were would the ground go? or would i just use a pick-up coil to magnetically pick up the signal? still even with a p[ick up coild where does the ground go and where does the signal lead go? also when you purchase a wellbrook ala-100 it doesn't come with the actual loop, so what is it that your buying? an amplifier, matching unit? i've never used a loop, always longwires and such, but i would like to try one. thx, john
>>>
>>>
>>>
>>> ----------

>>>
>>> If you've got links, post them in the Links section!
>>> http://groups.yahoo.com/group/loopantennas/links
>>>
>>> Post files here. If the file comes from a website, please put it in the Links rather
than uploading the file.
>>> http://groups.yahoo.com/group/loopantennas/files
>>>
>>> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
>>> http://ph.groups.yahoo.com/group/loopantennas/photos
>>>
>>> And please trim all this when replying!Yahoo! Groups Links
>>>
>>>
>>>
>>>
>>>
>>> -----
>>> No virus found in this message.
>>> Checked by AVG - www.avg.com
>>> Version: 2012.0.1913 / Virus Database: 2112/4780 - Release Date: 02/01/12
>>>
>>>
>>
>> [Non-text portions of this message have been removed]
>>
>>
>>
>> ------------------------------------
>>
>> If you've got links, post them in the Links section!
>> http://groups.yahoo.com/group/loopantennas/links
>>
>> Post files here. If the file comes from a website, please put it in the Links rather
than uploading the file.
>> http://groups.yahoo.com/group/loopantennas/files
>>
>> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
>> http://ph.groups.yahoo.com/group/loopantennas/photos
>>
>> And please trim all this when replying!Yahoo! Groups Links
>>
>>
>>
>>
>>
>> -----
>> No virus found in this message.

>> Checked by AVG - www.avg.com
>> Version: 2012.0.1913 / Virus Database: 2112/4781 - Release Date: 02/02/12
>>
>>
>>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.1913 / Virus Database: 2112/4781 - Release Date: 02/02/12
>
>
>

8885. Wellbrook ala-1530 question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-04 01:10:24 UTC
From: J Ferrow
Topic: 8885 Message: 8885

Hi, I recently picked up a Wellbrook ALA-1530 amplifier unit. The person that sold it to me did not have the actual loop section, said he lost it in a storage unit. I got a good deal on it so I bought it.

I've never seen the loop section in person and was wondering if I could just make a loop out of copper tubing or such in the same dimemsions as the oiginal. would this work?

I would appreciate if an owner of an ala-1530 loop could let me know exactly what the loop consists of and how it connects to the amplifier section.

Thx again, john

[Non-text portions of this message have been removed]

8886. Re: [loopantennas] Wellbrook ala-1530 question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-04 01:15:55 UTC
From: Don
Topic: 8885 Message: 8886

What you may have is just the DC power injection module. The actual amplifier has the metal loop permanently attached to it - it is inseparable. Take a look at the Wellbrook web site.

Don
Upland, CA
34.10 -117.63 1250ft
2x R-75 w/250Hz R-71A w/250Hz R-70
SDR-IQ SR-AF& LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 03-Feb-12 17:10, J Ferrow wrote:
> Hi, I recently picked up a Wellbrook ALA-1530 amplifier unit. The person that sold it to me did not have the actual loop section, said he lost it in a storage unit. I got a good deal on it so I bought it.
>
> I've never seen the loop section in person and was wondering if I could just make a loop out of copper tubing or such in the same dimemsions as the oiginal. would this work?
>
> I would appreciate if an owner of an ala-1530 loop could let me know exactly what the loop consists of and how it connects to the amplifier section.
>
> Thx again, john
>
>
>
>
>
>
>
>
> ---
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ---
>
> If you've got links, post them in the Links section!

> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.1913 / Virus Database: 2112/4784 - Release Date: 02/03/12
>
>

8887. Re: [loopantennas] Wellbrook ala-1530 question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-04 01:21:49 UTC
From: Steve Ratzlaff
Topic: 8885 Message: 8887

Hi John,
Is this a later 1530 model, not the latest version? Did you get the 12 volt regulated wallwart and the power injector box to go with it?
The original loop on all of these is a 3/4" diameter hollow aluminum tube of a little less than one-meter diameter. Both ends just insert into the plastic housing and are held in place with the sheet metal screw through the housing. Hopefully your preamp box has intact connections to the interior of the preamp otherwise you're in trouble.
But you can make a considerably more sensitive loop system by using a larger loop, since you don't have the original stock loop. I'd go with something like a 4-6 foot diameter loop. Any type of copper or aluminum tubing would work fine, and in a pinch a larger diameter coax cable such as RG=8 could be used, with the outer shield being used as the "loop" conductor. Of course using coax cable, you'd need to rig your own support. But rigid CATV tubing could also be used, if you have access to that..
And should you not have the mating power injector box or 12 volt regulated wallwart you can make your own injector box, and use a standard linear 13.8 volt supply. However you need to use some rectifier diodes in series as all the Wellbrook loopamps are designed to run on 12.0 volts, not 13.8 volts and will overheat and possibly burn up if run directly on 13.8 volts.

Steve

On Fri, Feb 3, 2012 at 5:10 PM, J Ferrow <ferrox4@...> wrote:

> Hi, I recently picked up a Wellbrook ALA-1530 amplifier unit. The person
> that sold it to me did not have the actual loop section, said he lost it in
> a storage unit. I got a good deal on it so I bought it.
>
> I've never seen the loop section in person and was wondering if I could
> just make a loop out of copper tubing or such in the same dimemsions as the
> oiginal. would this work?
>
> I would appreciate if an owner of an ala-1530 loop could let me know
> exactly what the loop consists of and how it connects to the amplifier
> section.
>
> Thx again, john
>
>
>
>
>
>
>
>

> _____
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ---
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

8888. Re: [loopantennas] Wellbrook ala-1530 question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-04 01:43:28 UTC
From: J Ferrow
Topic: 8885 Message: 8888

Steve, Thanks for getting back. The box i purchased says antenna interface with an antenna input on one end and a receiver input on the other end. I also have the wall wart. I don't think this is a newer version, but an older version. I'm guessing that what i purchased is the power injector box? i didn't spend a ton on it and in fact after lookjng at the pictures of the ala-100 i'm getting a sense of how this all connects. looks like i'm missing the most important part the actual antenna electronics. oh well.

From: Steve Ratzlaff <steveratz@...>
To: loopantennas@yahoogroups.com
Sent: Friday, February 3, 2012 8:21 PM
Subject: Re: [loopantennas] Wellbrook ala-1530 question

Hi John,
Is this a later 1530 model, not the latest version? Did you get the 12 volt regulated wallwart and the power injector box to go with it?
The original loop on all of these is a 3/4" diameter hollow aluminum tube of a little less than one-meter diameter. Both ends just insert into the plastic housing and are held in place with the sheet metal screw through the housing. Hopefully your preamp box has intact connections to the interior of the preamp otherwise you're in trouble.
But you can make a considerably more sensitive loop system by using a larger loop, since you don't have the original stock loop. I'd go with something like a 4-6 foot diameter loop. Any type of copper or aluminum tubing would work fine, and in a pinch a larger diameter coax cable such as RG=8 could be used, with the outer shield being used as the "loop" conductor. Of course using coax cable, you'd need to rig your own support. But rigid CATV tubing could also be used, if you have access to that..
And should you not have the mating power injector box or 12 volt regulated wallwart you can make your own injector box, and use a standard linear 13.8 volt supply. However you need to use some rectifier diodes in series as all the Wellbrook loopamps are designed to run on 12.0 volts, not 13.8 volts and will overheat and possibly burn up if run directly on 13.8 volts.

Steve

On Fri, Feb 3, 2012 at 5:10 PM, J Ferrow <ferrox4@...> wrote:

> Hi, I recently picked up a Wellbrook ALA-1530 amplifier unit. The person
> that sold it to me did not have the actual loop section, said he lost it in
> a storage unit. I got a good deal on it so I bought it.
>
> I've never seen the loop section in person and was wondering if I could
> just make a loop out of copper tubing or such in the same dimemsions as the
> oiginal. would this work?
>

> I would appreciate if an owner of an ala-1530 loop could let me know
> exactly what the loop consists of and how it connects to the amplifier
> section.
>
> Thx again, john
>
>
>
>
>
>
>
>
> ---------------------------------
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8889. Re: Antique antenna !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-04 07:07:55 UTC
From: longjohn119
Topic: 8863 Message: 8889

Easy enough to make yourself with 1/4" plywood, 1"-2" diameter wooden dowel and some wire
,,,,

Cut six 4" pieces of dowel and two 1'x2' pieces of plywood, separate the pieces of plywood with the dowels, one in each corner and one on each of the long side at the mid point

Wind 12-13 turns of wire with about a 1/4" spacing

Put it inside a cardboard box so no one can see all your Wave Magnet consists of nothing more than a small multi-turn untuned loop

A 'Down and Dirty' one can be made on a 12"x24"x4" (give or take) cardboard box with a little packing tape holding down the wires

Seems to work best with the old All American 5 type setup with a variable tuned input filter on the front end and not so well on modern wideband/fixed tuned input filter up conversion style receivers

JR

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Hi,
> Came across this item during a websearch yesterday,
>
> Vintage Zenith Wave Magnet Rotor Early Radio Antenna | eBay
> www.ebay.com/itm/Vintage...Early-Radio-Antenna-/380225462293$125.00
>
> Vintage Zenith Wave Magnet Rotor Early Radio Antenna in Collectibles , Radio, ...
>
> 72, Bian, G0NSL-QRP.
>
> [Non-text portions of this message have been removed]
>

8891. wideband magnetic active loop ideas??

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-05 02:47:07 UTC
From: J Ferrow
Topic: 8863 Message: 8891

Hi all, I just got finished building a mini whip e-field antenna that is nothing short of amazing. it rivals the LFengineering skymatch antenna and cost me alot less. I'm on a roll now and was wondering if anyone had any schematics or has built a broad band active magnetic loop similiar in performance to the wellbrook ala-100. would love to hear from people who have homebrewed one successfully.

sincerely, John ki4ucw

[Non-text portions of this message have been removed]

8892. Re: [loopantennas] wideband magnetic active loop ideas??

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-05 09:18:45 UTC
From: brian nsl
Topic: 8863 Message: 8892

John, KI4UCW,
I tried to mail you some information direct but your
QRZ.com address bounced ?????
72, Brian, GONSL-QRP
----- Original Message -----
From: J Ferrow
To: loopantennas@yahoogroups.com
Sent: Sunday, February 05, 2012 2:47 AM
Subject: [loopantennas] wideband magnetic active loop ideas??

[Non-text portions of this message have been removed]

8893. Re: [loopantennas] wideband magnetic active loop ideas??

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-05 13:14:58 UTC
From: Chris Trask
Topic: 8863 Message: 8893

>
> Hi all, I just got finished building a mini whip e-field antenna
> that is nothing short of amazing. it rivals the LFengineering
> skymatch antenna and cost me alot less. I'm on a roll now and
> was wondering if anyone had any schematics or has built a broad
> band active magnetic loop similiar in performance to the
> wellbrook ala-100. would love to hear from people who have
> homebrewed one successfully.
>

You'll find the design for a wideband loop antenna amplifier that outperforms both Wellbrook and Pixel here:

http://www.home.earthlink.net/~christrask/Paper009.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

8894. Figure of eight loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-12 08:48:00 UTC
From: drewbhoy67
Topic: 8894 Message: 8894

I was wondering if anyone could help me as i have looked everywhere and cant find an answer If i have a figure of eight magnetic loop and i bend one half so it is 45 degrees to the other half of the loop ,would that be working vetical and horizontal ? Thanks Drew

8895. Re: [loopantennas] Figure of eight loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-12 21:28:12 UTC
From: Jerry Flanders
Topic: 8894 Message: 8895

You can learn a lot from one of the free antenna modeling programs
like 4nec2 or maybe mmana (sp?) Takes a while to see how to work it,
but it can be very useful.

Jerry W4UK

At 03:48 AM 2/12/2012, you wrote:
>I was wondering if anyone could help me as i have looked everywhere
>and cant find an answer
> If i have a figure of eight magnetic loop and i bend one half so
> it is 45 degrees to the other half of the loop ,would that be
> working vetical and horizontal ? Thanks Drew
>

8896. Kiwa Medium Wave Air Core Loop Antenna for sale.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-18 16:44:22 UTC
From: Harry
Topic: 8896 Message: 8896

I'm getting ready to put my Kiwa Loop up for sale on ebay next week, just wanted to give folks here first shot at it. It's in good cosmetic and working order but is being sold as is. These have been going for about $550 to $600 on ebay, I'm asking $425 plus shipping. Any takers just send me an email.

8897. Re: Kiwa Medium Wave Air Core Loop Antenna for sale.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-19 01:38:17 UTC
From: Harry
Topic: 8896 Message: 8897

Antenna has been sold.

--- In loopantennas@yahoogroups.com, "Harry" <hmholden69@...> wrote:
>
> I'm getting ready to put my Kiwa Loop up for sale on ebay next week, just wanted to give folks here first shot at it. It's in good cosmetic and working order but is being sold as is. These have been going for about $550 to $600 on ebay, I'm asking $425 plus shipping. Any takers just send me an email.
>

8898. envelope slide tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-22 20:52:21 UTC
From: mike.evans191
Topic: 8898 Message: 8898

I was thinking of a title I hope this one will do.
I am thinking of making a spider MW BCB loop say about 24 x 24 inches in one corner it will have a tin foil slider tuner, in other words a post card with tin foil one side and a stiff slotted envelope the other, you slide in and out to tune the loop, you mark on the blank side the frequencie, thing is can anyone workout what pH the tuning slider would be, what lenght the tin foul should be and so on, I am thinking for the coil to use alarm foil or sticky copper strip if
i can find same, this to go as
i said on a bit of large card maybe even making it so that it folds we shall see and I await your input. Mike UK.

8899. Re: [loopantennas] envelope slide tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 08:23:53 UTC
From: Bill McGraw
Topic: 8898 Message: 8899

--- On Wed, 2/22/12, mike.evans191 <mike.evans191@...> wrote:

I was thinking of a title I hope this one will do.
I am thinking of making a spider MW BCB loop say about 24 x 24 inches in one corner it will have a tin foil slider tuner, in other words a post card with tin foil one side and a stiff slotted envelope the other, you slide in and out to tune the loop, you mark on the blank side the frequencie, thing is can anyone workout what pH the tuning slider would be, what lenght the tin foul should be and so on, I am thinking for the coil to use alarm foil or sticky copper strip if
i can find same, this to go as
i said on a bit of large card maybe even making it so that it folds we shall see and I await your input. Mike UK.

Mike,

I was tinkering with a crystal set one day a few years ago to see what it could tolerate receiving in town, early on had a 30 ft aerial pointed NE would pickup locals and at night on a good night would get WWL in New Orleans, 280 mi south. I even tried it with a 50 ft coil of 8" diameter that I used to boost a signal from Nashville, TN to listen to WSN (?) Grand Ole Opry about 400 mi NE of here. It's signal was weak locally as expected.

After using a tapped coil, I changed to several V-caps and then with two pieces of aluminum foil about 12" square and waxed paper for the dielectric that tuned as good as the other tuners. I didn't mark the frequencies, deciding to change the 1N34A to some other transistors, LEDs that didn't work but found a rusty nail and sharp pin to find a hot spot if I had the right spot and pressure. A corroded penny also worked but crudely. I had started to anneal a stainless steel razor blade to use with a pencil lead for the detector but diverted to another subject of one-turn loops in my office when the aerial went down.

The size and shape of the foil might be dependent on the length of the coil wiring, not well versed in that sort of thing nor can I tell the mF of my V-caps just by looking at them, if someone has a good guide on that. I hadn't considered a circular tuner with foil until visiting this site,

It's a long 50 year story of SW listening with my Tech license being issued 2 years ago and general 1 year ago, really slow learning how to use this new fangled Kenwood TS 2000, still studying antennas and for many years and just now putting a home made dipole on my wood fence as a start in HF until I can find a safe place to install it higher.

I love the idea of Tx loops but will have to wait on them for now. If MFJ can make them, so can I do the same.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8900. Re: [loopantennas] envelope slide tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 09:03:45 UTC
From: John Kolb
Topic: 8898 Message: 8900

Hi Bill,

I had a xtal set in G'ville years ago I thought was pretty hot. Had
two coils and a dual gang variable
cap, so wouldn't have worked with a tin foil cap. I could pick up
WWL every night after the locals
signed off, but don't remember picking up WSN or anything except WWL.
Antenna was a wire in
the attic, probably the entire length of the house.

My wife passed away Jan 30, after a 3 month fight with lung cancer,
and I'm still very tired all the time.
I'm pretty much unemployed, only work when they need me. They need
me at the moment, so get
some hours, but pretty much the last few weeks have been spent
dealing with banks, insurance co's,
etc, and cleaning the house, discarding her clothes etc.

John

At 12:23 AM 2/23/2012, you wrote:

>--- On Wed, 2/22/12, mike.evans191 <mike.evans191@...> wrote:
>
>I was thinking of a title I hope this one will do.
>I am thinking of making a spider MW BCB loop say about 24 x 24
>inches in one corner it will have a tin foil slider tuner, in other
>words a post card with tin foil one side and a stiff slotted
>envelope the other, you slide in and out to tune the loop, you mark
>on the blank side the frequencie, thing is can anyone workout what
>pH the tuning slider would be, what lenght the tin foul should be
>and so on, I am thinking for the coil to use alarm foil or sticky
>copper strip if
>i can find same, this to go as
>i said on a bit of large card maybe even making it so that it folds
>we shall see and I await your input. Mike UK.
>
>Mike,
>
>I was tinkering with a crystal set one day a few years ago to see
>what it could tolerate receiving in town, early on had a 30 ft
>aerial pointed NE would pickup locals and at night on a good night
>would get WWL in New Orleans, 280 mi south. I even tried it with a
>50 ft coil of 8" diameter that I used to boost a signal from
>Nashville, TN to listen to WSN (?) Grand Ole Opry about 400 mi NE of
>here. It's signal was weak locally as expected.

>
>After using a tapped coil, I changed to several V-caps and then with
>two pieces of aluminum foil about 12" square and waxed paper for the
>dielectric that tuned as good as the other tuners. I didn't mark the
>frequencies, deciding to change the 1N34A to some other transistors,
>LEDs that didn't work but found a rusty nail and sharp pin to find a
>hot spot if I had the right spot and pressure. A corroded penny also
>worked but crudely. I had started to anneal a stainless steel razor
>blade to use with a pencil lead for the detector but diverted to
>another subject of one-turn loops in my office when the aerial went down.
>
>The size and shape of the foil might be dependent on the length of
>the coil wiring, not well versed in that sort of thing nor can I
>tell the mF of my V-caps just by looking at them, if someone has a
>good guide on that. I hadn't considered a circular tuner with foil
>until visiting this site,
>
>It's a long 50 year story of SW listening with my Tech license being
>issued 2 years ago and general 1 year ago, really slow learning how
>to use this new fangled Kenwood TS 2000, still studying antennas and
>for many years and just now putting a home made dipole on my wood
>fence as a start in HF until I can find a safe place to install it higher.
>
>I love the idea of Tx loops but will have to wait on them for now.
>If MFJ can make them, so can I do the same.
>
>Bill McGraw, KF5FJZ, NRA Life
>"Somewhere South of Chicago"
>Greenville, Mississippi
>
>
>
>
>
>
>[Non-text portions of this message have been removed]
>
>
>
>------------------------------------
>
>If you've got links, post them in the Links section!
>http://groups.yahoo.com/group/loopantennas/links
>
>Post files here. If the file comes from a website, please put it in
>the Links rather than uploading the file.
>http://groups.yahoo.com/group/loopantennas/files
>
>You can now view images at higher resolution in Photos. Upload JPG
>and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.

>http://ph.groups.yahoo.com/group/loopantennas/photos
>
>And please trim all this when replying!Yahoo! Groups Links
>
>
>

[Non-text portions of this message have been removed]

8901. Re: [loopantennas] envelope slide tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 10:00:11 UTC
From: Bill McGraw
Topic: 8898 Message: 8901

John,
I am truly sorry about your wife's death. Please give my condolences to your sister. I saw her photos in the GHS reunion, didn't recognze her.

I'm 67 with MS and SCD plus herniated discs that hurt my back standing or walking, limits me everywhere. I don't mind dying, just don't want to suffer. Our class of about 35 is already planning our 50th class reunion and 5 have died already, one in superb shape died suddenly with a blood clot and the others lingered a long time, pitiful shit.

I made all medical decisions for my parents during Alzheimer's destruction, also after they died, buried their ashes and I had to start taking tranquilizers and anti-anxiety drugs just to tolerate their declining health, broken hips to coma and finally starving to death. I haven't finished dad's estate after 2 years due to some stock that is drawing good interest/dividends and some land from my mother's home that belongs to us 3 kids.

The 8" loop was used with my various AM receivers, not crystal set, to get WSM Nashville clearer and found out that some of the cheapest radios would work better than my RS Dx 398. I was told add a resistor in parallel to the sterio plug to make the 398 accept the loops, not the aerial, not sure how to do that but apparently it shut down the internal antenna. What do you know about that?

My crystal set was just wired up with farhnstock clamps and alligator clips so that I could wire in a new component at will. Without the coil and V-cap, no tuning, it would pick up <6 MHz Christian stations, Radio Havana at 6.0 MHz and others loudly and I didn't know the frequencies until they announced it or I hunted and verified with the 398. 30 feet aerial was somewhere close to quarter wave, 41 feet would be best for 6 MHz but at that time I had no idea of antenna designs for reception and the wire was from my office window to my small shop. I studied the calculations for the basics and still studying the esoterica of antennas.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

--- On Thu, 2/23/12, John Kolb <jlkolb@...> wrote:

Hi Bill,

I had a xtal set in G'ville years ago I thought was pretty hot. Had
two coils and a dual gang variable
cap, so wouldn't have worked with a tin foil cap. I could pick up
WWL every night after the locals
signed off, but don't remember picking up WSN or anything except WWL.
Antenna was a wire in
the attic, probably the entire length of the house.

My wife passed away Jan 30, after a 3 month fight with lung cancer,
and I'm still very tired all the time.
I'm pretty much unemployed, only work when they need me. They need
me at the moment, so get
some hours, but pretty much the last few weeks have been spent
dealing with banks, insurance co's,
etc, and cleaning the house, discarding her clothes etc.

John

[Non-text portions of this message have been removed]

8902. Re: envelope slide tuned loop - An Over Post way off subject.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 11:32:34 UTC
From: mike.evans191
Topic: 8898 Message: 8902

What is this all about - Very off subject. mike.

--- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:
>
> John,
> I am truly sorry about your wife's death. Please give my condolences to your sister. I saw her photos in the GHS reunion, didn't recognze her.
>
> I'm 67 with MS and SCD plus herniated discs that hurt my back standing or walking, limits me everywhere. I don't mind dying, just don't want to suffer. Our class of about 35 is already planning our 50th class reunion and 5 have died already, one in superb shape died suddenly with a blood clot and the others lingered a long time, pitiful shit.
>
> I made all medical decisions for my parents during Alzheimer's destruction, also after they died, buried their ashes and I had to start taking tranquilizers and anti-anxiety drugs just to tolerate their declining health, broken hips to coma and finally starving to death. I haven't finished dad's estate after 2 years due to some stock that is drawing good interest/dividends and some land from my mother's home that belongs to us 3 kids.
>
> The 8" loop was used with my various AM receivers, not crystal set, to get WSM Nashville clearer and found out that some of the cheapest radios would work better than my RS Dx 398. I was told add a resistor in parallel to the sterio plug to make the 398 accept the loops, not the aerial, not sure how to do that but apparently it shut down the internal antenna. What do you know about that?
>
> My crystal set was just wired up with farhnstock clamps and alligator clips so that I could wire in a new component at will. Without the coil and V-cap, no tuning, it would pick up <6 MHz Christian stations, Radio Havana at 6.0 MHz and others loudly and I didn't know the frequencies until they announced it or I hunted and verified with the 398. 30 feet aerial was somewhere close to quarter wave, 41 feet would be best for 6 MHz but at that time I had no idea of antenna designs for reception and the wire was from my office window to my small shop. I studied the calculations for the basics and still studying the esoterica of antennas.
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>
> --- On Thu, 2/23/12, John Kolb <jlkolb@...> wrote:
>
>
>
>
>
>
>

>
>
>
> Hi Bill,
>
> I had a xtal set in G'ville years ago I thought was pretty hot. Had
> two coils and a dual gang variable
> cap, so wouldn't have worked with a tin foil cap. I could pick up
> WWL every night after the locals
> signed off, but don't remember picking up WSN or anything except WWL.
> Antenna was a wire in
> the attic, probably the entire length of the house.
>
> My wife passed away Jan 30, after a 3 month fight with lung cancer,
> and I'm still very tired all the time.
> I'm pretty much unemployed, only work when they need me. They need
> me at the moment, so get
> some hours, but pretty much the last few weeks have been spent
> dealing with banks, insurance co's,
> etc, and cleaning the house, discarding her clothes etc.
>
> John
>
>
>
> [Non-text portions of this message have been removed]
>

8903. Re: envelope slide tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 11:42:43 UTC
From: mike.evans191
Topic: 8898 Message: 8903

thank You Bill for your imput I am mainly thinking BCB MW loop I should have been more clear on that my fault, I am now thinking to have it fold like a checker board with the wire under a sheet of cardboard for protection, the slide tuner will be in one corner it should work after all during WW2 the POW guys used I understand cig paper and cardboard for there hidden radios tuning system, but as I said it will be a Medium Wave loop, used by inductance. Mike - England.

--- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:
>
>
> --- On Wed, 2/22/12, mike.evans191 <mike.evans191@...> wrote:
>
>
>
>
>
>
>
>
>
> I was thinking of a title I hope this one will do.
> I am thinking of making a spider MW BCB loop say about 24 x 24 inches in one corner it will have a tin foil slider tuner, in other words a post card with tin foil one side and a stiff slotted envelope the other, you slide in and out to tune the loop, you mark on the blank side the frequencie, thing is can anyone workout what pH the tuning slider would be, what lenght the tin foul should be and so on, I am thinking for the coil to use alarm foil or sticky copper strip if
> i can find same, this to go as
> i said on a bit of large card maybe even making it so that it folds we shall see and I await your input. Mike UK.
>
> Mike,
>
> I was tinkering with a crystal set one day a few years ago to see what it could tolerate receiving in town, early on had a 30 ft aerial pointed NE would pickup locals and at night on a good night would get WWL in New Orleans, 280 mi south. I even tried it with a 50 ft coil of 8" diameter that I used to boost a signal from Nashville, TN to listen to WSN (?) Grand Ole Opry about 400 mi NE of here. It's signal was weak locally as expected.
>
> After using a tapped coil, I changed to several V-caps and then with two pieces of aluminum foil about 12" square and waxed paper for the dielectric that tuned as good as the other tuners. I didn't mark the frequencies, deciding to change the 1N34A to some other transistors, LEDs that didn't work but found a rusty nail and sharp pin to find a hot spot if I had the right spot and pressure. A corroded penny also worked but crudely. I had started to anneal a stainless steel razor blade to use with a pencil lead for the detector but diverted to another subject of one-turn loops in my office when the aerial

went down.
>
> The size and shape of the foil might be dependent on the length of the coil wiring, not well versed in that sort of thing nor can I tell the mF of my V-caps just by looking at them, if someone has a good guide on that. I hadn't considered a circular tuner with foil until visiting this site,
>
> It's a long 50 year story of SW listening with my Tech license being issued 2 years ago and general 1 year ago, really slow learning how to use this new fangled Kenwood TS 2000, still studying antennas and for many years and just now putting a home made dipole on my wood fence as a start in HF until I can find a safe place to install it higher.
>
> I love the idea of Tx loops but will have to wait on them for now. If MFJ can make them, so can I do the same.
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8904. Was I rude - I hope not, re MW BCB loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 11:47:35 UTC
From: mike.evans191
Topic: 8904 Message: 8904

Just to say sorry if I was rude, but the replys were quite off subject, more of a chat, which is fine, but this idea needs some help, ho that sounds rude but there is no easy way of saying this. Mike in England.

8905. Re: hooking up a loop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 15:29:12 UTC
From: Michael Evans
Topic: 8877 Message: 8905

Hi. There is no ground to a loop, its a loop, hard to explain but think of a O with a break gap at the bottom if you have a old tube radio there will be two antenna holds each open side goes in one hole same if you have a tranny the 3.5 jack lead or the 1/4 inch jack takes the two wires long pin and outer case into your radio, not much more to say apart you turn he loop in the direction of the wanted station, you can put a over wire in the middle of the loops turns to your radio input or just put the radio inside the loop or have it side ways on. hope this helps. Mike - England.

[Non-text portions of this message have been removed]

8906. Re: [loopantennas] Re: envelope slide tuned loop - An Over Post way off subject.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 17:32:52 UTC
From: John Kolb
Topic: 8898 Message: 8906

Very sorry - my mistake, replying to the group instead of directly to
Bill last night.

At 03:32 AM 2/23/2012, you wrote:
>What is this all about - Very off subject. mike.

[Non-text portions of this message have been removed]

8907. Re: envelope slide tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 18:51:21 UTC
From: Dean Wayman
Topic: 8898 Message: 8907

maybe these will help?

http://www.crystalradio.net/beginners3/cap.shtml

http://www.angelfire.com/ak5/energy21/cupcap.htm

http://www.eham.net/articles/5217

http://qrp.webhop.net/Homemade_Capacitors/Homebrew%20Capacitors.html

Good luck

Dean_0

8908. Re: envelope slide tuned loop - Thanks Dean.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 22:26:45 UTC
From: mike.evans191
Topic: 8898 Message: 8908

Hi Dean. Those links were very useful, I will make the first one the round turnable cap and the bolt slider looks good as well, I can now see that my envelope idea might very well work, it may need to be about 8-12 inches long, I am ging to use some cardboard covers one side tin foil the other side plain that can be got from a takeaway, anyway thank you very much for the links, 375pf is a good start useing ther circleuar idea, 500pf have been better, I will report back later with my findings as to if it tuned from 1.602-530 khz MW BCB. Mike - England.

--- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@...> wrote:
>
> maybe these will help?
>
> http://www.crystalradio.net/beginners3/cap.shtml
>
> http://www.angelfire.com/ak5/energy21/cupcap.htm
>
> http://www.eham.net/articles/5217
>
> http://qrp.webhop.net/Homemade_Capacitors/Homebrew%20Capacitors.html
>
>
> Good luck
>
> Dean_0
>

8909. Re: [loopantennas] Re: envelope slide tuned loop - An Over Post way off subject.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-23 23:42:22 UTC
From: Bill McGraw
Topic: 8898 Message: 8909

Pardon me, thought I was off list and only realized it when the post listed.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

--- On Thu, 2/23/12, mike.evans191 <mike.evans191@...> wrote:

What is this all about - Very off subject. mike.

[Non-text portions of this message have been removed]

8910. Re: envelope slide tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-24 18:52:26 UTC
From: Bruce Carter
Topic: 8898 Message: 8910

Don't forget Tom Polk's soda can capacitor!

http://www.tompolk.com/crystalradios/cokecancapacitor.html

--- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@...> wrote:
>
> maybe these will help?
>
> http://www.crystalradio.net/beginners3/cap.shtml
>
> http://www.angelfire.com/ak5/energy21/cupcap.htm
>
> http://www.eham.net/articles/5217
>
> http://qrp.webhop.net/Homemade_Capacitors/Homebrew%20Capacitors.html
>
>
> Good luck
>
> Dean_0
>

8911. Re: envelope slide tuned loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-24 22:26:49 UTC
From: mike.evans191
Topic: 8898 Message: 8911

Hi Bruce. Could not get my head around the coke can idea, is it a case of metal can with an inner foil tube, either coke can outside or inside a caedboard tube ect. Mike.

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> Don't forget Tom Polk's soda can capacitor!
>
> http://www.tompolk.com/crystalradios/cokecancapacitor.html
>
> --- In loopantennas@yahoogroups.com, "Dean Wayman" <dean_0_way@> wrote:
> >
> > maybe these will help?
> >
> > http://www.crystalradio.net/beginners3/cap.shtml
> >
> > http://www.angelfire.com/ak5/energy21/cupcap.htm
> >
> > http://www.eham.net/articles/5217
> >
> > http://qrp.webhop.net/Homemade_Capacitors/Homebrew%20Capacitors.html
> >
> >
> > Good luck
> >
> > Dean_0
> >
>

8912. Necessary Indoor Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-25 19:58:32 UTC
From: WilliamY
Topic: 8912 Message: 8912

At my present location I have absolutely no way to install an outdoor antenna. I am encouraged after monitoring this group for months now that a well designed indoor loop might work for me. My receiver is a Ten Tec RX3230D working into a gateway E2500S desktop computer. The receiver and the computer are close together on my radio table. Our central heat and AC system is noisy. I do have, however a large walk-in closet located 15 to 20 feet from the receiver and computer, and there is already a run of coax(originally installed for cable TV but "rung out" by me as continuos) from just below my radio receiver table to the far wall of the closet. I believe I could install a shielded loop about five feet above the floor, and it could rotate 360 degrees without obstruction. There is no convenient AC outlet inside this closet so power for any loop electronics would have to travel down the coax to the loop or be located at the receiver end of the coax. This is what I have to work with. Can I use an available commercial shielded loop in the above described environment? I have been using a homebrew 30 inch active whip and a homebrew 20 turn 3 foot by 5 foot active loop. Each works, but noise is an ongoing problem. I want to try a rotatable, shielded loop. Thanks for any constructive input. Bill Young WD5HOH

8913. Re: [loopantennas] Necessary Indoor Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-26 11:12:01 UTC
From: Tom Haylock
Topic: 8912 Message: 8913

Have a look at my loop on QRZ.COM
It works for me
m0zsa

----- Original Message -----
From: WilliamY
To: loopantennas@yahoogroups.com
Sent: Saturday, February 25, 2012 7:58 PM
Subject: [loopantennas] Necessary Indoor Loop

At my present location I have absolutely no way to install an outdoor antenna. I am encouraged after monitoring this group for months now that a well designed indoor loop might work for me. My receiver is a Ten Tec RX3230D working into a gateway E2500S desktop computer. The receiver and the computer are close together on my radio table. Our central heat and AC system is noisy. I do have, however a large walk-in closet located 15 to 20 feet from the receiver and computer, and there is already a run of coax(originally installed for cable TV but "rung out" by me as continuos) from just below my radio receiver table to the far wall of the closet. I believe I could install a shielded loop about five feet above the floor, and it could rotate 360 degrees without obstruction. There is no convenient AC outlet inside this closet so power for any loop electronics would have to travel down the coax to the loop or be located at the receiver end of the coax. This is what I have to work with. Can I use an available commercial shielded loop in the above described environment? I have been using a homebrew 30 inch active whip and a homebrew 20 turn 3 foot by 5 foot active loop. Each works, but noise is an ongoing problem. I want to try a rotatable, shielded loop. Thanks for any constructive input. Bill Young WD5HOH

[Non-text portions of this message have been removed]

8914. Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-26 15:17:43 UTC
From: Benoît Mangin
Topic: 8914 Message: 8914

GE All,

I know it's a possibility that this question or a similar one has been ask many times...

I found I could try varactor-tuning for one of my new RX antennas. It's a coper tube square loop antenna, built wih 18mm diameter tube. It's 250cm on each side, for a total lenght of 10m.

It's primarily designed for 160m RXing, in parallel with a 35-950pF variable capacitor. It should tune with 720pF. A High Z in / Low Z out switchable preamp is in construction.

But I want to try varicap diode tuning. Here is my question:

What are the characteristics that make varicap diode suitable for RF Design ? How do I know it's suitable to a particular frequency range ?

Are there "standard" varactor diodes references that are latgely used by varactor-tuned loops builders ?

VY 73
de F8GRY/Ben

[Non-text portions of this message have been removed]

8915. Re: [loopantennas] Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-26 15:25:45 UTC
From: Chris Trask
Topic: 8914 Message: 8915

<<SNIP>>

>
> But I want to try varicap diode tuning. Here is my question:
>
> What are the characteristics that make varicap diode suitable
> for RF Design ? How do I know it's suitable to a particular
> frequency range ?
>
> Are there "standard" varactor diodes references that are
> latgely used by varactor-tuned loops builders ?
>

These two papers should help:

http://www.home.earthlink.net/~christrask/Paper011.html

http://www.home.earthlink.net/~christrask/Paper018.html

Chris

8916. Re: [loopantennas] Necessary Indoor Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-27 01:46:23 UTC
From: Bill McGraw
Topic: 8912 Message: 8916

--- On Sun, 2/26/12, Tom Haylock <m0zsa@...> wrote:

Have a look at my loop on QRZ.COM
It works for me
m0zsa
Tom,
Tell us how it is working for distance and if you have the stepped remote motor installed. How far away are you to the antenna when transmitting?
Will you use it in your attic?
I liked that design if the cap is available anywhere or a substitute is available. I'm a new ham at age 67, retired 20 yrs and able to buy what I need but rather make my own. My radio is the Kenwood TS 2000 and I hope to use its 100 watts for everything, no amps or tall antennas here. I have a power line, 220 volts overhead but I'm stringing a homemade dipole on my 5 ft tall wooden fence with coax under the power line for my first HF antenna. I can change the orientation 90 degrees if necessary due to noise.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8917. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-27 04:46:11 UTC
From: Mvs
Topic: 8914 Message: 8917

All said, there is one practical difficulty in trying varicaps for Rx loops.
Due to height of antenna that is needed, the lightening related voltage surges might damage the varicaps.
--- In loopantennas@yahoogroups.com, Benoît Mangin <mangin.benoit@...> wrote:
>
> GE All,
>
> I know it's a possibility that this question or a similar one has been ask many times...
>
> I found I could try varactor-tuning for one of my new RX antennas. It's a coper tube square loop antenna, built wih 18mm diameter tube. It's 250cm on each side, for a total lenght of 10m.
>
> It's primarily designed for 160m RXing, in parallel with a 35-950pF variable capacitor. It should tune with 720pF. A High Z in / Low Z out switchable preamp is in construction.
>
> But I want to try varicap diode tuning. Here is my question:
>
> What are the characteristics that make varicap diode suitable for RF Design ? How do I know it's suitable to a particular frequency range ?
>
> Are there "standard" varactor diodes references that are latgely used by varactor-tuned loops builders ?
>
> VY 73
> de F8GRY/Ben
>
> [Non-text portions of this message have been removed]
>

8918. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-27 08:44:16 UTC
From: Bill McGraw
Topic: 8914 Message: 8918

--- On Sun, 2/26/12, Mvs <mvs_sarma@...> wrote

All said, there is one practical difficulty in trying varicaps for Rx loops.
Due to height of antenna that is needed, the lightening related voltage surges might damage the varicaps.

Mvs,
So, how would one be protected? I have a dual band antenna, MFJ-1522 for 2M/70cm that is not grounded by itself and just to make sure each day, I disconnect the antenna and power cord to the power supply.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8919. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-27 18:34:06 UTC
From: Bruce Carter
Topic: 8914 Message: 8919

I've been working on a ten foot loop for AM. It has to go outdoors due to its large size, which mean I absolutely have to use varactor tuning.

I've tested the varactor tuning system, and all seems good. The same performance I get out of a tuning capacitor.

I'm using NTE618's. Mouser has a lot of them still, but they seem to be rapidly going obsolete, so get them while you can. They are the only part number I've found with the necessary capacitance ratio for AM loops.

I've based my design on the input stage of a GE Superadio 3. Not many nodes to the circuit, so I'll just give a text description.

Indoor remote tuning board:

Two 9V batteries in series, across a 20 turn pot (single turn could be substituted). Tuning voltage comes off the variable terminal of the pot. I could get more resolution by making part of the resistance range with a fixed resistor, probably a good idea if you are using a single turn pot. You only need about 10V full scale, and you could fine tune further by eliminating about 1.4V on the low end.

At the remote loop:

Ground: tuning voltage negative, anode of varactor, one side of 0.1uF ceramic capacitor.

(node 1): Cathode of varactor, one side of loop.

(node 2): Other side of loop, other side of 0.1uF ceramic capacitor, and one side of 1Meg resistor

Tuning voltage positive: other side of 1 Meg resistor.

Of course you need a four wire cable going outdoors to the loop, because you need two connections for the sense winding. You could combine one side of the sense winding, I guess, with tuning voltage ground.

I did find that the tuning voltage is extremely sensitive to noise on the power supply, which is why I used batteries.

And this tunes a loop originally designed for a tuning capacitor very well. And remotely, which is awesomely useful.

--- In loopantennas@yahoogroups.com, Benoît Mangin <mangin.benoit@...> wrote:
>
> GE All,
>
> I know it's a possibility that this question or a similar one has been ask many times...
>

> I found I could try varactor-tuning for one of my new RX antennas. It's a coper tube square loop antenna, built wih 18mm diameter tube. It's 250cm on each side, for a total lenght of 10m.
>
> It's primarily designed for 160m RXing, in parallel with a 35-950pF variable capacitor. It should tune with 720pF. A High Z in / Low Z out switchable preamp is in construction.
>
> But I want to try varicap diode tuning. Here is my question:
>
> What are the characteristics that make varicap diode suitable for RF Design ? How do I know it's suitable to a particular frequency range ?
>
> Are there "standard" varactor diodes references that are latgely used by varactor-tuned loops builders ?
>
> VY 73
> de F8GRY/Ben
>
> [Non-text portions of this message have been removed]
>

8920. Re: [loopantennas] Necessary Indoor Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-27 22:47:31 UTC
From: Tom Haylock
Topic: 8912 Message: 8920

Hi Bill
Others who have built this antenna have achieved much longer distance's than I have achieved because of there environment.
I do not have an attic.
If you read my setup, I have ground floor surrounded by buildings and no outside antennas aloud. So the main problem is noise and no other antenna I have tried has bettered this one
Start with an air cap if you cannot get a vacuum cap.
If you want I can send you some emails from others direct off group.
Tom

----- Original Message -----
From: Bill McGraw
To: loopantennas@yahoogroups.com
Sent: Monday, February 27, 2012 1:46 AM
Subject: Re: [loopantennas] Necessary Indoor Loop

--- On Sun, 2/26/12, Tom Haylock <m0zsa@...> wrote:

Have a look at my loop on QRZ.COM
It works for me
m0zsa
Tom,
Tell us how it is working for distance and if you have the stepped remote motor installed. How far away are you to the antenna when transmitting?
Will you use it in your attic?
I liked that design if the cap is available anywhere or a substitute is available. I'm a new ham at age 67, retired 20 yrs and able to buy what I need but rather make my own. My radio is the Kenwood TS 2000 and I hope to use its 100 watts for everything, no amps or tall antennas here. I have a power line, 220 volts overhead but I'm stringing a homemade dipole on my 5 ft tall wooden fence with coax under the power line for my first HF antenna. I can change the orientation 90 degrees if necessary due to noise.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8921. RE: [loopantennas] Necessary Indoor Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 00:48:02 UTC
From: William Young
Topic: 8912 Message: 8921

Tom, Thanks. I have an attic, but I'm still working out whether or not I actually have an unused run of coax from my radio operating position through a junction box in a closet all the way to the attic without interrupting my AT&T high speed internet service. I think I have figured out what to measure and how to measure, but I'm still working on it. Also, I no longer transmit. I have the luxury of optimizing any antenna system I build for receiving only. I want to receive essentially as low as possible(down to 10kHz?) to 30 mHz. So I prefer an untuned, broadband loop. I want the loop to be 365 degrees rotatable from a fixed position, and I may be able to locate it in my attic. If it's located there I will hope I can rotate it for minimum man-made noise and leave it in that position. That remains to be seen. If the loop cannot be located in our attic I will locate it in the large closet. I would have better access to it there, but it would be closer to ground. In addition I would like to include an ANC-4 Antenna Noise Canceller & Diversity Combiner (or the MFJ-1026 Noise Cancelling Signal Enhancer) in my receiving system. I think I could use my existing active whip antenna as a "noise antenna". That's an outline of what I have in mind. I'm probably looking at $600 US minimum to implement this system, so I will probably think about it and discuss it before buying anything. I am open to any relevant experience, opinions or data. Bill Young WD5HOH

To: loopantennas@yahoogroups.com
From: m0zsa@...
Date: Mon, 27 Feb 2012 22:47:31 +0000
Subject: Re: [loopantennas] Necessary Indoor Loop

Hi Bill
Others who have built this antenna have achieved much longer distance's than I have achieved because of there environment.
I do not have an attic.
If you read my setup, I have ground floor surrounded by buildings and no outside antennas aloud. So the main problem is noise and no other antenna I have tried has bettered this one
Start with an air cap if you cannot get a vacuum cap.
If you want I can send you some emails from others direct off group.
Tom

----- Original Message -----
From: Bill McGraw
To: loopantennas@yahoogroups.com
Sent: Monday, February 27, 2012 1:46 AM
Subject: Re: [loopantennas] Necessary Indoor Loop

--- On Sun, 2/26/12, Tom Haylock <m0zsa@...> wrote:

Have a look at my loop on QRZ.COM
It works for me
m0zsa
Tom,
Tell us how it is working for distance and if you have the stepped remote motor installed.

How far away are you to the antenna when transmitting?
Will you use it in your attic?
I liked that design if the cap is available anywhere or a substitute is available. I'm a new ham at age 67, retired 20 yrs and able to buy what I need but rather make my own. My radio is the Kenwood TS 2000 and I hope to use its 100 watts for everything, no amps or tall antennas here. I have a power line, 220 volts overhead but I'm stringing a homemade dipole on my 5 ft tall wooden fence with coax under the power line for my first HF antenna. I can change the orientation 90 degrees if necessary due to noise.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8922. Re: [loopantennas] Necessary Indoor Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 08:51:34 UTC
From: Tom Haylock
Topic: 8912 Message: 8922

Bill

To the best of my knollage I have never seen a wide band loop, loops have a very narrow or Q tuning position and this is why they can compete with yargis and are better noise cancellers.

I have tried other Noise Cancelling Signal Enhancer and sold them all.

My loop can tune from 80m to 17m.

Use a wire or wide band antenna to find the signal and then change to the loop.

One other thing, have you tried CQ100. It might not be real radio but when you are in my position or in my environment it's great

Tom

8923. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 12:37:00 UTC
From: Lee
Topic: 8914 Message: 8923

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> I've been working on a ten foot loop for AM. It has to go outdoors due to its large size, which mean I absolutely have to use varactor tuning.
>
> I've tested the varactor tuning system, and all seems good. The same performance I get out of a tuning capacitor.
>
> I'm using NTE618's. Mouser has a lot of them still, but they seem to be rapidly going obsolete, so get them while you can. They are the only part number I've found with the necessary capacitance ratio for AM loops.
>
> I've based my design on the input stage of a GE Superadio 3. Not many nodes to the circuit, so I'll just give a text description.
>
> Indoor remote tuning board:
>
> Two 9V batteries in series, across a 20 turn pot (single turn could be substituted). Tuning voltage comes off the variable terminal of the pot. I could get more resolution by making part of the resistance range with a fixed resistor, probably a good idea if you are using a single turn pot. You only need about 10V full scale, and you could fine tune further by eliminating about 1.4V on the low end.
>
> At the remote loop:
>
> Ground: tuning voltage negative, anode of varactor, one side of 0.1uF ceramic capacitor.
>
> (node 1): Cathode of varactor, one side of loop.
>
> (node 2): Other side of loop, other side of 0.1uF ceramic capacitor, and one side of 1Meg resistor
>
> Tuning voltage positive: other side of 1 Meg resistor.
>
> Of course you need a four wire cable going outdoors to the loop, because you need two connections for the sense winding. You could combine one side of the sense winding, I guess, with tuning voltage ground.
>
> I did find that the tuning voltage is extremely sensitive to noise on the power supply, which is why I used batteries.
>
> And this tunes a loop originally designed for a tuning capacitor very well. And remotely, which is awesomely useful.
>

Sounds like my kind of circuit, couple of points I`m not to sure of
though...

1/ Two 9V batteries in series, ACROSS (??) a 20 turn pot.

2/ > Of course you need a four wire cable going outdoors to the loop, because you need two connections for the sense winding. You could combine one side of the sense winding, I guess, with tuning voltage ground.

Could you draw a curcuit layout please??

Thanks.

Lee..G6ZSG.

8925. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 13:24:04 UTC
From: Mvs
Topic: 8914 Message: 8925

there are other devices like SANYO SVC388 and 389(SOT23) - both dual varicap for am band.
secondly Toshiba has 1SV149. ASIAN SOURCES HAVE LOTS OF THEM
svc still sold by RScomponents of uk

--- In loopantennas@yahoogroups.com, "Lee" <leo1949uk@...> wrote:
>
>
>
> --- In loopantennas@...m, "Bruce Carter" <rbrucecarter@> wrote:
> >
> > I've been working on a ten foot loop for AM. It has to go outdoors due to its large size, which mean I absolutely have to use varactor tuning.
> >
> > I've tested the varactor tuning system, and all seems good. The same performance I get out of a tuning capacitor.
> >
> > I'm using NTE618's. Mouser has a lot of them still, but they seem to be rapidly going obsolete, so get them while you can. They are the only part number I've found with the necessary capacitance ratio for AM loops.
> >
> > I've based my design on the input stage of a GE Superadio 3. Not many nodes to the circuit, so I'll just give a text description.
> >
> > Indoor remote tuning board:
> >
> > Two 9V batteries in series, across a 20 turn pot (single turn could be substituted). Tuning voltage comes off the variable terminal of the pot. I could get more resolution by making part of the resistance range with a fixed resistor, probably a good idea if you are using a single turn pot. You only need about 10V full scale, and you could fine tune further by eliminating about 1.4V on the low end.
> >
> > At the remote loop:
> >
> > Ground: tuning voltage negative, anode of varactor, one side of 0.1uF ceramic capacitor.
> >
> > (node 1): Cathode of varactor, one side of loop.
> >
> > (node 2): Other side of loop, other side of 0.1uF ceramic capacitor, and one side of 1Meg resistor
> >
> > Tuning voltage positive: other side of 1 Meg resistor.
> >
> > Of course you need a four wire cable going outdoors to the loop, because you need two connections for the sense winding. You could combine one side of the sense winding, I

guess, with tuning voltage ground.
> >
> > I did find that the tuning voltage is extremely sensitive to noise on the power supply, which is why I used batteries.
> >
> > And this tunes a loop originally designed for a tuning capacitor very well. And remotely, which is awesomely useful.
> >
>
> Sounds like my kind of circuit, couple of points I`m not to sure of
> though...
>
> 1/ Two 9V batteries in series, ACROSS (??) a 20 turn pot.
>
> 2/ > Of course you need a four wire cable going outdoors to the loop, because you need two connections for the sense winding. You could combine one side of the sense winding, I guess, with tuning voltage ground.
>
> Could you draw a curcuit layout please??
>
> Thanks.
>
> Lee..G6ZSG.
>

8926. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 13:24:13 UTC
From: Bruce Carter
Topic: 8914 Message: 8926

> 1/ Two 9V batteries in series, ACROSS (??) a 20 turn pot.

9V + 9V = 18V. A lot easier than putting a bunch of AA's in series to make 10.5. The varactor needs about 1.5 to 9.5 to tune the AM band.

> Could you draw a curcuit layout please??

Eventually. I suck at ASCII schematics - which suck anyway. Draw it yourself from the node I described, there are only 4 connections in the whole schematic.

8927. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 13:28:21 UTC
From: Mvs
Topic: 8914 Message: 8927

perhaps we can have one single 1.5 V AAA or even smaller cell in series to 9V battery meakes aan economical proposal.

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> > 1/ Two 9V batteries in series, ACROSS (??) a 20 turn pot.
>
> 9V + 9V = 18V. A lot easier than putting a bunch of AA's in series to make 10.5. The varactor needs about 1.5 to 9.5 to tune the AM band.
>
> > Could you draw a curcuit layout please??
>
> Eventually. I suck at ASCII schematics - which suck anyway. Draw it yourself from the node I described, there are only 4 connections in the whole schematic.
>

8928. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 14:35:22 UTC
From: Lee
Topic: 8914 Message: 8928

--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> > 1/ Two 9V batteries in series, ACROSS (??) a 20 turn pot.

Across?? in series with the circuit, surely??..must be a typo.

> 9V + 9V = 18V. A lot easier than putting a bunch of AA's in series to make 10.5. The varactor needs about 1.5 to 9.5 to tune the AM band.
>
> > Could you draw a curcuit layout please??

Circuit even ...Duh..

> Eventually. I suck at ASCII schematics - which suck anyway. Draw it yourself from the node I described, there are only 4 connections in the whole schematic.

Yes, but you srung a sensor winding on me ..the rest was clear, what
sensor winding?? my old brain aint so fast nowadays, sorry...

Regards.

Lee...G6ZSG.

8929. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 16:46:28 UTC
From: Steve Ratzlaff
Topic: 8914 Message: 8929

Just look at this article, with proper schematic and explanations and all.
He uses a 9V battery. Same thing, add your 4-line cable if you want it to
be really remote.
http://randombio.com/loopantenna.html

Steve

[Non-text portions of this message have been removed]

8930. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-28 18:10:29 UTC
From: Rick Karlquist
Topic: 8914 Message: 8930

>> > Could you draw a curcuit layout please??
>
> Circuit even ...Duh..
>

Here is a complete construction article with schematics
and PC boards available:

http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf

BTW, you don't need sense wiring because the current is
essentially zero and you can send the tuning voltage over
the feedline, as described in the link above.

Rick N6RK

8931. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-29 00:35:12 UTC
From: Bill McGraw
Topic: 8914 Message: 8931

--- On Tue, 2/28/12, Mvs <mvs_sarma@...> wrote:

there are other devices like SANYO SVC388 and 389(SOT23) - both dual varicap for am band.
secondly Toshiba has 1SV149. ASIAN SOURCES HAVE LOTS OF THEM
svc still sold by RScomponents of uk

Mvs,
This is getting too complicated for me to understand. Is this about verator tuning for loops, a complete system, new and still available? I can't find any prices for them.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8932. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-29 03:59:32 UTC
From: Lee
Topic: 8914 Message: 8932

--- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>
>
> >> > Could you draw a curcuit layout please??
> >
> > Circuit even ...Duh..
> >
>
> Here is a complete construction article with schematics
> and PC boards available:
>
> http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf
>
> BTW, you don't need sense wiring because the current is
> essentially zero and you can send the tuning voltage over
> the feedline, as described in the link above.
>
> Rick N6RK

Thankyou for the url Rick...very interesting reading.

As I have an ant(untuned inverted L) which is adequate for AM using a 9:1 transformer for impedance matching...I am looking more for 17m to 6m and general coverage shortwavebands and am using a homebrew magloop with air spaced variable cap electro-mechanically tuned...(would love a vacuum cap but can`t afford one) but do like the varicap methods described in this thread and your url looks the best start to experimenting, the varicaps mentioned are for 50khz - 200khz...which ones would be suitable for 17 - 6 metres??, never had dealings with varicaps ... lol. I thought they were capacitance rather than frequency operated, shows how much I know.

Regards.

Lee...G6ZSG.

8933. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-29 11:40:01 UTC
From: Bill McGraw
Topic: 8914 Message: 8933

--- On Tue, 2/28/12, Steve Ratzlaff <ratzlaffsteve@...> wrote:

Just look at this article, with proper schematic and explanations and all.
He uses a 9V battery. Same thing, add your 4-line cable if you want it to
be really remote.
http://randombio.com/loopantenna.html

Steve

Steve,
Do I assume correctly this loop is not for transmit? If for Tx, do you have a close up photo of the tuning circuit?

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

[Non-text portions of this message have been removed]

8934. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-29 15:42:56 UTC
From: Steve Ratzlaff
Topic: 8914 Message: 8934

These are just receiving loops, using varactors for remote tuning. I had thought you said you just wanted an indoor receiving antenna. They are all homebrew, nothing commercial like these are offered.
Steve

On Wed, Feb 29, 2012 at 3:40 AM, Bill McGraw <mcgr3799@...> wrote:
>
> Steve,
> Do I assume correctly this loop is not for transmit? If for Tx, do you
> have a close up photo of the tuning circuit?
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>
>

[Non-text portions of this message have been removed]

8935. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-29 18:00:46 UTC
From: Rick Karlquist
Topic: 8914 Message: 8935

Lee wrote:

> --- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>>
>>
>> >> > Could you draw a curcuit layout please??
>> >
>> > Circuit even ...Duh..
>> >
>>
>> Here is a complete construction article with schematics
>> and PC boards available:
>>
>> http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf
>>
>> BTW, you don't need sense wiring because the current is
>> essentially zero and you can send the tuning voltage over
>> the feedline, as described in the link above.
>>
>> Rick N6RK
>
> Thankyou for the url Rick...very interesting reading.
>
> As I have an ant(untuned inverted L) which is adequate for AM
> using a 9:1 transformer for impedance matching...I am looking
> more for 17m to 6m and general coverage shortwavebands and am
> using a homebrew magloop with air spaced variable cap electro-
> mechanically tuned...(would love a vacuum cap but can`t afford
> one) but do like the varicap methods described in this thread
> and your url looks the best start to experimenting, the varicaps
> mentioned are for 50khz - 200khz...which ones would be suitable
> for 17 - 6 metres??, never had dealings with varicaps ... lol.
> I thought they were capacitance rather than frequency operated,
> shows how much I know.
>
> Regards.
>
> Lee...G6ZSG.

The NTE618 varactor is specifically for the AM BCB 500 kHz to 1700
kHz. For shortwave, you need much less capacitance, and lots
of diodes are available in those lower values. There would
be nothing in principle to prevent you from scaling the
loop design in the NCJ article to higher frequencies. Varactors

have a capacitance inversely proportional to the bias voltage raised to a power between .5 and 2. Why would you want a vacuum variable capacitor in a receiving loop?

Rick N6RK

8936. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-02-29 19:29:15 UTC
From: Mvs
Topic: 8914 Message: 8936

I think that sentense with a "," there ....9V batteries in series, across a 20 turn pot......was perfectly alright. it clearly sounds that 18V would be across the potentiometer.

I dont know why any confusion!!

--- In loopantennas@yahoogroups.com, "Lee" <leo1949uk@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@> wrote:
> >
> > > 1/ Two 9V batteries in series, ACROSS (??) a 20 turn pot.
>
> Across?? in series with the circuit, surely??..must be a typo.
>
> > 9V + 9V = 18V. A lot easier than putting a bunch of AA's in series to make 10.5. The varactor needs about 1.5 to 9.5 to tune the AM band.
> >
> > > Could you draw a curcuit layout please??
>
> Circuit even ...Duh..
>
> > Eventually. I suck at ASCII schematics - which suck anyway. Draw it yourself from the node I described, there are only 4 connections in the whole schematic.
>
> Yes, but you srung a sensor winding on me ..the rest was clear, what
> sensor winding?? my old brain aint so fast nowadays, sorry...
>
> Regards.
>
> Lee...G6ZSG.
>

8938. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-01 10:02:29 UTC
From: Lee
Topic: 8914 Message: 8938

--- In loopantennas@yahoogroups.com, "Mvs" <mvs_sarma@...> wrote:
>
> I think that sentense with a "," there ....9V batteries in series, across a 20 turn pot......was perfectly alright. it clearly sounds
that 18V would be across the potentiometer.

Heh heh...it may sound right to you, but not to me!! :) lol.

The batteries in series sounds ok but 18 volts ACROSS the pot ...
think about it..maybe I`m wrong, at my age I wouldn`t be suprised.

Anyways...I have followed your directions and put them to paper
(not too difficult after kickstarting my brain) and made a cicuit
board, using a hobby knife on a copper clad board and soldered the
main components in place but in the absence of a varactor am using
(read :- experimenting) leds and diodes out of my junk box...and
getting some results with leds, not sure what but varying the pot
alters the `S` readings...

Hope you see the funny side of my assertions :)

Regards.

Lee...G6ZSG.

> I dont know why any confusion!!
>
> --- In loopantennas@yahoogroups.com, "Lee" <leo1949uk@> wrote:
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@> wrote:
> > >
> > > > 1/ Two 9V batteries in series, ACROSS (??) a 20 turn pot.
> >
> > Across?? in series with the circuit, surely??..must be a typo.
> >
> > > 9V + 9V = 18V. A lot easier than putting a bunch of AA's in series to make 10.5. The varactor needs about 1.5 to 9.5 to tune the AM band.
> > >
> > > > Could you draw a curcuit layout please??
> >
> > Circuit even ...Duh..
> >
> > > Eventually. I suck at ASCII schematics - which suck anyway. Draw it yourself from the node I described, there are only 4 connections in the whole schematic.
> >

> > Yes, but you srung a sensor winding on me ..the rest was clear, what
> > sensor winding?? my old brain aint so fast nowadays, sorry...
> >
> > Regards.
> >
> > Lee...G6ZSG.
> >
>

8939. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-01 13:24:43 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 8939

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

8940. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-01 13:24:43 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 8940

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

8941. OT Joe "Yodar" Strain

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-01 19:26:13 UTC
From: mcgr3799@bellsouth.net
Topic: 8941 Message: 8941

Admin,
Contact me off list.

8942. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-02 03:59:24 UTC
From: Lee
Topic: 8914 Message: 8942

> >
> > Thankyou for the url Rick...very interesting reading.
> >
> > As I have an ant(untuned inverted L) which is adequate for AM
> > using a 9:1 transformer for impedance matching...I am looking
> > more for 17m to 6m and general coverage shortwavebands and am
> > using a homebrew magloop with air spaced variable cap electro-
> > mechanically tuned...(would love a vacuum cap but can`t afford
> > one) but do like the varicap methods described in this thread
> > and your url looks the best start to experimenting, the varicaps
> > mentioned are for 50khz - 200khz...which ones would be suitable
> > for 17 - 6 metres??, never had dealings with varicaps ... lol.
> > I thought they were capacitance rather than frequency operated,
> > shows how much I know.
> >
> > Regards.
> >
> > Lee...G6ZSG.
>
> The NTE618 varactor is specifically for the AM BCB 500 kHz to 1700
> kHz. For shortwave, you need much less capacitance, and lots
> of diodes are available in those lower values. There would
> be nothing in principle to prevent you from scaling the
> loop design in the NCJ article to higher frequencies. Varactors
> have a capacitance inversely proportional to the bias voltage
> raised to a power between .5 and 2. Why would you want a
> vacuum variable capacitor in a receiving loop?
>
> Rick N6RK
>
Hi Rick.

Been searching the web and found about 8 suitable varactors that
would do the job including the NTE618, but have a local ham rally
where a local mail order business has a stock of BB112 9volt diodes
will be attending, so I can collect quicker than delivery..and browse
various stalls at the same time, nice day out.
Why would I want vacuum cap? because my 3 foot dia magloop is for tx
and only covers 28Mhz to 16Mhz...

Regards.

Lee...G6ZSG.

8943. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-02 05:22:37 UTC
From: Mvs
Topic: 8914 Message: 8943

I found http://partsandkits.com/parts.php have motorola make MVAM109 varicaps that are reasonably cheap.

Perhaps it could help few American members, even though they dispatch across world,

--- In loopantennas@yahoogroups.com, "Lee" <leo1949uk@...> wrote:
>
>
> > >
> > > Thankyou for the url Rick...very interesting reading.
> > >
> > > As I have an ant(untuned inverted L) which is adequate for AM
> > > using a 9:1 transformer for impedance matching...I am looking
> > > more for 17m to 6m and general coverage shortwavebands and am
> > > using a homebrew magloop with air spaced variable cap electro-
> > > mechanically tuned...(would love a vacuum cap but can`t afford
> > > one) but do like the varicap methods described in this thread
> > > and your url looks the best start to experimenting, the varicaps
> > > mentioned are for 50khz - 200khz...which ones would be suitable
> > > for 17 - 6 metres??, never had dealings with varicaps ... lol.
> > > I thought they were capacitance rather than frequency operated,
> > > shows how much I know.
> > >
> > > Regards.
> > >
> > > Lee...G6ZSG.
> >
> > The NTE618 varactor is specifically for the AM BCB 500 kHz to 1700
> > kHz. For shortwave, you need much less capacitance, and lots
> > of diodes are available in those lower values. There would
> > be nothing in principle to prevent you from scaling the
> > loop design in the NCJ article to higher frequencies. Varactors
> > have a capacitance inversely proportional to the bias voltage
> > raised to a power between .5 and 2. Why would you want a
> > vacuum variable capacitor in a receiving loop?
> >
> > Rick N6RK
> >
> Hi Rick.
>
> Been searching the web and found about 8 suitable varactors that
> would do the job including the NTE618, but have a local ham rally
> where a local mail order business has a stock of BB112 9volt diodes
> will be attending, so I can collect quicker than delivery..and browse
> various stalls at the same time, nice day out.

> Why would I want vacuum cap? because my 3 foot dia magloop is for tx
> and only covers 28Mhz to 16Mhz...
>
> Regards.
>
> Lee...G6ZSG.
>

8944. Wellbook ALA100

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-03 08:28:28 UTC
From: stephen_qrp
Topic: 8944 Message: 8944

Hello

I have just completed constructing a 12ft square loop with 2 turns of wire connected in parallel at the Wellbrook ALA100 feed-point.

I cannot decide if I should mount the loop horizontally or vertically.
The loop will not be on a rotator and so I will not be looking to "null" at all. My feeling is to go for horizontal, but would welcome any suggestions.

Another question I have been pondering, is the location of the feed-point. I read a technical paper on loops that suggested that the location of the feed-point would influence the polarization of the loop. Unfortunately I am not cleaver enough to understand the why this might be the case.

Regards to all.

Stephen

8945. Re: [loopantennas] Wellbook ALA100

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-03 11:38:35 UTC
From: Andy Ikin
Topic: 8944 Message: 8945

Stephen wrote on March 3.

"Hello

I have just completed constructing a 12ft square loop with 2 turns of wire connected in parallel at the Wellbrook ALA100 feed-point.

I cannot decide if I should mount the loop horizontally or vertically.
The loop will not be on a rotator and so I will not be looking to "null" at all. My feeling is to go for horizontal, but would welcome any suggestions.

Another question I have been pondering, is the location of the feed-point. I read a technical paper on loops that suggested that the location of the feed-point would influence the polarization of the loop. Unfortunately I am not cleaver enough to understand the why this might be the case.

Regards to all."

Stephen,

The loop dimensions you have given are more suited to the ALA100M. If you are using the ALA100 or the new ALA100LN (low noise 8 JFET version) then a much larger loop is required. You can use any loop mounted horizontally. However, the gain drops off significantly where the ground to loop space difference is less than say Lambda/8. Or put it another its is more suitable for HF.
Where the loop circumference is small in terms of wavelength less that approx. 0.2 Lambda, the antenna polarization is function of its physical mounting and not the feed point. With large loops, for example a full wave, the polarisation is dependant on the feed point. With a vertical mounted loop fed from the bottom, it is Horizontally polarized and Vertical polarized if fed from centre of the one side.

Kind regards

Andrew Ikin

----- Original Message -----
From: stephen_qrp
To: loopantennas@yahoogroups.com
Sent: Saturday, March 03, 2012 8:28 AM
Subject: [loopantennas] Wellbook ALA100

Hello

I have just completed constructing a 12ft square loop with 2 turns of wire connected in parallel at the Wellbrook ALA100 feed-point.

I cannot decide if I should mount the loop horizontally or vertically.
The loop will not be on a rotator and so I will not be looking to "null" at all. My feeling

is to go for horizontal, but would welcome any suggestions.

Another question I have been pondering, is the location of the feed-point. I read a technical paper on loops that suggested that the location of the feed-point would influence the polarization of the loop. Unfortunately I am not cleaver enough to understand the why this might be the case.

Regards to all.

Stephen

[Non-text portions of this message have been removed]

8946. Re: [loopantennas] Wellbook ALA100

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-03 14:52:11 UTC
From: J Ferrow
Topic: 8944 Message: 8946

andy good info - i have an ala-100ln on the way - i have questions about loop size also.

what is the smallest loop size i cold get away with using with this amp? based on your response it sounds like its not even practical to use the 100LN with a rotor. finally what would happen if i did use the 100LN with a 12ft loop as suggested by the original poster.

thx, john

From: Andy Ikin <andrew.ikin@btopenworld.com>
To: loopantennas@yahoogroups.com
Sent: Saturday, March 3, 2012 6:38 AM
Subject: Re: [loopantennas] Wellbook ALA100

Stephen wrote on March 3.

"Hello

I have just completed constructing a 12ft square loop with 2 turns of wire connected in parallel at the Wellbrook ALA100 feed-point.

I cannot decide if I should mount the loop horizontally or vertically.
The loop will not be on a rotator and so I will not be looking to "null" at all. My feeling is to go for horizontal, but would welcome any suggestions.

Another question I have been pondering, is the location of the feed-point. I read a technical paper on loops that suggested that the location of the feed-point would influence the polarization of the loop. Unfortunately I am not cleaver enough to understand the why this might be the case.

Regards to all."

Stephen,

The loop dimensions you have given are more suited to the ALA100M. If you are using the ALA100 or the new ALA100LN (low noise 8 JFET version) then a much larger loop is required. You can use any loop mounted horizontally. However, the gain drops off significantly where the ground to loop space difference is less than say Lambda/8. Or put it another its is more suitable for HF.
Where the loop circumference is small in terms of wavelength less that approx. 0.2 Lambda, the antenna polarization is function of its physical mounting and not the feed point. With large loops, for example a full wave, the polarisation is dependant on the feed point. With a vertical mounted loop fed from the bottom, it is Horizontally polarized and Vertical polarized if fed from centre of the one side.

Kind regards

Andrew Ikin

----- Original Message -----
From: stephen_qrp
To: loopantennas@yahoogroups.com
Sent: Saturday, March 03, 2012 8:28 AM
Subject: [loopantennas] Wellbook ALA100

Hello

I have just completed constructing a 12ft square loop with 2 turns of wire connected in parallel at the Wellbrook ALA100 feed-point.

I cannot decide if I should mount the loop horizontally or vertically.
The loop will not be on a rotator and so I will not be looking to "null" at all. My feeling is to go for horizontal, but would welcome any suggestions.

Another question I have been pondering, is the location of the feed-point. I read a technical paper on loops that suggested that the location of the feed-point would influence the polarization of the loop. Unfortunately I am not cleaver enough to understand the why this might be the case.

Regards to all.

Stephen

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8947. Re: Wellbook ALA100

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-03 15:58:28 UTC
From: stephen_qrp
Topic: 8944 Message: 8947

Hello Andy

Many thanks for your kind reply, I should have been more careful in stating that I have the ALA100M.

As I understand your answer, should I want the 40m meter band then 40/8 is the minimum height above ground for a loop physically mounted horizontally.

However if I mount my small loop physically vertically then height above ground is less of an issue and can be fed from the bottom..

My understanding is that a vertical loop is more directional whereas mounting horizontally it is more omni-directional. My thinking is to go horizontally mounted at about 18ft above ground for frequencies of 8 MHz - 16 MHZ unless you say otherwise.

I use your 1530 and 1010 for other frequencies and have noted that mounting them horizontally is definitely not a good idea.

Kind regards

Stephen

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
> Stephen wrote on March 3.
>
> "Hello
>
> I have just completed constructing a 12ft square loop with 2 turns of wire connected in parallel at the Wellbrook ALA100 feed-point.
>
> I cannot decide if I should mount the loop horizontally or vertically.
> The loop will not be on a rotator and so I will not be looking to "null" at all. My feeling is to go for horizontal, but would welcome any suggestions.
>
> Another question I have been pondering, is the location of the feed-point. I read a technical paper on loops that suggested that the location of the feed-point would influence the polarization of the loop. Unfortunately I am not cleaver enough to understand the why this might be the case.
>
> Regards to all."
>
>
>
>

> Stephen,
>
> The loop dimensions you have given are more suited to the ALA100M. If you are using the ALA100 or the new ALA100LN (low noise 8 JFET version) then a much larger loop is required.
> You can use any loop mounted horizontally. However, the gain drops off significantly where the ground to loop space difference is less than say Lambda/8. Or put it another its is more suitable for HF.
> Where the loop circumference is small in terms of wavelength less that approx. 0.2 Lambda, the antenna polarization is function of its physical mounting and not the feed point. With large loops, for example a full wave, the polarisation is dependant on the feed point. With a vertical mounted loop fed from the bottom, it is Horizontally polarized and Vertical polarized if fed from centre of the one side.
>
> Kind regards
>
> Andrew Ikin
>
>
>
>
>
>
>
>
>
> ----- Original Message -----
> From: stephen_qrp
> To: loopantennas@yahoogroups.com
> Sent: Saturday, March 03, 2012 8:28 AM
> Subject: [loopantennas] Wellbook ALA100
>
>
>
> Hello
>
> I have just completed constructing a 12ft square loop with 2 turns of wire connected in parallel at the Wellbrook ALA100 feed-point.
>
> I cannot decide if I should mount the loop horizontally or vertically.
> The loop will not be on a rotator and so I will not be looking to "null" at all. My feeling is to go for horizontal, but would welcome any suggestions.
>
> Another question I have been pondering, is the location of the feed-point. I read a technical paper on loops that suggested that the location of the feed-point would influence the polarization of the loop. Unfortunately I am not cleaver enough to understand the why this might be the case.
>
> Regards to all.
>
> Stephen

>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8948. Re: [loopantennas] Re: Wellbook ALA100

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-03 19:47:00 UTC
From: Andy Ikin
Topic: 8944 Message: 8948

Stephen, wrote on the March 3.

"Hello Andy

Many thanks for your kind reply, I should have been more careful in stating that I have the ALA100M.

As I understand your answer, should I want the 40m meter band then 40/8 is the minimum height above ground for a loop physically mounted horizontally.

However if I mount my small loop physically vertically then height above ground is less of an issue and can be fed from the bottom..

My understanding is that a vertical loop is more directional whereas mounting horizontally it is more omni-directional. My thinking is to go horizontally mounted at about 18ft above ground for frequencies of 8 MHz - 16 MHZ unless you say otherwise.

I use your 1530 and 1010 for other frequencies and have noted that mounting them horizontally is definitely not a good idea.

Kind regards"

Stephen what you say is more or less correct. However, at HF where the signal arrival angles are higher or where the same signal has multiple arrival angles, a vertical mounted loop will appear to be omni-directional. Mounting the loop horizontally may reduce some very high angle signals.
Kind regards

Andrew

[Non-text portions of this message have been removed]

8949. Re: [loopantennas] Wellbook ALA100

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-03 22:16:40 UTC
From: Andy Ikin
Topic: 8944 Message: 8949

John Ferrow, wrote on March 3rd,

"andy good info - i have an ala-100ln on the way - i have questions about loop size also.

what is the smallest loop size i cold get away with using with this amp? based on your response it sounds like its not even practical to use the 100LN with a rotor. finally what would happen if i did use the 100LN with a 12ft loop as suggested by the original poster."

John, You can make the loop smaller, by using 2 turn loop, but you need to space turns by approx. 3-4 inches to keep the loop inductance down.

Kind regards

Andrew

[Non-text portions of this message have been removed]

8950. Re: Wellbook ALA100

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-04 07:02:07 UTC
From: stephen_qrp
Topic: 8944 Message: 8950

Thank you Andy

Stephen

> Stephen what you say is more or less correct. However, at HF where the signal arrival angles are higher or where the same signal has multiple arrival angles, a vertical mounted loop will appear to be omni-directional. Mounting the loop horizontally may reduce some very high angle signals.
> Kind regards
>
> Andrew
>
>
> [Non-text portions of this message have been removed]
>

8951. Help for stopping a noise !!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-06 19:22:11 UTC
From: Zacharias Liangas
Topic: 8951 Message: 8951

Heloo
This message is off topic but I don´t have somewhere to wrote else ...

It is now 2 weeks since I a huge noise has been introduced to my already heavy QRM ed home from DSL at least.
MY system consists of a R75, a 2x16 inv V antenna a 16 H antenna
This noise adds a S10 level QRN on most bands ie wiping most radio stations and is cut on 7 MHz and above 15 MHZ

You can find a sample on this link

http://soundcloud.com/greekdx/qrn-1

Just a little research with my `field meter´ Jupiteru 7100 finds the source as the electric panel from an Italian pellet burner on the cellar of our house
Look at the 18secs video :
http://youtu.be/FUxBUo7kTJg

with attenuated signal level
Do you have any idea on how to kill this noise? (esp from the burner side)
Standard rig : ICOM R75 / 2x16 V / m@h40 heads Sennheiser
Please read and distribute this 15 year research article http://tinyurl.com/5vzg7e
Please read my article on SINPO at http://tinyurl.com/yt7qjd

_____
http://zlgr.multiply.com (radio monitoring site plus audio clips) MAIN SITE
http://www.delicious.com/gr_greek1/@zach (all mypages !!)
.....
Zacharias Liangas , Thessaloniki Greece
greekdx @ otenet dot gr ---
Pesawat penerima: ICOM R75 , Lowe HF150 , Degen 1102,1103,108,
Tecsun PL200/550, Chibo c300/c979, Yupi 7000
Antenna: 16m hor, 2x16 m V invert, 1m australian loop

8952. Re: Help for stopping a noise !!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-06 21:42:52 UTC
From: Alex P
Topic: 8951 Message: 8952

Hard to say without a schematic diagram or understanding of the theory of operation. First thing that comes to mind is it looks like there are no electrical filters on the power lines. Poor shielding on the assemblies, or insufficient electrical grounding (earthing).

--- In loopantennas@yahoogroups.com, "Zacharias Liangas " <greekdx@...> wrote:
>
> Heloo
> This message is off topic but I don´t have somewhere to wrote else ...
>
> It is now 2 weeks since I a huge noise has been introduced to my already heavy QRM ed
> home from DSL at least.
> MY system consists of a R75, a 2x16 inv V antenna a 16 H antenna
> This noise adds a S10 level QRN on most bands ie wiping most radio stations and is cut on
> 7 MHz and above 15 MHZ
>
> You can find a sample on this link
>
> http://soundcloud.com/greekdx/qrn-1
>
> Just a little research with my `field meter´ Jupiteru 7100 finds the source as the
electric
> panel from an Italian pellet burner on the cellar of our house
> Look at the 18secs video :
> http://youtu.be/FUxBUo7kTJg
>
> with attenuated signal level
> Do you have any idea on how to kill this noise? (esp from the burner side)
> Standard rig : ICOM R75 / 2x16 V / m@h40 heads Sennheiser
> Please read and distribute this 15 year research article http://tinyurl.com/5vzg7e
> Please read my article on SINPO at http://tinyurl.com/yt7qjd
> _________________________
> http://zlgr.multiply.com (radio monitoring site plus audio clips) MAIN SITE
> http://www.delicious.com/gr_greek1/@zach (all mypages !!)
> ....
> Zacharias Liangas , Thessaloniki Greece
> greekdx @ otenet dot gr ---
> Pesawat penerima: ICOM R75 , Lowe HF150 , Degen 1102,1103,108,
> Tecsun PL200/550, Chibo c300/c979, Yupi 7000
> Antenna: 16m hor, 2x16 m V invert, 1m australian loop
>

8953. Re: Help for stopping a noise !!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-07 07:31:19 UTC
From: Mvs
Topic: 8951 Message: 8953

Many power adopters(wall bricks,though analog) are not designed well to suite for radio working. they needd to have 0.01uF ceramic disc capacitorss across the diode elements. liewise they need to have a sort of linear regulatorwith proper filtering.

secondly, many desktop psus are bilut and sold with no front end emi filters even though they have provision on the printed board inside. I tappears that we have to place a filter as it could be mounted replacing the 3 pin sockt of the psu.

perhaps we need to prevent RG cable parallel to either internet (DSL cable, or some such. the leadin should not be parallel to a power duct.

during the active Dxing times we can swith off the chopper type fam speed regulators etc to prevent interference.

Once we start examining and eliminating, we find slow improvement.

--- In loopantennas@yahoogroups.com, "Zacharias Liangas " <greekdx@...> wrote:
>
> Heloo
> This message is off topic but I don´t have somewhere to wrote else ...
>
> It is now 2 weeks since I a huge noise has been introduced to my already heavy QRM ed
> home from DSL at least.
> MY system consists of a R75, a 2x16 inv V antenna a 16 H antenna
> This noise adds a S10 level QRN on most bands ie wiping most radio stations and is cut on
> 7 MHz and above 15 MHZ
>
> You can find a sample on this link
>
> http://soundcloud.com/greekdx/qrn-1
>
> Just a little research with my `field meter´ Jupiteru 7100 finds the source as the
electric
> panel from an Italian pellet burner on the cellar of our house
> Look at the 18secs video :
> http://youtu.be/FUxBUo7kTJg
>
> with attenuated signal level
> Do you have any idea on how to kill this noise? (esp from the burner side)
> Standard rig : ICOM R75 / 2x16 V / m@h40 heads Sennheiser
> Please read and distribute this 15 year research article http://tinyurl.com/5vzg7e
> Please read my article on SINPO at http://tinyurl.com/yt7qjd
> _____________________
> http://zlgr.multiply.com (radio monitoring site plus audio clips) MAIN SITE
> http://www.delicious.com/gr_greek1/@zach (all mypages !!)
> ....

> Zacharias Liangas , Thessaloniki Greece
> greekdx @ otenet dot gr ---
> Pesawat penerima: ICOM R75 , Lowe HF150 , Degen 1102,1103,108,
> Tecsun PL200/550, Chibo c300/c979, Yupi 7000
> Antenna: 16m hor, 2x16 m V invert, 1m australian loop
>

8954. Introduction DE K4JQV

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-07 14:56:43 UTC
From: jacob
Topic: 8954 Message: 8954

Hi Group;

I just found the group and I'm excited to see what others are doing. I have been experimenting with mag loops for about 2 years now. I have two that I use very often. One is transmitting; a five foot diameter 5/8in flex copper affair with a vac. variable - tunes 60 meter band to 17 meter band and works great! My newest is for the AM broadcast band and uses about 5 turns of small wire on a 3 foot frame. It all came from my "junk box" which I think is cool.
I am very interested in taking the mag loops to the next level which for me will involve making them more aesthetic (better wood or the big guy)and setting up a remote tuning control.

On a separate note: I have found that several friends, who otherwise have minimal interest in radio, are absolutely fascinated when I pull out the loops! There is something really unique in hearing the noise peak, the signals appear, and then turning the loop to really "lock-on" to the signals. These things are just neat.

73;
Jacob K4JQV

8955. Re: [loopantennas] Introduction DE K4JQV

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-07 17:59:06 UTC
From: Bill McCourt - WF1L
Topic: 8954 Message: 8955

Hi Jacob,

I also share your facination with loop antennas having used and built several.

My current project is building a BCB receiving loop from a 23" diam quilting hoop, 12 turns of #28 wire and a 365pf tuning capacitor, to use with my portable AM radios fo BCB DXing.

I've also built and currently use a dual band receiving loop for 160M & 80M which works great for removing atmospheric and lowering local noise levels.

All the designs I've found on the web.

When I got my General Ticket back in 2001, a friend loaned me his MFJ tuned loop to use until I could build something else. It was fun to have, but required constant re-tuning after moving the VFO on my rig. I quickly moved over to a random longwire antenna which I still use to this day, as it's quite stealthy and, in my neighborhood, that's a necessity.

Welcome to the group!

Bill - WF1L

--- On Wed, 3/7/12, jacob <chambersjacob@yahoo.com> wrote:

From: jacob <chambersjacob@...>
Subject: [loopantennas] Introduction DE K4JQV
To: loopantennas@yahoogroups.com
Date: Wednesday, March 7, 2012, 9:56 AM

Hi Group;

I just found the group and I'm excited to see what others are doing. I have been experimenting with mag loops for about 2 years now. I have two that I use very often. One is transmitting; a five foot diameter 5/8in flex copper affair with a vac. variable - tunes 60 meter band to 17 meter band and works great! My newest is for the AM broadcast band and uses about 5 turns of small wire on a 3 foot frame. It all came from my "junk box" which I think is cool.
I am very interested in taking the mag loops to the next level which for me will involve making them more aesthetic (better wood or the big guy)and setting up a remote tuning control.

On a separate note: I have found that several friends, who otherwise have minimal interest in radio, are absolutely fascinated when I pull out the loops! There is something really unique in hearing the noise peak, the signals appear, and then turning the loop to really "lock-on" to the signals. These things are just neat.

73;
Jacob K4JQV

[Non-text portions of this message have been removed]

8956. Market for Loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-08 17:07:07 UTC
From: charles
Topic: 8956 Message: 8956

I would think that it should be a market, for home made AM LOOPS?
How should it be done, individual or through a store front?
I think this would bring in extra income for builders and help MRL/SWL?

8957. Re: Market for Loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-08 19:14:51 UTC
From: AlienRelics
Topic: 8956 Message: 8957

It is a rather esoteric hobby, I'd think you would have to be in a very big city like Seattle to be able to afford a storefront.

Etsy seems like it might be a good place to sell AM loop antennas. I've been thinking about it myself.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "charles" <slow2run@...> wrote:
>
> I would think that it should be a market, for home made AM LOOPS?
> How should it be done, individual or through a store front?
> I think this would bring in extra income for builders and help MRL/SWL?
>

8958. Re: [loopantennas] Introduction DE K4JQV

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-08 20:19:30 UTC
From: Tom Humes
Topic: 8954 Message: 8958

Where can I find the BCB antenna you use?
I want to re-do it to use on LF radio beacon bands.

Tom Humes
kf7anq

--- On Wed, 3/7/12, Bill McCourt - WF1L <wemccourt@...> wrote:

From: Bill McCourt - WF1L <wemccourt@...>
Subject: Re: [loopantennas] Introduction DE K4JQV
To: loopantennas@yahoogroups.com
Date: Wednesday, March 7, 2012, 10:59 AM

Hi Jacob,

I also share your facination with loop antennas having used and built several.

My current project is building a BCB receiving loop from a 23" diam quilting hoop, 12 turns of #28 wire and a 365pf tuning capacitor, to use with my portable AM radios fo BCB DXing.

I've also built and currently use a dual band receiving loop for 160M & 80M which works great for removing atmospheric and lowering local noise levels.

All the designs I've found on the web.

When I got my General Ticket back in 2001, a friend loaned me his MFJ tuned loop to use until I could build something else. It was fun to have, but required constant re-tuning after moving the VFO on my rig. I quickly moved over to a random longwire antenna which I still use to this day, as it's quite stealthy and, in my neighborhood, that's a necessity.

Welcome to the group!

Bill - WF1L

--- On Wed, 3/7/12, jacob <chambersjacob@...> wrote:

From: jacob <chambersjacob@...>
Subject: [loopantennas] Introduction DE K4JQV
To: loopantennas@yahoogroups.com
Date: Wednesday, March 7, 2012, 9:56 AM

Hi Group;

I just found the group and I'm excited to see what others are doing. I have been experimenting with mag loops for about 2 years now. I have two that I use very often. One is transmitting; a five foot diameter 5/8in flex copper affair with a vac. variable - tunes 60 meter band to 17 meter band and works great! My newest is for the AM broadcast band and uses about 5 turns of small wire on a 3 foot frame. It all came from my "junk box" which I think is cool.

I am very interested in taking the mag loops to the next level which for me will involve making them more aesthetic (better wood or the big guy)and setting up a remote tuning control.

On a separate note: I have found that several friends, who otherwise have minimal interest in radio, are absolutely fascinated when I pull out the loops! There is something really unique in hearing the noise peak, the signals appear, and then turning the loop to really "lock-on" to the signals. These things are just neat.

73;
Jacob K4JQV

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8959. Re: [loopantennas] Introduction DE K4JQV

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-08 23:39:07 UTC
From: Bill McCourt - WF1L
Topic: 8954 Message: 8959

Google Quilting Hoop Loop and K4ZAD and you should find it.

Bill - WF1L

--- On Thu, 3/8/12, Tom Humes <tomhumes3050@...> wrote:

From: Tom Humes <tomhumes3050@...>
Subject: Re: [loopantennas] Introduction DE K4JQV
To: loopantennas@yahoogroups.com
Date: Thursday, March 8, 2012, 3:19 PM

Where can I find the BCB antenna you use?

I want to re-do it to use on LF radio beacon bands.

Tom Humes

kf7anq

--- On Wed, 3/7/12, Bill McCourt - WF1L <wemccourt@...> wrote:

From: Bill McCourt - WF1L <wemccourt@yahoo.com>

Subject: Re: [loopantennas] Introduction DE K4JQV

To: loopantennas@yahoogroups.com

Date: Wednesday, March 7, 2012, 10:59 AM

Hi Jacob,

I also share your facination with loop antennas having used and built several.

My current project is building a BCB receiving loop from a 23" diam quilting hoop, 12 turns of #28 wire and a 365pf tuning capacitor, to use with my portable AM radios fo BCB DXing.

I've also built and currently use a dual band receiving loop for 160M & 80M which works great for removing atmospheric and lowering local noise levels.

All the designs I've found on the web.

When I got my General Ticket back in 2001, a friend loaned me his MFJ tuned loop to use until I could build something else. It was fun to have, but required constant re-tuning after moving the VFO on my rig. I quickly moved over to a random longwire antenna which I still use to this day, as it's quite stealthy and, in my neighborhood, that's a necessity.

Welcome to the group!

Bill - WF1L

--- On Wed, 3/7/12, jacob <chambersjacob@...> wrote:

From: jacob <chambersjacob@...>

Subject: [loopantennas] Introduction DE K4JQV

To: loopantennas@yahoogroups.com

Date: Wednesday, March 7, 2012, 9:56 AM

Hi Group;

I just found the group and I'm excited to see what others are doing. I have been experimenting with mag loops for about 2 years now. I have two that I use very often. One is transmitting; a five foot diameter 5/8in flex copper affair with a vac. variable - tunes 60 meter band to 17 meter band and works great! My newest is for the AM broadcast band and uses about 5 turns of small wire on a 3 foot frame. It all came from my "junk box" which I think is cool.

I am very interested in taking the mag loops to the next level which for me will involve making them more aesthetic (better wood or the big guy)and setting up a remote tuning control.

On a separate note: I have found that several friends, who otherwise have minimal interest in radio, are absolutely fascinated when I pull out the loops! There is something really unique in hearing the noise peak, the signals appear, and then turning the loop to really "lock-on" to the signals. These things are just neat.

73;

Jacob K4JQV

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

8960. Making and Selling MW BCB loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-10 09:39:45 UTC
From: mike.evans191
Topic: 8960 Message: 8960

Hi from across the pond {England} some years ago I did make and sell a 40 x 40 loop getting it in the post was a problem but it did go parcel post, getting a box carton was a bit of a problem but super markets helped.
It was a double H type made of 1 x 1 inch pine wood, turn one H on its side a slot the two together and your get in idea, some would call it a spider web loop now get the idea, anyway it slotted together to form that 2 x H and the holes for the wire were on each end of the loop 8 ends with 7-9 holes which I pre drilled making sure there were all in line, winding and pulling the wire all of about 90 feet or more into each hole and going around and around took some time and space with manny a time getting in a right tangle, someone side why not slots and slip the wire in! I tried this but the wood broke at the hole points I even used choc block but you still had to put the wire in those holes.
To stop the wire pulling and bending the frame I put bits of wooded strip across the top s of the H eg 4 bits.
The tuning cap was on a flat bit of 8 x 4 plywood {Note the gap of each top of the H is 7 inches} at the bottom a shelf was made to hold it the tuning cap at the back.
I used full sizer slow tune 500pf tuning caps these were not cheap even from ebay, in all I made about 25 loops each one costing just £40 with £10 postage was I crazy to charge such a low price after all my work, maybe but when I ask for £60 via a UK radio mag no one came forward.
I next tired selling them in do it yourself form, most buyers ran into problems evan glueing the two H bits together in the end I gave up on them.
Would I restart making them NEVER. Sorry on picture to show.
One other idea is to use large underground black or orange pipe some can be as big as 24 inches across just cut a 2 inch wide bit, some even has a grove on the outside to hold the turns, so there you have it, you can sell your home made loops but the hassle, would it be worth it. Michael - England.

8961. SALING LOOPS

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-10 21:40:04 UTC
From: charles
Topic: 8961 Message: 8961

you should list them on www.eham.net , for free, talk a look at Eham Classified , under MW,SW/Receivers?

8962. Re: Making and Selling MW BCB loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-10 22:09:06 UTC
From: osage_archer
Topic: 8960 Message: 8962

The Ultralight DX group on Yahoo

http://groups.yahoo.com/group/ultralightdx/

has many recent messages about Ferrite Sleeve Loop antennas (FSL) for the MW BCB which use a number of ferrite rods wound with Litz wire and a variable capacitor, to get the equivalent performance of an air loop many times bigger. As well they have info about making air loops. Worth checking out!

Tim C.

--- In loopantennas@yahoogroups.com, "mike.evans191" <mike.evans191@...> wrote:
>
> Hi from across the pond {England} some years ago I did make and sell a 40 x 40 loop getting it in the post was a problem but it did go parcel post, getting a box carton was a bit of a problem but super markets helped.
> It was a double H type made of 1 x 1 inch pine wood, turn one H on its side a slot the two together and your get in idea, some would call it a spider web loop now get the idea, anyway it slotted together to form that 2 x H and the holes for the wire were on each end of the loop 8 ends with 7-9 holes which I pre drilled making sure there were all in line, winding and pulling the wire all of about 90 feet or more into each hole and going around and around took some time and space with manny a time getting in a right tangle, someone side why not slots and slip the wire in! I tried this but the wood broke at the hole points I even used choc block but you still had to put the wire in those holes.
> To stop the wire pulling and bending the frame I put bits of wooded strip across the top s of the H eg 4 bits.
> The tuning cap was on a flat bit of 8 x 4 plywood {Note the gap of each top of the H is 7 inches} at the bottom a shelf was made to hold it the tuning cap at the back.
> I used full sizer slow tune 500pf tuning caps these were not cheap even from ebay, in all I made about 25 loops each one costing just £40 with £10 postage was I crazy to charge such a low price after all my work, maybe but when I ask for £60 via a UK radio mag no one came forward.
> I next tired selling them in do it yourself form, most buyers ran into problems evan glueing the two H bits together in the end I gave up on them.
> Would I restart making them NEVER. Sorry on picture to show.
> One other idea is to use large underground black or orange pipe some can be as big as 24 inches across just cut a 2 inch wide bit, some even has a grove on the outside to hold the turns, so there you have it, you can sell your home made loops but the hassle, would it be worth it. Michael - England.
>

8963. Re: Making and Selling MW BCB loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-10 22:51:38 UTC
From: mike.evans191
Topic: 8960 Message: 8963

Yes I was a member and left the group I could not find one member who was selling what he had made and there was so many boring pages about ferrite made loops one week in was 6 inch the next 9 then 12 then back to 6 it just went on and on give me a real good size loop anyday, by the way the ferrite loops were so heavy that the loop was bigger than the radio and twice as heavy. Michael Uk.

--- In loopantennas@yahoogroups.com, "osage_archer" <timchandler2001@...> wrote:
>
> The Ultralight DX group on Yahoo
>
> http://groups.yahoo.com/group/ultralightdx/
>
> has many recent messages about Ferrite Sleeve Loop antennas (FSL) for the MW BCB which use a number of ferrite rods wound with Litz wire and a variable capacitor, to get the equivalent performance of an air loop many times bigger. As well they have info about making air loops. Worth checking out!
>
> Tim C.
>
> --- In loopantennas@yahoogroups.com, "mike.evans191" <mike.evans191@> wrote:
> >
> > Hi from across the pond {England} some years ago I did make and sell a 40 x 40 loop getting it in the post was a problem but it did go parcel post, getting a box carton was a bit of a problem but super markets helped.
> > It was a double H type made of 1 x 1 inch pine wood, turn one H on its side a slot the two together and your get in idea, some would call it a spider web loop now get the idea, anyway it slotted together to form that 2 x H and the holes for the wire were on each end of the loop 8 ends with 7-9 holes which I pre drilled making sure there were all in line, winding and pulling the wire all of about 90 feet or more into each hole and going around and around took some time and space with manny a time getting in a right tangle, someone side why not slots and slip the wire in! I tried this but the wood broke at the hole points I even used choc block but you still had to put the wire in those holes.
> > To stop the wire pulling and bending the frame I put bits of wooded strip across the top s of the H eg 4 bits.
> > The tuning cap was on a flat bit of 8 x 4 plywood {Note the gap of each top of the H is 7 inches} at the bottom a shelf was made to hold it the tuning cap at the back.
> > I used full sizer slow tune 500pf tuning caps these were not cheap even from ebay, in all I made about 25 loops each one costing just £40 with £10 postage was I crazy to charge such a low price after all my work, maybe but when I ask for £60 via a UK radio mag no one came forward.
> > I next tired selling them in do it yourself form, most buyers ran into problems evan glueing the two H bits together in the end I gave up on them.
> > Would I restart making them NEVER. Sorry on picture to show.
> > One other idea is to use large underground black or orange pipe some can be as big as 24 inches across just cut a 2 inch wide bit, some even has a grove on the outside to hold

the turns, so there you have it, you can sell your home made loops but the hassle, would it be worth it. Michael - England.
> >
>

8964. I will buy a loop!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-11 20:32:04 UTC
From: charles
Topic: 8964 Message: 8964

Tell me what you can offer me and its $price shipped to zip 75949, if you had rather sell it on Ebay to a highest bider, then I will bid on it. Just tell me, what to look for?(LW, MW, SW)

8965. Re: I will buy a loop!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-11 23:29:54 UTC
From: osage_archer
Topic: 8964 Message: 8965

It's pretty easy and cheap to make one, you can find instructions by googling and it can be a fun project costing less than $10-20 or so. The loop can be designed for different ranges of frequencies.

If instead you want to buy one, for MW BCB at least you can find various on eBay looking for "loop antenna", here are several. I can testify that the Terk Advantage is effective and fairly small, I think it's a good value overall. I did not check for price variation so you may want to look around to find the cheapest seller:

http://www.ebay.com/itm/TG39-Passive-Indoor-Mediumwave-MW-Band-Loop-Antenna-/180567680771?pt=LH_DefaultDomain_0&hash=item2a0aac2703

http://www.ebay.com/itm/AMPLIFIED-ANTENNA-LOOP-/300539691850?pt=LH_DefaultDomain_0&hash=item45f98fc34a

http://www.ebay.com/itm/Terk-ADVANTAGE-Indoor-AM-Radio-Loop-Antenna-/270911189104?pt=LH_DefaultDomain_0&hash=item3f1390b070

http://www.ebay.com/itm/Audiovox-ADVANTAGE-TERK-Advantage-Indoor-Radio-Antenna-Loop-/260846827523?pt=LH_DefaultDomain_0&hash=item3cbbaeb803

http://www.ebay.com/itm/Kaito-AN-200-Indoor-Tunable-Passive-AM-Loop-Radio-Antenna-AN200-/200660225144?pt=LH_DefaultDomain_0&hash=item2eb8480c78

Tim C.

--- In loopantennas@yahoogroups.com, "charles" <slow2run@...> wrote:
>
> Tell me what you can offer me and its $price shipped to zip 75949, if you had rather sell it on Ebay to a highest bider, then I will bid on it. Just tell me, what to look for?(LW, MW, SW)
>

8966. Make A BCB MW band Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-13 09:31:38 UTC
From: mike.evans191
Topic: 8966 Message: 8966

How would I start making a BCB loop if I did not know how { I do know{ for the first timer your need WOOD - WIRE and a veriable tuning condenser that vain thing thats in a old time radio, plus some GLUE.
You could go on YOU TUBEwhere guys will show you how to put such a loop together, but they will not tell you the cost here I will, the tuning veriable will be found either as I said from a old rtube radio or on ebay, on ebay the price for a 365 or a 500pf will not be cheap because there getting rare, the wood should be about $10 I am trying to think in US money your need to have it cut to size and countersunk groved more on this later, depending on the loops size, but lets start with a 40 inch loop my favourite, useing 1 x 1 inch pine with pref no knots in it have the woodman counter sink the wood so that it forms a H frame it will have a square of 9 inches in the middle press in the counter sunks together to form the frame BUT not before you drill on each courner of the up rights re H top and bottom of and the H layed on its side so they cross each other, after this has been done then put the glue in the counter sunk groves and clamp down, you now have the main frame are the holes all in line I hope so. With about 120-130 feet of wire it can be almost any type passed the wire into the bottom hole of the H pref the right hand side and pull the wire to the next hole and the next until you go all around till the bottom of the H and the bottom left hand side hole go up a hole on the right hand side of the H and keep on go around untill you have filled all 9 holes, these holes I should have side should be a 1/4 inch apart, time to have a rest and it is hope you did not use a few bad words with the wire pulling, with the two ends of the wire now at the bottom of the H cut off 12 inches of wire, you should have 2 x 12 inch tails, solder on one end to the main metal side of the tuning cap the other end to the tag your see in the middle the loop is now made, place a radio close by find a weak station a turn the tune knob on the variable the station should now be pulled in. NEXT TIME THE OVER LAY WIRE called the INDUCTOR. hope this was helpfull, any problems just post. Mike - ENGLAND

8967. Pixel PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-14 02:39:52 UTC
From: slsfron
Topic: 8967 Message: 8967

I have a PRO-1A and I thought worked pretty well. Recently I purchased the Clifton Labs Z1501D Active Antenna and it receives hands down uch better then the PRO-1A. The Z1501D is mounted on a pole about 7' high, and the Pro-1A is mounted on a 14' section of Rohn 25 with a 5' mast. Of course the Pro-1A has a rotor to turn it. Both are fed with premium quad shield coax which is mostly buried until it goes up into the attic to the radios. I wonder if the Pro-1A can be upgraded to the B model and if that would make a difference. I am basing my experiance with both antennas while DXing NDBs.

WR5RR Ron

8968. Re: [loopantennas] Pixel PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-14 08:50:48 UTC
From: Tracey Gardner
Topic: 8967 Message: 8968

Hello Ron

Are you a member of the Yahoo NDB list?

73s Tracey G5VU

----- Original Message -----
From: "slsfron" <wr5rr@...>
To: <loopantennas@yahoogroups.com>
Sent: Wednesday, March 14, 2012 2:39 AM
Subject: [loopantennas] Pixel PRO-1A

>I have a PRO-1A and I thought worked pretty well. Recently I purchased the
>Clifton Labs Z1501D Active Antenna and it receives hands down uch better
>then the PRO-1A. The Z1501D is mounted on a pole about 7' high, and the
>Pro-1A is mounted on a 14' section of Rohn 25 with a 5' mast. Of course the
>Pro-1A has a rotor to turn it. Both are fed with premium quad shield coax
>which is mostly buried until it goes up into the attic to the radios. I
>wonder if the Pro-1A can be upgraded to the B model and if that would make
>a difference. I am basing my experiance with both antennas while DXing
>NDBs.
>
> WR5RR Ron
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the
> Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF
> into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----

> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.1913 / Virus Database: 2114/4868 - Release Date: 03/13/12
>

8969. Re: Pixel PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-14 10:45:48 UTC
From: John
Topic: 8967 Message: 8969

I wonder if the Pro-1A can be upgraded to the B model and if that would make a difference. I am basing my experiance with both antennas while DXing NDBs.
>
> WR5RR Ron
>
Ron,

Recently, I contacted Doug Talley at Pixel re the same question, as my Pro-1A was bought directly from them a year ago. I sent him pictures of my fixed loop installation. He said my amp was okay, but the new and improved 'B' loop would be an improvement and he could send me one for $200. I didn't take him up on his offer. I may call him one day and find out just what improvement I could expect. The antenna was $350 - the loop shouldn't represent over half of it's cost - and it makes me think they shipped me 'old stock' when I bought my loop - not a great feeling since the 'B' was out just days/weeks later. Maybe I just feel a bit burned. The loop did null EMI from arcing high tension insulators in front of my house, but that changed in January when a tornado came through my neighborhood, taking down many such power lines. Listening now is very sporadic. I was impressed with the loop.

John

8970. Re: Pixel PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-15 00:01:54 UTC
From: Cliff
Topic: 8967 Message: 8970

Hi Ron,

Just received my PRO-1B at some expense in Australia. So far impressed had WWVB 60khz very strong this morning,using either my Watkins Johnson 8718A or the JRC-NRD545DSP I don't have much to compare it with but works well as far as I can determine.Oh yes this is indoors at ground level of a villa.

What have you noticed about the Clifton in comparison to the loop ?

rgds
Cliff VK2CCJ

--- In loopantennas@yahoogroups.com, "slsfron" <wr5rr@...> wrote:
>
> I have a PRO-1A and I thought worked pretty well. Recently I purchased the Clifton Labs Z1501D Active Antenna and it receives hands down uch better then the PRO-1A. The Z1501D is mounted on a pole about 7' high, and the Pro-1A is mounted on a 14' section of Rohn 25 with a 5' mast. Of course the Pro-1A has a rotor to turn it. Both are fed with premium quad shield coax which is mostly buried until it goes up into the attic to the radios. I wonder if the Pro-1A can be upgraded to the B model and if that would make a difference. I am basing my experiance with both antennas while DXing NDBs.
>
> WR5RR Ron
>

8971. Re: Pixel PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-15 13:42:03 UTC
From: slsfron
Topic: 8967 Message: 8971

Yes I am a member of the NDB list.
73
Ron WR5RR

--- In loopantennas@yahoogroups.com, "Tracey Gardner" <tracey.gardner@...> wrote:
>
> Hello Ron
>
> Are you a member of the Yahoo NDB list?
>
> 73s Tracey G5VU
>
>
>
>
> ----- Original Message -----
> From: "slsfron" <wr5rr@...>
> To: <loopantennas@yahoogroups.com>
> Sent: Wednesday, March 14, 2012 2:39 AM
> Subject: [loopantennas] Pixel PRO-1A
>
>
> >I have a PRO-1A and I thought worked pretty well. Recently I purchased the
> >Clifton Labs Z1501D Active Antenna and it receives hands down uch better
> >then the PRO-1A. The Z1501D is mounted on a pole about 7' high, and the
> >Pro-1A is mounted on a 14' section of Rohn 25 with a 5' mast. Of course the
> >Pro-1A has a rotor to turn it. Both are fed with premium quad shield coax
> >which is mostly buried until it goes up into the attic to the radios. I
> >wonder if the Pro-1A can be upgraded to the B model and if that would make
> >a difference. I am basing my experiance with both antennas while DXing
> >NDBs.
> >
> > WR5RR Ron
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the
> > Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >

> > You can now view images at higher resolution in Photos. Upload JPG and GIF
> > into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> > -----
> > No virus found in this message.
> > Checked by AVG - www.avg.com
> > Version: 2012.0.1913 / Virus Database: 2114/4868 - Release Date: 03/13/12
> >
>

8972. Re: Pixel PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-15 13:59:02 UTC
From: slsfron
Topic: 8967 Message: 8972

Most of the time the Clifton Labs 1500D receives NDBs much better. It was pointed out to me that "A good active whip will always be more sensitive than the small loop at LF--that's just the physics of the loop in operation. The loop steadily loses sensitivity as frequency decreases. And an approx. 1 meter diameter untuned active loop is just not very sensitive at LF compared to a good active whip". A larger loop would work better at LF. There is no electrical or performance difference between the upgraded B version and the original A. This is my findings and information from Jack Clifton and Steve AA7U. Both very knowlegable on both antennas. I haven't spent much time on the higher bands comparing the antennas.

Ron WR5RR

--- In loopantennas@yahoogroups.com, "Cliff" <vk2ccj@...> wrote:
>
> Hi Ron,
>
> Just received my PRO-1B at some expense in Australia. So far impressed had WWVB 60khz very strong this morning,using either my Watkins Johnson 8718A or the JRC-NRD545DSP I don't have much to compare it with but works well as far as I can determine.Oh yes this is indoors at ground level of a villa.
>
> What have you noticed about the Clifton in comparison to the loop ?
>
> rgds
> Cliff VK2CCJ
>
> --- In loopantennas@yahoogroups.com, "slsfron" <wr5rr@> wrote:
> >
> > I have a PRO-1A and I thought worked pretty well. Recently I purchased the Clifton Labs Z1501D Active Antenna and it receives hands down uch better then the PRO-1A. The Z1501D is mounted on a pole about 7' high, and the Pro-1A is mounted on a 14' section of Rohn 25 with a 5' mast. Of course the Pro-1A has a rotor to turn it. Both are fed with premium quad shield coax which is mostly buried until it goes up into the attic to the radios. I wonder if the Pro-1A can be upgraded to the B model and if that would make a difference. I am basing my experiance with both antennas while DXing NDBs.
> >
> > WR5RR Ron
> >
>

8973. Re: [loopantennas] Re: Pixel PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-15 15:05:44 UTC
From: Tom Humes
Topic: 8967 Message: 8973

what is the specific groups address for NDB's?

--- On Thu, 3/15/12, slsfron <wr5rr@...> wrote:

From: slsfron <wr5rr@...>
Subject: [loopantennas] Re: Pixel PRO-1A
To: loopantennas@yahoogroups.com
Date: Thursday, March 15, 2012, 6:42 AM

Yes I am a member of the NDB list.
73
Ron WR5RR

--- In loopantennas@yahoogroups.com, "Tracey Gardner" <tracey.gardner@...> wrote:
>
> Hello Ron
>
> Are you a member of the Yahoo NDB list?
>
> 73s Tracey G5VU
>
>
>
>
> ----- Original Message -----
> From: "slsfron" <wr5rr@...>
> To: <loopantennas@yahoogroups.com>
> Sent: Wednesday, March 14, 2012 2:39 AM
> Subject: [loopantennas] Pixel PRO-1A
>
>
> >I have a PRO-1A and I thought worked pretty well. Recently I purchased the
> >Clifton Labs Z1501D Active Antenna and it receives hands down uch better
> >then the PRO-1A. The Z1501D is mounted on a pole about 7' high, and the
> >Pro-1A is mounted on a 14' section of Rohn 25 with a 5' mast. Of course the
> >Pro-1A has a rotor to turn it. Both are fed with premium quad shield coax
> >which is mostly buried until it goes up into the attic to the radios. I
> >wonder if the Pro-1A can be upgraded to the B model and if that would make
> >a difference. I am basing my experiance with both antennas while DXing
> >NDBs.
> >
> > WR5RR Ron
> >
> >
> >
> > ------------------------------------

> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the
> > Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF
> > into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> > -----
> > No virus found in this message.
> > Checked by AVG - www.avg.com
> > Version: 2012.0.1913 / Virus Database: 2114/4868 - Release Date: 03/13/12
> >
>

[Non-text portions of this message have been removed]

8974. Re: [loopantennas] Re: Pixel PRO-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-15 17:04:28 UTC
From: Don
Topic: 8967 Message: 8974

<ndblist"@yahoogroups.com

Don
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 15-Mar-12 08:05, Tom Humes wrote:
> what is the specific groups address for NDB's?
>
>
> --- On Thu, 3/15/12, slsfron<wr5rr@...> wrote:
>
>
> From: slsfron<wr5rr@...>
> Subject: [loopantennas] Re: Pixel PRO-1A
> To: loopantennas@yahoogroups.com
> Date: Thursday, March 15, 2012, 6:42 AM
>
>
>
>
>
>
>
>
>

8975. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-17 13:43:11 UTC
From: Lee
Topic: 8914 Message: 8975

> > The NTE618 varactor is specifically for the AM BCB 500 kHz to 1700
> > kHz. For shortwave, you need much less capacitance, and lots
> > of diodes are available in those lower values. There would
> > be nothing in principle to prevent you from scaling the
> > loop design in the NCJ article to higher frequencies. Varactors
> > have a capacitance inversely proportional to the bias voltage
> > raised to a power between .5 and 2. Why would you want a
> > vacuum variable capacitor in a receiving loop?
> >
> > Rick N6RK
> >
> Hi Rick.
>
> Been searching the web and found about 8 suitable varactors that
> would do the job including the NTE618, but have a local ham rally
> where a local mail order business has a stock of BB112 9volt diodes
> will be attending, so I can collect quicker than delivery..and browse
> various stalls at the same time, nice day out.
> Why would I want vacuum cap? because my 3 foot dia magloop is for tx
> and only covers 28Mhz to 16Mhz...
>
> Regards.
>
> Lee...G6ZSG.
>

Well, had a nice day out and came home with a pair of varactors and a nice clean Yaesu FT 790R 2 metre a multimode electric handbag that after a bit of furtling works extremely well (Kerching)...thankyou.

Had a look at these varactors (36z-w80) which I had been assured runs up to 540Khz at 9 volts.. and set about sorting out the bits and pieces from my junk box to build the Trask indoor loop antenna as was posted earlier in this thread and laid out except for building the loop for 28Mhz to 10Mhz at 10 feet circumference...but could not get it to work!!

Finally discovered it works from 9Khz (lowest freq on my Winradio G305i SDR) to around 1700Khz ...RESULT YAY... verified it was tuning by shorting across the loop input...

Problem - I want to work around the HF bands and am not sure how to convert to the HF broadcast bands I need.. Can any kind person advise please..

Thanks.

Lee...G6ZSG.

8976. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-18 04:56:42 UTC
From: Bill McGraw
Topic: 8914 Message: 8976

Lee,
Re the Winradio G305i SDR, I understand it tunes to 1800 mHz or higher and the quote was 1700 kHz. Was that in error? The kit comes with a short antenna, wire, not loop? What am I missing with this plug-in card for a laptop?

I do not understand the varactor tuning necessary because I'm weak on electronics for loops. My simple inside office wall loops plug into my receiver with an outside ground and work well enough to satisfy me on SW, no BCB. My Kenwood 2000 and a half wave dipole has super receiving (compared to my Radio Shack DX 398) but weak transmitting ability, something I'll work on later.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

Well, had a nice day out and came home with a pair of varactors and a nice clean Yaesu FT 790R 2 metre a multimode electric handbag that after a bit of furtling works extremely well (Kerching)...thankyou.

Had a look at these varactors (36z-w80) which I had been assured runs up to 540Khz at 9 volts.. and set about sorting out the bits and pieces from my junk box to build the Trask indoor loop antenna as was posted earlier in this thread and laid out except for building the loop for 28Mhz to 10Mhz at 10 feet circumference...but could not get it to work!!

Finally discovered it works from 9Khz (lowest freq on my Winradio G305i SDR) to around 1700Khz ...RESULT YAY... verified it was tuning by shorting across the loop input...

Problem - I want to work around the HF bands and am not sure how to convert to the HF broadcast bands I need.. Can any kind person advise please..

Thanks.

Lee...G6ZSG.

[Non-text portions of this message have been removed]

8977. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-18 08:45:36 UTC
From: Lee
Topic: 8914 Message: 8977

Hi Bill .. No, 1700Khz was not in error and yes, the 305i tunes to around 1800Mhz...9Khz to 1700Khz was the apparent bandwidth of the antenna that I have just built, also, the 305i does not plug into a laptop,,it plugs into the ide slot of a desktop computor..The whole point?? and IF you DID notice another error..I DID commit a typo...

The radio I bought is a Yaesu FT 290R not a Yaesu FT 790R. the 790R covers 70 centimetres, NOT 2 metres :)

Bill... I am also at a loss when it comes to tuning antennae using varactors but, if you google `magloops` and the way they operate, then maybe you will understand the why and how to tune a loop antenna..

I do hope this has been of use to you Bill... maybe someone more knowledgable than me regarding loop antenna tuning using varactors will be along to advise us both.

Regards.

Lee...G6ZSG.

--- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:
>
> Lee,
> Re the Winradio G305i SDR, I understand it tunes to 1800 mHz or higher and the quote was 1700 kHz. Was that in error? The kit comes with a short antenna, wire, not loop? What am I missing with this plug-in card for a laptop?
>
> I do not understand the varactor tuning necessary because I'm weak on electronics for loops. My simple inside office wall loops plug into my receiver with an outside ground and work well enough to satisfy me on SW, no BCB. My Kenwood 2000 and a half wave dipole has super receiving (compared to my Radio Shack DX 398) but weak transmitting ability, something I'll work on later.
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>
>
>
>
>
>
>
>
>

>
> Well, had a nice day out and came home with a pair of varactors and
> a nice clean Yaesu FT 790R 2 metre a multimode electric handbag that
> after a bit of furtling works extremely well (Kerching)...thankyou.
>
> Had a look at these varactors (36z-w80) which I had been assured
> runs up to 540Khz at 9 volts.. and set about sorting out the bits and
> pieces from my junk box to build the Trask indoor loop antenna as was
> posted earlier in this thread and laid out except for building the
> loop for 28Mhz to 10Mhz at 10 feet circumference...but could not get
> it to work!!
>
> Finally discovered it works from 9Khz (lowest freq on my Winradio
> G305i SDR) to around 1700Khz ...RESULT YAY... verified it was tuning
> by shorting across the loop input...
>
> Problem - I want to work around the HF bands and am not sure how
> to convert to the HF broadcast bands I need.. Can any kind person
> advise please..
>
> Thanks.
>
> Lee...G6ZSG.
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

8978. Re: [loopantennas] Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-18 09:21:47 UTC
From: Bill McGraw
Topic: 8914 Message: 8978

Thanks, Lee. I am relatively new learning and studying loops for Tx, really need a better antenna than my shoddy dipole.

I looked up your radios on iHam, didn't know they worked on 2M/70cm as well as HF if that is correct what I read. I'm relatively new at Ham radio, everything seems to lead me to a tangent subject and forget where I started with a question.

Again, thanks and I will pursue loops as you suggest.

Bill McGraw, KF5FJZ, NRA Life
"Somewhere South of Chicago"
Greenville, Mississippi

--- On Sun, 3/18/12, Lee <leo1949uk@...> wrote:

Hi Bill .. No, 1700Khz was not in error and yes, the 305i tunes to around 1800Mhz...9Khz to 1700Khz was the apparent bandwidth of the antenna that I have just built, also, the 305i does not plug into a laptop,,it plugs into the ide slot of a desktop computor..The whole point?? and IF you DID notice another error..I DID commit a typo...

The radio I bought is a Yaesu FT 290R not a Yaesu FT 790R. the 790R covers 70 centimetres, NOT 2 metres :)

Bill... I am also at a loss when it comes to tuning antennae using varactors but, if you google `magloops` and the way they operate, then maybe you will understand the why and how to tune a loop antenna..

I do hope this has been of use to you Bill... maybe someone more knowledgable than me regarding loop antenna tuning using varactors will be along to advise us both.

Regards.

Lee...G6ZSG.

[Non-text portions of this message have been removed]

8979. Re: Beginner question - Varactor tuning diodes references

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-19 03:25:34 UTC
From: Mvs
Topic: 8914 Message: 8979

@bill,
I fear that we should NOT resort to varicap tuning of TX antennae.
the High power coming from PA of the TX rig would just burn off the varicap diode. No lighhtening is need. Let us not waste the costly resource experimenting across the TX antennae.

The concept of use of varicaps for tuning loops is valid only for Rx antennae.

--- In loopantennas@yahoogroups.com, Bill McGraw <mcgr3799@...> wrote:
>
> Thanks, Lee. I am relatively new learning and studying loops for Tx, really need a better antenna than my shoddy dipole.
>
> I looked up your radios on iHam, didn't know they worked on 2M/70cm as well as HF if that is correct what I read. I'm relatively new at Ham radio, everything seems to lead me to a tangent subject and forget where I started with a question.
>
> Again, thanks and I will pursue loops as you suggest.
>
> Bill McGraw, KF5FJZ, NRA Life
> "Somewhere South of Chicago"
> Greenville, Mississippi
>
> --- On Sun, 3/18/12, Lee <leo1949uk@...> wrote:
>
>
>
>
>
>
>
>
>
>
>
> Hi Bill .. No, 1700Khz was not in error and yes, the 305i tunes to
> around 1800Mhz...9Khz to 1700Khz was the apparent bandwidth of the
> antenna that I have just built, also, the 305i does not plug into a
> laptop,,it plugs into the ide slot of a desktop computor..The whole
> point?? and IF you DID notice another error..I DID commit a typo...
>
> The radio I bought is a Yaesu FT 290R not a Yaesu FT 790R. the 790R
> covers 70 centimetres, NOT 2 metres :)
>
> Bill... I am also at a loss when it comes to tuning antennae using
> varactors but, if you google `magloops` and the way they operate,
> then maybe you will understand the why and how to tune a loop

> antenna..
>
> I do hope this has been of use to you Bill... maybe someone more
> knowledgable than me regarding loop antenna tuning using varactors
> will be along to advise us both.
>
> Regards.
>
> Lee...G6ZSG.
>
>
>
> [Non-text portions of this message have been removed]
>

8980. ALA 1532

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-23 20:50:54 UTC
From: ronelltom
Topic: 8980 Message: 8980

Hi Guys,
My ALA1539 has arrived today and just potting it on a waidow ledge has allowed many sigmals, albeit with lost of noise. I will try and get it outside to-morrow.
However my question is. As I only ever listen to Sw bands and never MW, is there a real need to buy and use a rotator. I believe that short wave signal being 'sky waves' would hit downwards, Therefore there would be no either directional or null obtainable by rotating the loop.
Problem:- Is this right or am I just trying to talk myself out of the need to buy a rotator.
Could anyone out there please advise me at all.
Ron, Aberystwyth, wales,UK

8981. Re: [loopantennas] ALA 1532

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-23 23:08:43 UTC
From: Andy Ikin
Topic: 8980 Message: 8981

Hello Ron,

A rotator is not normally needed for SW. Try and get the loop well away from the house, this should reduce the noise level.

Regards

Andrew Ikin

Brecknockshire, Wales

----- Original Message -----
From: ronelltom
To: loopantennas@yahoogroups.com
Sent: Friday, March 23, 2012 8:50 PM
Subject: [loopantennas] ALA 1532

Hi Guys,
My ALA1539 has arrived today and just potting it on a waidow ledge has allowed many sigmals, albeit with lost of noise. I will try and get it outside to-morrow.
However my question is. As I only ever listen to Sw bands and never MW, is there a real need to buy and use a rotator. I believe that short wave signal being 'sky waves' would hit downwards, Therefore there would be no either directional or null obtainable by rotating the loop.
Problem:- Is this right or am I just trying to talk myself out of the need to buy a rotator.
Could anyone out there please advise me at all.
Ron, Aberystwyth, wales,UK

[Non-text portions of this message have been removed]

8982. Re: [loopantennas] ALA 1532

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-23 23:31:33 UTC
From: Bill McCourt - WF1L
Topic: 8980 Message: 8982

Loop antennas are directional in line with the plane across the diameter of the loop. You'll need a rotor unless the antenna is low enough to turn by hand.

--- On Fri, 3/23/12, ronelltom <ronelltom@...> wrote:

From: ronelltom <ronelltom@...>
Subject: [loopantennas] ALA 1532
To: loopantennas@yahoogroups.com
Date: Friday, March 23, 2012, 4:50 PM

Hi Guys,

My ALA1539 has arrived today and just potting it on a waidow ledge has allowed many sigmals, albeit with lost of noise. I will try and get it outside to-morrow.

However my question is. As I only ever listen to Sw bands and never MW, is there a real need to buy and use a rotator. I believe that short wave signal being 'sky waves' would hit downwards, Therefore there would be no either directional or null obtainable by rotating the loop.

Problem:- Is this right or am I just trying to talk myself out of the need to buy a rotator.

Could anyone out there please advise me at all.

Ron, Aberystwyth, wales,UK

[Non-text portions of this message have been removed]

8983. Re: [loopantennas] ALA 1532

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-24 00:21:21 UTC
From: Jack Smith
Topic: 8980 Message: 8983

That is only true for (a) vertically polarized signals that (b) arrive with zero elevation angle. For all other signals, the loop response does not follow the classic "figure 8" pattern.

At shortwave frequencies propagation is by skywave unless you are very close to the transmitter and in general neither (a) nor (b) will be true.

And, the polarization will vary over time as does the angle of arrival.

In these circumstances, a rotor will not be all that useful and isn't necessary.

Jack K8ZOA

On 3/23/2012 7:31 PM, Bill McCourt - WF1L wrote:
>
> Loop antennas are directional in line with the plane across the
> diameter of the loop. You'll need a rotor unless the antenna is low
> enough to turn by hand.
>
> --- On Fri, 3/23/12, ronelltom <ronelltom@...
> <mailto:ronelltom%40gmail.com>> wrote:
>
> From: ronelltom <ronelltom@... <mailto:ronelltom%40gmail.com>>
> Subject: [loopantennas] ALA 1532
> To: loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>
> Date: Friday, March 23, 2012, 4:50 PM
>
>
>
> Hi Guys,
>
> My ALA1539 has arrived today and just potting it on a waidow ledge has
> allowed many sigmals, albeit with lost of noise. I will try and get it
> outside to-morrow.
>
> However my question is. As I only ever listen to Sw bands and never
> MW, is there a real need to buy and use a rotator. I believe that
> short wave signal being 'sky waves' would hit downwards, Therefore
> there would be no either directional or null obtainable by rotating
> the loop.
>
> Problem:- Is this right or am I just trying to talk myself out of the
> need to buy a rotator.
>
> Could anyone out there please advise me at all.

>
> Ron, Aberystwyth, wales,UK
>
> [Non-text portions of this message have been removed]
>
>

[Non-text portions of this message have been removed]

8984. Re: ALA 1532

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-24 02:35:50 UTC
From: Lee
Topic: 8980 Message: 8984

Hi Ron.

I very rarely turn my magloop and whe I do it is only if there is to
null out any stations that are causing interference, so I use the
cheaper armstrong method to turn the mast.. lol.

Lee...G6ZSG.
Birmingham. uk.

--- In loopantennas@yahoogroups.com, "ronelltom" <ronelltom@...> wrote:
>
> Hi Guys,
> My ALA1539 has arrived today and just potting it on a waidow ledge has allowed many sigmals, albeit with lost of noise. I will try and get it outside to-morrow.
> However my question is. As I only ever listen to Sw bands and never MW, is there a real need to buy and use a rotator. I believe that short wave signal being 'sky waves' would hit downwards, Therefore there would be no either directional or null obtainable by rotating the loop.
> Problem:- Is this right or am I just trying to talk myself out of the need to buy a rotator.
> Could anyone out there please advise me at all.
> Ron, Aberystwyth, wales,UK
>

8985. Re: ALA 1532

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-24 15:53:51 UTC
From: Alex P
Topic: 8980 Message: 8985

Since this loop is much smaller than a naturally resonant full size loop antenna, for skywave signals above about 8 MHz, the rotator will generally give you a very minor difference if at all. Below about 8 MHz the directionality will be more observable since the vertically polarized groundwave starts to predominate over the skywave. These guidelines are for farfield signals and vary throughout the day due to ionospheric conditions. If you've got locally generated noise near you, a rotator will help to cancel it out. Unfortunately, most noise sources these days are coming from many directions and you end up chasing your tail. Best thing to do for noise is mount it as high as possible and as far away as you can from a house or powerline.

--- In loopantennas@yahoogroups.com, "ronelltom" <ronelltom@...> wrote:
>
> Hi Guys,
> My ALA1539 has arrived today and just potting it on a waidow ledge has allowed many sigmals, albeit with lost of noise. I will try and get it outside to-morrow.
> However my question is. As I only ever listen to Sw bands and never MW, is there a real need to buy and use a rotator. I believe that short wave signal being 'sky waves' would hit downwards, Therefore there would be no either directional or null obtainable by rotating the loop.
> Problem:- Is this right or am I just trying to talk myself out of the need to buy a rotator.
> Could anyone out there please advise me at all.
> Ron, Aberystwyth, wales,UK
>

8986. RE: [loopantennas] ALA 1532

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-25 00:52:04 UTC
From: Steve Roberts
Topic: 8980 Message: 8986

Hello Ron,
My experience is that I erected an MFJ1788 about 40 feet away from the house and installed a rotor. I use mostly 20 meter as my operating area and the rotating of the loop antenna has no effect on the incoming signal strength or on my transmitted signal. What the rotor does help with is the reduction of noise and for this alone I am glad I installed it. The MFJ1788 is still a pig to tune when trying to respond to a station it simply takes to long to do so. Good luck with your installation.
Steve Roberts VE3LEH

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of ronelltom
Sent: March 23, 2012 4:51 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] ALA 1532

Hi Guys,
My ALA1539 has arrived today and just potting it on a waidow ledge has allowed many sigmals, albeit with lost of noise. I will try and get it outside to-morrow.
However my question is. As I only ever listen to Sw bands and never MW, is there a real need to buy and use a rotator. I believe that short wave signal being 'sky waves' would hit downwards, Therefore there would be no either directional or null obtainable by rotating the loop.
Problem:- Is this right or am I just trying to talk myself out of the need to buy a rotator.
Could anyone out there please advise me at all.
Ron, Aberystwyth, wales,UK

[Non-text portions of this message have been removed]

8987. Buried coax, what effect on a loop if any?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-25 06:29:57 UTC
From: doug12455
Topic: 8987 Message: 8987

I've often wondered if burying the r6 quad shield coax would effect the tuning of the loop. Specifically a Pixel Pro 1B. I know have ground effect with 50' of buried coax for a ground mounted 80-10 HF vertical.

Brian

8988. Burying the coax, does this have an effect on an untuned loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-25 06:54:27 UTC
From: doug12455
Topic: 8988 Message: 8988

I have a Pixel Pro-1B loop. I'm going to use quad shielded rg6 coax. Now would you think 25' buried would effect the tune of the loop? I'm wondering if this may desense the loop some.

Brian

8989. Re: [loopantennas] Burying the coax, does this have an effect on an untuned loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-25 15:55:50 UTC
From: Jack Smith
Topic: 8988 Message: 8989

The Pro-1B is an un-tuned or "aperiodic" loop.

In general, conductors near a loop can re-radiate signals and distort the null azimuth or in the worst case filling in the null. Burying the feedline a few inches will reduce re-radiation from it and thereby help preserve null depth.

Of course, that won't do anything for other re-radiators. I have a 100 ft tower about 50 or 60 feet from my loops and re-radiation from the tower has a severe effect upon null depth and azimuth above 1 MHz or so.

Jack K8ZOA

On 3/25/2012 2:54 AM, doug12455 wrote:
>
> I have a Pixel Pro-1B loop. I'm going to use quad shielded rg6 coax.
> Now would you think 25' buried would effect the tune of the loop? I'm
> wondering if this may desense the loop some.
>
> Brian
>
>

[Non-text portions of this message have been removed]

8990. Re: Burying the coax, does this have an effect on an untuned loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-25 17:01:56 UTC
From: Alex P
Topic: 8988 Message: 8990

Brian,

My experience with re-radiation effects, as Jack has described, is similar.

Need more info regarding buried coax effects of your 80 meter loop--what kind of coax are you using?? Are you using a Balun??

Regarding the use of buried quad RG-6 for the pro-1B, I think that it uses a preamp and therefore would expect that it provides some isolation from the loop element and therefore some immunity to imbalance due to coax related effects. The amplified signals from the loop element will be larger and 'overshadow' the now relatively smaller signals that might get picked up on the coax. Moreover, I would expect that high quality quad braid/foil shielding coax, which provides significantly more shielding effectiveness (SE) than a single braid shield, would provide less buried ground effect than your 80 m loop application. Important caveats are that contrary to popular belief, the foil on a coax doesn't start providing significant shielding effectiveness until above 800 to 900 MHz because of the depth of penetration of RF and the thickness of the foil. So for HF and below you're still relying on the braid and the quality, the 'optical coverage' of same. As an example, the quad RG6 I've inspected from Home Depot is poor, having low optical coverage, low number of strands and gaps in the braid. Radio Shack quad RG6 is better, but no cigar. The best stuff is usually used by reputable broadband cable companies or providers such as Belden.

If you decide to use the quad RG-6 for your pro-1b application, I'd be interested in your findings.

73's

--- In loopantennas@yahoogroups.com, Jack Smith <Jack.Smith@...> wrote:
>
> The Pro-1B is an un-tuned or "aperiodic" loop.
>
> In general, conductors near a loop can re-radiate signals and distort
> the null azimuth or in the worst case filling in the null. Burying the
> feedline a few inches will reduce re-radiation from it and thereby help
> preserve null depth.
>
> Of course, that won't do anything for other re-radiators. I have a 100
> ft tower about 50 or 60 feet from my loops and re-radiation from the
> tower has a severe effect upon null depth and azimuth above 1 MHz or so.
>
> Jack K8ZOA
>
>
> On 3/25/2012 2:54 AM, doug12455 wrote:
> >
> > I have a Pixel Pro-1B loop. I'm going to use quad shielded rg6 coax.

> > Now would you think 25' buried would effect the tune of the loop? I'm
> > wondering if this may desense the loop some.
> >
> > Brian
> >
> >
>
>
> [Non-text portions of this message have been removed]
>

8991. Re: [loopantennas] Re: Best Bet Loop Type Made with Surplus Cable (LZ1AQ article)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-25 23:16:46 UTC
From: Garey Wittich
Topic: 8002 Message: 8991

Steve:

Have you heard from other builders of the LZ1AQ Loop as to their results ??? You were NOT very happy with your results !!!

I have saved your E-mail (as you can see) for a while- as I have bought the PVC Pipe for the support structure of the "cross-parallel Loop and have it sitting in on my garage floor ready to build it once other projects are done.

Clifton Laboratories has a Amplifier made for Loops that I thought I might buy for about $95. It would save a tremendous amount of time buying the parts and it comes with the circuit board. Not sure if you were aware of this. Believe the Amplifier is based on a Langford or Chris Trask design.

Garey Wittich   Santa Monica, CA

From: Steve Ratzlaff <steveratz@...>
To: loopantennas@yahoogroups.com
Sent: Monday, November 15, 2010 2:31 PM
Subject: Re: [loopantennas] Re: Best Bet Loop Type Made with Surplus Cable (LZ1AQ article)

This past summer I did a number of loop and loop preamp experiments,
including building the LZ1AQ loop preamp and the "crossed-parallel" loops in
the mentioned article.
In his preamp I substituted transformers with more inductance to get
response down to LF. But I found the preamp to be noisy over the whole LF-HF
range and inferior to most other loop preamps I was testing. I built four 38
inch
diameter loops and connected them in the "cross-parallel" configuration, and
compared their performance from LF-HF to a single-turn loop of the same
combined area (about 73 inch diameter), with the same conductor width as the
C-P loops. At no frequency did I find the "crossed-parallel" loops with
lower inductance to be superior to the single-turn loop with higher
inductance, no matter which loop preamp was used. My results did not come
close to matching his claimed results. I would
be very interested to hear of other's results should they build the LZ1AQ
loop preamp and/or the "crossed-parallel" loops, and compare them with
single-turn loops, and other loop preamps.
73,
Steve

----- Original Message -----
From: "Chris and Symon Kennedy" <torview@...>
To: <loopantennas@yahoogroups.com>

Sent: Monday, November 15, 2010 11:52 AM
Subject: [loopantennas] Re: Best Bet Loop Type Made with Surplus Cable

> Hue
>
> A commentary on small loop's and an interesting loop amplifier design that
> includes a shielded twisted pair feeder can be found at:
>
> http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.htm
>
> Certainly worth a visit for anyone interested in small receiving loops and
> amplifiers.
>
> 73, Symon G4DND

[Non-text portions of this message have been removed]

8992. Re: [loopantennas] Re: Best Bet Loop Type Made with Surplus Cable (LZ1AQ article)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-26 00:06:59 UTC
From: Steve Ratzlaff
Topic: 8002 Message: 8992

Hi Garey,
My, that was a blast to the past reading that old email from me of Nov. 2010. I had a lot of fun doing those loop and loopamp experiments.
But no, I have not heard from anyone else who did such tests. LZ1AQ now offers a completely assembled-with-enclosure combined loop and active whipamp module. The loopamp section is probably very similar to his original loop amp that I built and tested.
I was not previously aware of a loopamp offered by Clifton Laboratories but looked it up just now--I assume you're referring to the Z10130A "Fet Buffer Amp for Dr. Dallas Lankford Antennas". From what little I know of such antennas I would say make sure you read that specific article before you assume such an amplifier can be used with other types of loop antennas. I'm not sure that such is the case. I believe the Lankford antenna to be used with this amplifier is a large terminated loop used as part of a multiple loop array. Probably Clifton Laboratories, if you asked, would be able to give more information on the proper use of this amplfier, and if it could be used with other more generic types of loops. But I certainly wouldn't assume that to be the case.
Wellbrook makes a superb standalone loopamp, the ALA 100, which I've used and had very good results with. But that is designed to use a fairly large loop rather than the small one meter diameter loops that LZ1AQ mentions using. I've also used other Clifton Laboratory kits and they all work very well, so I was interested in your comment that a loopamp was now being offered. However as noted above, I would inquire if such a loopamp was suitable to use with generic loops of various sizes and not just for the specific terminated loop mentioned that this loopamp is for.

73,
Steve

On 3/25/2012 4:16 PM, Garey Wittich wrote:
> Steve:
>
> Have you heard from other builders of the LZ1AQ Loop as to their results
> ??? You were NOT very happy with your results !!!
>
> I have saved your E-mail (as you can see) for a while- as I have bought
> the PVC Pipe for the support structure of the "cross-parallel Loop and
> have it sitting in on my garage floor ready to build it once other
> projects are done.
>
> Clifton Laboratories has a Amplifier made for Loops that I thought I
> might buy for about $95. It would save a tremendous amount of time

> buying the parts and it comes with the circuit board. Not sure if you
> were aware of this. Believe the Amplifier is based on a Langford or
> Chris Trask design.
>
> Garey Wittich Santa Monica, CA

8993. Re: Burying the coax, does this have an effect on an untuned loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-26 00:59:45 UTC
From: doug12455
Topic: 8988 Message: 8993

Alex,
I installed the Pro-1B today. I ordered the coax with the antenna. Doug states the coax he supplies is high grade quad shielded. I didn't look at who the manufacture is of this coax, but I will. Anyhow I installed it today with a 100' run. Until tomorrow I just have the coax laying across the lawn and up to the house. Before I went any further I wanted to test the loop. So far I'm quite impressed. Has a lower noise floor than my 100' dipole (no surprise). Signal levels below say 3/mhz are higher as well as a lower noise floor (signal to noise). Above that it's a toss-up but the loop always beets the dipole in actual signal to noise.

I may just string it up from the peak of the garage to the house with the proper relief mounts of course.

Brian

--- In loopantennas@yahoogroups.com, "Alex P" <winston376@...> wrote:
>
>
>
>
> Brian,
>
> My experience with re-radiation effects, as Jack has described, is similar.
>
> Need more info regarding buried coax effects of your 80 meter loop--what kind of coax are you using?? Are you using a Balun??
>
> Regarding the use of buried quad RG-6 for the pro-1B, I think that it uses a preamp and therefore would expect that it provides some isolation from the loop element and therefore some immunity to imbalance due to coax related effects. The amplified signals from the loop element will be larger and 'overshadow' the now relatively smaller signals that might get picked up on the coax. Moreover, I would expect that high quality quad braid/foil shielding coax, which provides significantly more shielding effectiveness (SE) than a single braid shield, would provide less buried ground effect than your 80 m loop application. Important caveats are that contrary to popular belief, the foil on a coax doesn't start providing significant shielding effectiveness until above 800 to 900 MHz because of the depth of penetration of RF and the thickness of the foil. So for HF and below you're still relying on the braid and the quality, the 'optical coverage' of same. As an example, the quad RG6 I've inspected from Home Depot is poor, having low optical coverage, low number of strands and gaps in the braid. Radio Shack quad RG6 is better, but no cigar. The best stuff is usually used by reputable broadband cable companies or providers such as Belden.
>
> If you decide to use the quad RG-6 for your pro-1b application, I'd be interested in your findings.
>
> 73's

>
>
>
> --- In loopantennas@yahoogroups.com, Jack Smith <Jack.Smith@> wrote:
> >
> > The Pro-1B is an un-tuned or "aperiodic" loop.
> >
> > In general, conductors near a loop can re-radiate signals and distort
> > the null azimuth or in the worst case filling in the null. Burying the
> > feedline a few inches will reduce re-radiation from it and thereby help
> > preserve null depth.
> >
> > Of course, that won't do anything for other re-radiators. I have a 100
> > ft tower about 50 or 60 feet from my loops and re-radiation from the
> > tower has a severe effect upon null depth and azimuth above 1 MHz or so.
> >
> > Jack K8ZOA
> >
> >
> > On 3/25/2012 2:54 AM, doug12455 wrote:
> > >
> > > I have a Pixel Pro-1B loop. I'm going to use quad shielded rg6 coax.
> > > Now would you think 25' buried would effect the tune of the loop? I'm
> > > wondering if this may desense the loop some.
> > >
> > > Brian
> > >
> > >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

8994. HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-25 22:23:10 UTC
From: pop
Topic: 8994 Message: 8994

Hi!

I have kits available for:

3" OD ROTOR + 2 STATOR PLATES $3.50
4" OD ROTOR + 2 STATOR PLATES $5.00
5" OD ROTOR + 2 STATOR PLATES $5.75
6" OD ROTOR + 2 STATOR PLATES $6.75
8" OD ROTOR + 2 STATOR PLATES $9.50

the objective of producing and selling a variety of components and kits for use in the construction and home-brew of Butterfly Type Variable Capacitors,voltage 2.5-15KV
A "Butterfly Capacitor" is a variable capacitor which usually consists of a "cold" rotor plate and two independent stator plates that oppose each other. The rotor plate's shape resembles that of a butterfly, hence the name "Butterfly Capacitor". Butterfly Capacitors are typically used in symmetrical tuned circuits such as RF power amplifier stages in push-pull configuration, antenna tuners and in high current applications as needed in magnetic loop antenna circuits.

These type of capacitors are no longer main stream, nor widely produced any longer, and therefore usually hard to find. When you do find them, they are not cheap.
We are striving to keep costs to a minimum so that the average hobbyist can afford to home-brew RF Amplifiers, Antenna Tuners, Magnetic Loop Antennas and various other RF related items. One way that we are able to make our Butterfly Capacitors affordable is to leave the final assembly for the end user to perform.

We provide the parts that require special equipment to manufacture, such as our CNCr. With our CNC , we are able to produce precision parts, namely the rotor and stator plates. The end user can then stack the plates on some threaded aluminum rod, using pieces of tube or nuts as spacers, thereby saving a large portion of the cost of what a fully assembled unit would be. The items required to finish a capacitor can be found at your local hardware store. We can also supply these items for a slight additional cost.

WE CAN ALSO SUPPLY THESE PARTS FOR ASSEMBLING (,ALUMINUM SPACERS,PLASTIC END PLATES) FOR AN ADDITIONAL COST

If you are unable, or not interested in constructing your own capacitor with the parts we supply and would rather have one delivered in ready to install condition, please contact us for a quote.

73 de VA6POP
Vasile

Now I'm building a Jumbo capacitor 15.000V
using 6" and 8" OD rotor blades
distance between plates 1.25"

8995. RES: [loopantennas] HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-26 13:02:36 UTC
From: Deninson G. Barreira, PE
Topic: 8994 Message: 8995

How to buy and pay for the kit(s)?

Dennis - KM4NO

De: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] Em nome de pop
Enviada em: Sunday, March 25, 2012 6:23 PM
Para: loopantennas@yahoogroups.com
Assunto: [loopantennas] HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Hi!

I have kits available for:

3" OD ROTOR + 2 STATOR PLATES $3.50
4" OD ROTOR + 2 STATOR PLATES $5.00
5" OD ROTOR + 2 STATOR PLATES $5.75
6" OD ROTOR + 2 STATOR PLATES $6.75
8" OD ROTOR + 2 STATOR PLATES $9.50

the objective of producing and selling a variety of components and kits for use in the construction and home-brew of Butterfly Type Variable Capacitors,voltage 2.5-15KV
A "Butterfly Capacitor" is a variable capacitor which usually consists of a "cold" rotor plate and two independent stator plates that oppose each other. The rotor plate's shape resembles that of a butterfly, hence the name "Butterfly Capacitor". Butterfly Capacitors are typically used in symmetrical tuned circuits such as RF power amplifier stages in push-pull configuration, antenna tuners and in high current applications as needed in magnetic loop antenna circuits.

These type of capacitors are no longer main stream, nor widely produced any longer, and therefore usually hard to find. When you do find them, they are not cheap.
We are striving to keep costs to a minimum so that the average hobbyist can afford to home-brew RF Amplifiers, Antenna Tuners, Magnetic Loop Antennas and various other RF related items. One way that we are able to make our Butterfly Capacitors affordable is to leave the final assembly for the end user to perform.

We provide the parts that require special equipment to manufacture, such as our CNCr. With our CNC , we are able to produce precision parts, namely the rotor and stator plates. The end user can then stack the plates on some threaded aluminum rod, using pieces of tube or nuts as spacers, thereby saving a large portion of the cost of what a fully

assembled unit would be. The items required to finish a capacitor can be found at your local hardware store. We can also supply these items for a slight additional cost.

WE CAN ALSO SUPPLY THESE PARTS FOR ASSEMBLING (,ALUMINUM SPACERS,PLASTIC END PLATES) FOR AN ADDITIONAL COST

If you are unable, or not interested in constructing your own capacitor with the parts we supply and would rather have one delivered in ready to install condition, please contact us for a quote.

73 de VA6POP
Vasile

Now I'm building a Jumbo capacitor 15.000V
using 6" and 8" OD rotor blades
distance between plates 1.25"

[Non-text portions of this message have been removed]

8996. Re: [loopantennas] HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-26 16:58:44 UTC
From: Brian Burns
Topic: 8994 Message: 8996

Hello Vasile,

This sounds very interesting! I am planning a
medium power AM transmitter that uses tubes, and I'm not sure I will be
able to find the high voltage capacitors for the 813 final amplifier.

Do you have a website showing your kits? Would they need to be shipped from France?

73

Brian Burns

See my website at : www.lessonsinlutherie.com

Craftsman Graphics
18000 George's Lane
Fort Bragg, CA 95437

Toll Free: 866-214-9472

[Non-text portions of this message have been removed]

8997. Re: Burying the coax, does this have an effect on an untuned loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-26 17:00:53 UTC
From: Alex P
Topic: 8988 Message: 8997

Brian,

Did some tests over the past 3-4 years with a barefoot 6 ft diameter copper pipe loop and also a 50 ft circumference delta loop on a retractable 45 ft tower. Incrementally moving from rooftop level, about 12 ft, to the full 45-50 ft, significantly reduced the unwanted electrical emissions yielding a relatively high S/N and low baseband floor better than about -125 dbm, which was close to the limit of my SDR. These results were repeatable using actual RX's (Collins, Drake, Icom) with their respective lower floors. These results were in a suburban environment, 300 ft from an industrial park and 200 ft from high tension feedlines located at about 60 ft in elevation---a pretty bad electrical environment.

73's

--- In loopantennas@yahoogroups.com, "doug12455" <doug124@...> wrote:
>
> Alex,
> I installed the Pro-1B today. I ordered the coax with the antenna. Doug states the coax he supplies is high grade quad shielded. I didn't look at who the manufacture is of this coax, but I will. Anyhow I installed it today with a 100' run. Until tomorrow I just have the coax laying across the lawn and up to the house. Before I went any further I wanted to test the loop. So far I'm quite impressed. Has a lower noise floor than my 100' dipole (no surprise). Signal levels below say 3/mhz are higher as well as a lower noise floor (signal to noise). Above that it's a toss-up but the loop always beets the dipole in actual signal to noise.
>
> I may just string it up from the peak of the garage to the house with the proper relief mounts of course.
>
> Brian
>
> --- In loopantennas@yahoogroups.com, "Alex P" <winston376@> wrote:
> >
> >
> >
> >
> > Brian,
> >
> > My experience with re-radiation effects, as Jack has described, is similar.
> >
> > Need more info regarding buried coax effects of your 80 meter loop--what kind of coax are you using?? Are you using a Balun??
> >
> > Regarding the use of buried quad RG-6 for the pro-1B, I think that it uses a preamp and therefore would expect that it provides some isolation from the loop element and therefore some immunity to imbalance due to coax related effects. The amplified signals from the loop element will be larger and 'overshadow' the now relatively smaller signals that might get

picked up on the coax. Moreover, I would expect that high quality quad braid/foil shielding coax, which provides significantly more shielding effectiveness (SE) than a single braid shield, would provide less buried ground effect than your 80 m loop application. Important caveats are that contrary to popular belief, the foil on a coax doesn't start providing significant shielding effectiveness until above 800 to 900 MHz because of the depth of penetration of RF and the thickness of the foil. So for HF and below you're still relying on the braid and the quality, the 'optical coverage' of same. As an example, the quad RG6 I've inspected from Home Depot is poor, having low optical coverage, low number of strands and gaps in the braid. Radio Shack quad RG6 is better, but no cigar. The best stuff is usually used by reputable broadband cable companies or providers such as Belden.
> >
> > If you decide to use the quad RG-6 for your pro-1b application, I'd be interested in your findings.
> >
> > 73's
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, Jack Smith <Jack.Smith@> wrote:
> > >
> > > The Pro-1B is an un-tuned or "aperiodic" loop.
> > >
> > > In general, conductors near a loop can re-radiate signals and distort
> > > the null azimuth or in the worst case filling in the null. Burying the
> > > feedline a few inches will reduce re-radiation from it and thereby help
> > > preserve null depth.
> > >
> > > Of course, that won't do anything for other re-radiators. I have a 100
> > > ft tower about 50 or 60 feet from my loops and re-radiation from the
> > > tower has a severe effect upon null depth and azimuth above 1 MHz or so.
> > >
> > > Jack K8ZOA
> > >
> > >
> > > On 3/25/2012 2:54 AM, doug12455 wrote:
> > > >
> > > > I have a Pixel Pro-1B loop. I'm going to use quad shielded rg6 coax.
> > > > Now would you think 25' buried would effect the tune of the loop? I'm
> > > > wondering if this may desense the loop some.
> > > >
> > > > Brian
> > > >
> > > >
> > >
> > >
> > > [Non-text portions of this message have been removed]
> > >
> >
>

8998. Re: Burying the coax, does this have an effect on an untuned loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-26 18:12:47 UTC
From: doug12455
Topic: 8988 Message: 8998

Alex mine is about 12' off the ground. That is about as high as I'll be able to get it in relation to other antennas taking up the needed space. Maybe in the future I may be able to get it in the 35' range. BTW correction on my last post. Beets = beats. I doubt the loop throws vegetables at my dipole :-)

Brian

--- In loopantennas@yahoogroups.com, "Alex P" <winston376@...> wrote:
>
>
>
>
>
>
>
> Brian,
>
> Did some tests over the past 3-4 years with a barefoot 6 ft diameter copper pipe loop and also a 50 ft circumference delta loop on a retractable 45 ft tower. Incrementally moving from rooftop level, about 12 ft, to the full 45-50 ft, significantly reduced the unwanted electrical emissions yielding a relatively high S/N and low baseband floor better than about -125 dbm, which was close to the limit of my SDR. These results were repeatable using actual RX's (Collins, Drake, Icom) with their respective lower floors. These results were in a suburban environment, 300 ft from an industrial park and 200 ft from high tension feedlines located at about 60 ft in elevation---a pretty bad electrical environment.
>
> 73's
>
> --- In loopantennas@yahoogroups.com, "doug12455" <doug124@> wrote:
> >
> > Alex,
> > I installed the Pro-1B today. I ordered the coax with the antenna. Doug states the coax he supplies is high grade quad shielded. I didn't look at who the manufacture is of this coax, but I will. Anyhow I installed it today with a 100' run. Until tomorrow I just have the coax laying across the lawn and up to the house. Before I went any further I wanted to test the loop. So far I'm quite impressed. Has a lower noise floor than my 100' dipole (no surprise). Signal levels below say 3/mhz are higher as well as a lower noise floor (signal to noise). Above that it's a toss-up but the loop always beets the dipole in actual signal to noise.
> >
> > I may just string it up from the peak of the garage to the house with the proper relief mounts of course.
> >
> > Brian
> >

> > --- In loopantennas@yahoogroups.com, "Alex P" <winston376@> wrote:
> > >
> > >
> > >
> > >
> > > Brian,
> > >
> > > My experience with re-radiation effects, as Jack has described, is similar.
> > >
> > > Need more info regarding buried coax effects of your 80 meter loop--what kind of coax are you using?? Are you using a Balun??
> > >
> > > Regarding the use of buried quad RG-6 for the pro-1B, I think that it uses a preamp and therefore would expect that it provides some isolation from the loop element and therefore some immunity to imbalance due to coax related effects. The amplified signals from the loop element will be larger and 'overshadow' the now relatively smaller signals that might get picked up on the coax. Moreover, I would expect that high quality quad braid/foil shielding coax, which provides significantly more shielding effectiveness (SE) than a single braid shield, would provide less buried ground effect than your 80 m loop application. Important caveats are that contrary to popular belief, the foil on a coax doesn't start providing significant shielding effectiveness until above 800 to 900 MHz because of the depth of penetration of RF and the thickness of the foil. So for HF and below you're still relying on the braid and the quality, the 'optical coverage' of same. As an example, the quad RG6 I've inspected from Home Depot is poor, having low optical coverage, low number of strands and gaps in the braid. Radio Shack quad RG6 is better, but no cigar. The best stuff is usually used by reputable broadband cable companies or providers such as Belden.
> > >
> > > If you decide to use the quad RG-6 for your pro-1b application, I'd be interested in your findings.
> > >
> > > 73's
> > >
> > >
> > >
> > > --- In loopantennas@yahoogroups.com, Jack Smith <Jack.Smith@> wrote:
> > > >
> > > > The Pro-1B is an un-tuned or "aperiodic" loop.
> > > >
> > > > In general, conductors near a loop can re-radiate signals and distort
> > > > the null azimuth or in the worst case filling in the null. Burying the
> > > > feedline a few inches will reduce re-radiation from it and thereby help
> > > > preserve null depth.
> > > >
> > > > Of course, that won't do anything for other re-radiators. I have a 100
> > > > ft tower about 50 or 60 feet from my loops and re-radiation from the
> > > > tower has a severe effect upon null depth and azimuth above 1 MHz or so.
> > > >
> > > > Jack K8ZOA
> > > >

> > > >
> > > > On 3/25/2012 2:54 AM, doug12455 wrote:
> > > > >
> > > > > I have a Pixel Pro-1B loop. I'm going to use quad shielded rg6 coax.
> > > > > Now would you think 25' buried would effect the tune of the loop? I'm
> > > > > wondering if this may desense the loop some.
> > > > >
> > > > > Brian
> > > > >
> > > > >
> > > >
> > > >
> > > > [Non-text portions of this message have been removed]
> > > >
> > >
> >
>

8999. update - a year with the DX Pro-1A

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-27 14:03:59 UTC
From: John
Topic: 8999 Message: 8999

The decision to try the Pro-1A was tough - I'd made remotely tuned loops, wideband loops, active whip antennas, and a myriad of wire antennas over the years. Sadly, the top 30ft of a 65ft pine snapped off 9/2010 and hung precariously ofer both my powerline drop and a neighbor's as well. I had it removed in a few days - while we were on a planned post Labor Day Gulf Coast trip. I came back to find a pile of pine mulching, the only remnant of the huge tree and it's roots. Located 20 ft from my basement den's window, through which all of the wire antenna leads/feedlines were fed, there simply wasn't another choice for a wire antenna support, as the nearest trees were 25ft uphill and behind the house. My antenna had been a 30ft wire run from an eave to the treeline, perpendicular to the house and powerlines across the street. It was matched via a 9:1 UNUN to an RG-58 coax to the listening post. As the hi-Z antenna was so close to the house - and it's wiring - it picked up a good bit of QRM from the various switching supplies and fluorescent lights in the house. The wideband/Faraday shielded loop seemed like a great idea.

I got my Pro-1A quickly - and it was mounted on an old rusty 5ft RS mast section from years back, which in turn was mounted on the skirt of my low deck, putting the loop's bottom at ~6.5ft above the ground. I picked up 100ft of Belden QuadShield RG6, some waterproof connectors, and a 'DataShark' crimper (~$22)from a local TV parts house I first purchased from in 1964 (My Dad had to drive me!). Although it was intended to be temporary, with the loop to be mounted with a rotor ~10ft off the ground and in a clearing in the trees about 90ft behind the house, it's still ~12ft from the house - mounted to the deck.

It's directivity seemed unimportant - with weak nulls - at night on HF. On MF, it did seem to null quite well with ground wave signals. It's main use - to null powerline/house radiated QRM - was unreal - a 3+ S unit reduction in background QRM at HF - a bit more at MF. Sadly, January 27th's F4 tornado cut a path a block above me in the subdivision - lots of since replaced powerlines - and more RFI sources from other directions. Obviously, I can only null such QRM from one line of action. Additionally, the antenna rolls off in response above 22 MHz and below 200 kHz. It could be the antenna or it's power coupling unit. Doug T. of Pixel suggested upgrading to a Pro-1B loop and 12V power coupling unit - for $200. It seems like a lot - especially considering how much I have invested in it now. Oh... the clearing where I was to remount the loop was littered with fallen tree limbs & parts - the loop would have been ruined had it been there! It looks a bit odd on the deck... even drew a question from a contractor, "What's that... some kind of short wave ham radio thing?". The antenna did help in the one way it was hoped to - I can listen to the ever-decreasing number of SWBC stations again. It also had me add an older Icom R75 alongside the Palstar R30A. Perhaps I will DX again!

BTW, with the near 100% shielding of decent, like Belden Quad Shield, RG6, it can be run anywhere without fear of picking up more QRM. If I were to bury my feedline, I'd run it inside a cheap garden hose first - then bury it - for mechanical protection from abrasion and little teeth.

I guess I missed buying a Pro-1B by days - my greatest regret.

John

9000. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-27 00:15:46 UTC
From: pop
Topic: 8994 Message: 9000

Hi!
Tnx for e-mail!
You can pay using paypal.
For an estimation I need pF?/V?
rotor size (OD)
and the address for shipping cost!
73 de VA6POP
Vasile

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

9001. Re: Burying the coax, does this have an effect on an untuned loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-27 13:12:51 UTC
From: Thomas F. Giella
Topic: 8988 Message: 9001

Burying your coaxial cable can reduce local QRN quite a bit depending on just how bad the local noise is. I live in a typical suburban environment. When I bought my house in 2005 the local noise environment on 160 meters was surprisingly low but with time the noise crept up to an intolerable level.

That led me to build an outdoor rotatable ground level receive loop http://www.wcflunatall.com/nz4o14.htm which was fed with RG-8X coax. The noise on the receive loop was dramatically lower but there still was some. I then buried the coaxial cable and that got rid of almost all of the noise. At a later date I added coaxial choke BALUN's at the antenna feedpoint and radio shack entrance panel and that got rid of the rest of the noise.

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
thomasfgiella@...

NZ4O Amateur & SWL Radio Autobiography: http://www.nz4o.com
NZ4O MF (300-3000 KC) Radiowave Propagation Forecast:
http://www.mwfrequencypropagation.org
NZ4O HF/6M Radiowave Propagation Forecast: http://www.solarcycle24.org

---
avast! Antivirus: Outbound message clean.
Virus Database (VPS): 120327-0, 03/27/2012
Tested on: 3/27/2012 9:12:51 AM
avast! - copyright (c) 1988-2012 AVAST Software.
http://www.avast.com

9002. Re: Burying the coax, does this have an effect on an untuned loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-27 17:17:34 UTC
From: doug12455
Topic: 8988 Message: 9002

Thanks. I'm going to bury it using a garden hose. I decided I don't want naked coax in the ground 4" down during the winter months.

Brian

--- In loopantennas@yahoogroups.com, "Thomas F. Giella" <thomasfgiella@...> wrote:
>
> Burying your coaxial cable can reduce local QRN quite a bit depending on
> just how bad the local noise is. I live in a typical suburban environment.
> When I bought my house in 2005 the local noise environment on 160 meters was
> surprisingly low but with time the noise crept up to an intolerable level.
>
> That led me to build an outdoor rotatable ground level receive loop
> http://www.wcflunatall.com/nz4o14.htm which was fed with RG-8X coax. The
> noise on the receive loop was dramatically lower but there still was some. I
> then buried the coaxial cable and that got rid of almost all of the noise.
> At a later date I added coaxial choke BALUN's at the antenna feedpoint and
> radio shack entrance panel and that got rid of the rest of the noise.
>
> 73 & GUD DX,
> Thomas F. Giella, NZ4O
> Lakeland, FL, USA
> thomasfgiella@...
>
> NZ4O Amateur & SWL Radio Autobiography: http://www.nz4o.com
> NZ4O MF (300-3000 KC) Radiowave Propagation Forecast:
> http://www.mwfrequencypropagation.org
> NZ4O HF/6M Radiowave Propagation Forecast: http://www.solarcycle24.org
>
>
>
> ---
> avast! Antivirus: Outbound message clean.
> Virus Database (VPS): 120327-0, 03/27/2012
> Tested on: 3/27/2012 9:12:51 AM
> avast! - copyright (c) 1988-2012 AVAST Software.
> http://www.avast.com
>

9003. RES: [loopantennas] Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-27 23:04:20 UTC
From: Deninson G. Barreira, PE
Topic: 8994 Message: 9003

Hello,

Loop antenna use: 300-350 pF, Voltage around 1Kv (QRP), rotor 3" diam +/-

Address to: Clinton, TN 37716

Dennis - KM4NO

De: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] Em
nome de pop
Enviada em: Monday, March 26, 2012 8:16 PM
Para: loopantennas@yahoogroups.com
Assunto: [loopantennas] Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Hi!
Tnx for e-mail!
You can pay using paypal.
For an estimation I need pF?/V?
rotor size (OD)
and the address for shipping cost!
73 de VA6POP
Vasile

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>

[Non-text portions of this message have been removed]

9004. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-28 03:34:15 UTC
From: querencias
Topic: 8994 Message: 9004

Bon jour, Msr. Vasile,

I would like a quote for several of your capacitor kits.

Outer diameter 4 or 5 inches (120 mm to 140 mm), capacity of 300 pF max and Voltage capacity of 15 KV. Shipping is to San Diego, California, USA, 92103'

Merci Bien!

Grant.

--- In loopantennas@yahoogroups.com, "pop" <pop_vasile@...> wrote:
>
> Hi!
> Tnx for e-mail!
> You can pay using paypal.
> For an estimation I need pF?/V?
> rotor size (OD)
> and the address for shipping cost!
> 73 de VA6POP
> Vasile
>
>
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> > [Non-text portions of this message have been removed]
> >
>

9005. ALA 1530 Update.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-03-31 19:36:00 UTC
From: ronelltom
Topic: 9005 Message: 9005

Hi all.
Well, I have now got the ALA 1530 Wellbrook Loop on a short mast down the garden. It works superbly on SW (my interest bands). I just cannot fault it for low noise reception of signals. Was it worth the money ?, the answer has to be yes as I had a noise floor of 8-9 24/7 before , and now have an average noise floor of2-3 most days, signals that where usually way down in the noise can now be heard clearly.
I noticed on e-bay that you can buy coils of CCTV cable fitted with BNC plugs for a very low price, (far cheaper than coax and of course you don't have to try to fit BNC plugs to it (I still cannot do it very well). As this cable will only be used for receiving has anyone out tried this cable for receiving radio signals would it be a `good buy' or is there some drawback to using this stuff. ??????
Thanks Guys
Ron, GW1HIN, Aberystwyth, Wales, UK

9006. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-01 12:20:34 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 9006

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Although it will allow arbitrarily large images, it will only show them to the moderator and whoever uploaded them. Everyone else can only see a resampled max of 300x400 pixels. So anything over that in Photos is a waste of storage. So crop in to the important parts and resample to about 300x400. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. If you need to post a schematic diagram that would be unreadable at 300x400, I strongly suggest the Files section as it has no such limitations.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

9007. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-01 12:20:34 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 9007

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

9008. Re: [loopantennas] File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-01 15:10:24 UTC
From: Ken Kizer
Topic: 457 Message: 9008

loopantennas@yahoogroups.com writes...

>If you have a link relevant to the group, please post it in the Links
>section. If you just put it in a message, it will get lost in the shuffle
>after a few days. The coverage of the list is pretty broad.
>
>All members can upload Links, Files, and Photos.
>
>A few guidelines:
>
>Try to place them in the proper folder, if it exists. If not, you can either
>just put it in the root folder and eventually I'll move it into the proper
>place, or create a folder.

Yahoo allows attachments to posts, and they are automatically placed
in the Attachments folder. The advantage is, assuming this group is
the same as the ten other Yahoo groups I've joined, that the Files
section is only 100 mb of storage. The Attachment (and Photos) folders
are each 100 GIG of storage.

>When creating a folder or uploading a file or photo, please don't use
>spaces or punctuation. You can either use caps for the first letter of
>each word, or use underscore as a space.
>
>Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"
>
>Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and
>File names.
>
>A special note about the Photos section: Although it will allow
>arbitrarily large images, it will only show them to the moderator and
>whoever uploaded them. Everyone else can only see a resampled
>max of 300x400 pixels. So anything over that in Photos is a waste
>of storage. So crop in to the important parts and resample to about
>300x400. For photos, JPG saves smaller and looks better, for line
>drawings GIF is smaller and looks better. If you need to post a
>schematic diagram that would be unreadable at 300x400, I strongly
>suggest the Files section as it has no such limitations.

Nor do attachments to posts have limitation, as far as I can tell.

Also, I don't know if this is a change, but photos can be viewed at
full resolution. There are options to do so.

>Feel free to ask if you need help figuring out how to crop and
>resample. Irfanview is a fairly easy to use program that loads

>just about any file, you can crop and resample from there:
>http://www.irfanview.com
>
>Or for more complex stuff, another free program is GIMP:
>http://www.gimp.org
>
>A last note: if you see something in any folder or in the messages
>that looks like spam or simply inappropriate, don't post on the list-
>email me directly and tell me about it and I'll take care of it with a
>minimum of fuss. loopantennas-owner@yahoogroups.com
>
>Thanks,
>Steve Greenfield

9009. Re: [loopantennas] File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-01 16:45:15 UTC
From: Andy
Topic: 6528 Message: 9009

Ken Kizer <cfa@...> wrote:

> Yahoo allows attachments to posts, and they are automatically placed
> in the Attachments folder.

Attachments are not enabled (not allowed) in this group.

> Also, I don't know if this is a change, but photos can be viewed at
> full resolution. There are options to do so.

That was a change made to Yahoo!groups, somewhere around three years ago. I have found that it doesn't always work.

Andy

9010. Re: File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-01 16:55:08 UTC
From: AlienRelics
Topic: 6528 Message: 9010

I see no "Attachments" folder. In any case, sending files as an attachment means that someone looking in an Attachments folder in the future would have no context. Can Attachments be organized?

It also means that every time someone sends an attachment to help one or two people, it potentially goes out to thousands.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Ken Kizer <cfa@...> wrote:
>
> loopantennas@yahoogroups.com writes...
>
> >If you have a link relevant to the group, please post it in the Links
> >section. If you just put it in a message, it will get lost in the shuffle
> >after a few days. The coverage of the list is pretty broad.
> >
> >All members can upload Links, Files, and Photos.
> >
> >A few guidelines:
> >
> >Try to place them in the proper folder, if it exists. If not, you can either
> >just put it in the root folder and eventually I'll move it into the proper
> >place, or create a folder.
>
> Yahoo allows attachments to posts, and they are automatically placed
> in the Attachments folder. The advantage is, assuming this group is
> the same as the ten other Yahoo groups I've joined, that the Files
> section is only 100 mb of storage. The Attachment (and Photos) folders
> are each 100 GIG of storage.
>
> >When creating a folder or uploading a file or photo, please don't use
> >spaces or punctuation. You can either use caps for the first letter of
> >each word, or use underscore as a space.
> >
> >Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"
> >
> >Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and
> >File names.
> >
> >A special note about the Photos section: Although it will allow
> >arbitrarily large images, it will only show them to the moderator and
> >whoever uploaded them. Everyone else can only see a resampled
> >max of 300x400 pixels. So anything over that in Photos is a waste
> >of storage. So crop in to the important parts and resample to about
> >300x400. For photos, JPG saves smaller and looks better, for line

> >drawings GIF is smaller and looks better. If you need to post a
> >schematic diagram that would be unreadable at 300x400, I strongly
> >suggest the Files section as it has no such limitations.
>
> Nor do attachments to posts have limitation, as far as I can tell.
>
> Also, I don't know if this is a change, but photos can be viewed at
> full resolution. There are options to do so.
>
> >Feel free to ask if you need help figuring out how to crop and
> >resample. Irfanview is a fairly easy to use program that loads
> >just about any file, you can crop and resample from there:
> >http://www.irfanview.com
> >
> >Or for more complex stuff, another free program is GIMP:
> >http://www.gimp.org
> >
> >A last note: if you see something in any folder or in the messages
> >that looks like spam or simply inappropriate, don't post on the list-
> >email me directly and tell me about it and I'll take care of it with a
> >minimum of fuss. loopantennas-owner@yahoogroups.com
> >
> >Thanks,
> >Steve Greenfield
>

9011. Re: [loopantennas] Re: File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-01 17:13:09 UTC
From: Andy
Topic: 6528 Message: 9011

> It also means that every time someone sends an attachment to help one
> or two people, it potentially goes out to thousands.

The "Attachments" feature that was added to Yahoo!groups a few years ago, works a little (actually a lot) differently.

Yahoo intercepts the attached files from the incoming email, strips them off, and files them away in a special "Attachments" folder under "Messages". The attachments themselves are NOT sent out to anyone, but links to them are. You need to click on those links to go to the group's webpage where you can find the attachments.

Thus, you need to be online. You can't go online, download your email, disconnect from the net, and view those attachments, without going back online again. For many of us who are connected 24/7 that's not an issue; but there are still some folks in the boonies who may not use the 'net that way.

Personally, I prefer having files uploaded to the group's Files and/or Photos areas, where they can be organized and grouped into folders and sub-folders as desired. I have seen some groups with massive amounts of stuff in the "Attachments" folder and it is nearly impossible to find things there.

But anyway, Attachments do not work at all unless enabled for the Yahoo!group, and they have not been enabled for this Yahoo!group.

Andy

9012. Re: [loopantennas] File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-01 17:36:13 UTC
From: Ken Kizer
Topic: 6528 Message: 9012

Andy writes...

>Ken Kizer <cfa@...> wrote:
>
>> Yahoo allows attachments to posts, and they are automatically placed
>> in the Attachments folder.
>
>Attachments are not enabled (not allowed) in this group.

If it's a concern about trojans, viruses, and such, it appears Yahoo
is doing a good enough job it wouldn't present a threat. I haven't
seen any problems in any of the other Yahoo groups I've joined.

But I don't know the philosophy of this group.

It was just an observation I thought might be helpful. The files
section is 77% full at the moment.

>> Also, I don't know if this is a change, but photos can be viewed at
>> full resolution. There are options to do so.
>
>That was a change made to Yahoo!groups, somewhere around three years
>ago. I have found that it doesn't always work.

If the images aren't large enough to need zooming?

>Andy

Ken
--
cfa at alt dot net

9013. Re: [loopantennas] Re: File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-01 17:36:26 UTC
From: Ken Kizer
Topic: 6528 Message: 9013

AlienRelics writes...

>I see no "Attachments" folder. In any case, sending files as
>an attachment means that someone looking in an Attachments
>folder in the future would have no context. Can Attachments
>be organized?

Yes, the attachment folder hasn't been created. Attachments can be
sorted on author, subject, and date.

The attachments folder is a huge help for groups that have maxed out
their files folder. One group has created four additional groups, just
to handle the files.

>It also means that every time someone sends an attachment
>to help one or two people, it potentially goes out to thousands.

Yes, if it's sent to the group. But that might be a good thing.

>Steve Greenfield AE7HD

Ken
--
cfa at alt dot net

9014. Re: ALA 1530 Update.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-02 00:34:45 UTC
From: vbifyz
Topic: 9005 Message: 9014

What kind of "CCTV cable"? Do you mean twisted pair? That may pick up more interference than coax.
I am using old RG-6 coax from cable TV wiring for all my antenna installations. It can be had essentially for free if you know where to look. I picked about 50m on the street on a garbage day. I had to buy a box of type F connectors, a few BNC/type F adaptors and a TV crimping tool.

Works perfectly, no noise pickup at all. A good test is to connect a proper terminator (75 or 50 Ohm for coax, 110 Ohm for twisted pair) in place of the antenna and listen to the receiver. Ideally, you hear nothing at all but the reciver internal noise. Coax of any kind comes close to this, twisted pair picks up a bit.

73, Mike

--- In loopantennas@...m, "ronelltom" <ronelltom@...> wrote:
>
> Hi all.
> Well, I have now got the ALA 1530 Wellbrook Loop on a short mast down the garden. It works superbly on SW (my interest bands). I just cannot fault it for low noise reception of signals. Was it worth the money ?, the answer has to be yes as I had a noise floor of 8-9 24/7 before , and now have an average noise floor of2-3 most days, signals that where usually way down in the noise can now be heard clearly.
> I noticed on e-bay that you can buy coils of CCTV cable fitted with BNC plugs for a very low price, (far cheaper than coax and of course you don't have to try to fit BNC plugs to it (I still cannot do it very well). As this cable will only be used for receiving has anyone out tried this cable for receiving radio signals would it be a `good buy' or is there some drawback to using this stuff. ??????
> Thanks Guys
> Ron, GW1HIN, Aberystwyth, Wales, UK
>

9015. Attachments

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-02 00:45:15 UTC
From: AlienRelics
Topic: 9015 Message: 9015

I'm moving this to its own thread.

I only see these choices:
Store on site (exclude from emails)
Include in emails (exclude from site)
Exclude from site and emails

So I'm going to Store On Site. This makes sense to me, that way everyone isn't receiving every file, but if you want it now or in the future it is available for download.

I prefer files be uploaded to the Files area. When I go to a group, I often just look through files and links.

However, this is not my list. I just run it. I'm setting it to allow attachments and store them on site.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Ken Kizer <cfa@...> wrote:
>
> AlienRelics writes...
>
> >I see no "Attachments" folder. In any case, sending files as
> >an attachment means that someone looking in an Attachments
> >folder in the future would have no context. Can Attachments
> >be organized?
>
> Yes, the attachment folder hasn't been created. Attachments can be
> sorted on author, subject, and date.
>
> The attachments folder is a huge help for groups that have maxed out
> their files folder. One group has created four additional groups, just
> to handle the files.
>
> >It also means that every time someone sends an attachment
> >to help one or two people, it potentially goes out to thousands.
>
> Yes, if it's sent to the group. But that might be a good thing.
>
> >Steve Greenfield AE7HD
>
> Ken
> --
> cfa at alt dot net
>

9016. Re: [loopantennas] Attachments

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-02 03:51:57 UTC
From: Andy
Topic: 9015 Message: 9016

> I only see these choices:
> Store on site (exclude from emails)
> Include in emails (exclude from site)
> Exclude from site and emails

I don't know if it needs to be said, but your first choice really has two options:

- Store on site in Files/Photos areas
- Store on site in Attachments area

Me, personally, I prefer the Files/Photos areas, even if they are more limited in terms of the currently available file space that Yahoo gives us. But that's just me.

That option does/did require additional steps, as people need to upload files (separately from sending messages), and others who want them need to navigate online and download them. Whereas using the new Attachments area is more automated because it can all happen within your email program.

Andy

9017. Re: [loopantennas] ALA 1530 Update.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-02 09:43:40 UTC
From: Andy Ikin
Topic: 9005 Message: 9017

Ron,

Sorry I am a bit late commenting on your question.

I can't be specific about using low cost CCTV cable. But I would advise you not to use any cable where the inner core is copper plated steel. Multi-screened cable where there is mix of copper and aluminium foil, silver plated inner core or screen should be avoided in coastal regions as these can corrode and may cause noise.

Best stick with tin plated copper cable like RG58 C/U. This cable is available from Westlake Electronics at very reasonable price. It manufactured in the UK by Webroo (own by Belden).

73

Andrew Ikin

----- Original Message -----
From: ronelltom
To: loopantennas@yahoogroups.com
Sent: Saturday, March 31, 2012 8:36 PM
Subject: [loopantennas] ALA 1530 Update.

Hi all.
Well, I have now got the ALA 1530 Wellbrook Loop on a short mast down the garden. It works superbly on SW (my interest bands). I just cannot fault it for low noise reception of signals. Was it worth the money ?, the answer has to be yes as I had a noise floor of 8-9 24/7 before , and now have an average noise floor of2-3 most days, signals that where usually way down in the noise can now be heard clearly.
I noticed on e-bay that you can buy coils of CCTV cable fitted with BNC plugs for a very low price, (far cheaper than coax and of course you don't have to try to fit BNC plugs to it (I still cannot do it very well). As this cable will only be used for receiving has anyone out tried this cable for receiving radio signals would it be a `good buy' or is there some drawback to using this stuff. ??????
Thanks Guys
Ron, GW1HIN, Aberystwyth, Wales, UK

9018. Re: [loopantennas] ALA 1530 Update.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-02 10:37:03 UTC
From: Don
Topic: 9005 Message: 9018

Hi Ron,

I would second Andy's comments and add that I would be concerned that
the shielding may only be 70% or less and would not fair too good when
used outdoors.

Don
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 02-Apr-12 02:43, Andy Ikin wrote:
>
>
> Ron,
> Sorry I am a bit late commenting on your question.
> I can't be specific about using low cost CCTV cable. But I would advise
> you not to use any cable where the inner core is copper plated steel.
> Multi-screened cable where there is mix of copper and aluminum foil,
> silver plated inner core or screen should be avoided in coastal regions
> as these can corrode and may cause noise.
> Best stick with tin plated copper cable like RG58 C/U. This cable is
> available from Westlake Electronics at very reasonable price. It
> manufactured in the UK by Webroo (own by Belden).
> 73
> Andrew Ikin
>
> ----- Original Message -----
> *From:* ronelltom <mailto:ronelltom@...>
> *To:* loopantennas@yahoogroups.com
> <mailto:loopantennas@yahoogroups.com>
> *Sent:* Saturday, March 31, 2012 8:36 PM
> *Subject:* [loopantennas] ALA 1530 Update.
>
> Hi all.
> Well, I have now got the ALA 1530 Wellbrook Loop on a short mast
> down the garden. It works superbly on SW (my interest bands). I just
> cannot fault it for low noise reception of signals. Was it worth the
> money ?, the answer has to be yes as I had a noise floor of 8-9 24/7
> before , and now have an average noise floor of2-3 most days,
> signals that where usually way down in the noise can now be heard
> clearly.

> I noticed on e-bay that you can buy coils of CCTV cable fitted with
> BNC plugs for a very low price, (far cheaper than coax and of course
> you don't have to try to fit BNC plugs to it (I still cannot do it
> very well). As this cable will only be used for receiving has
> anyone out tried this cable for receiving radio signals would it be
> a `good buy' or is there some drawback to using this stuff. ??????
> Thanks Guys
> Ron, GW1HIN, Aberystwyth, Wales, UK
>
>
>
>
>
> No virus found in this message.
> Checked by AVG - www.avg.com <http://www.avg.com>
> Version: 2012.0.1913 / Virus Database: 2114/4909 - Release Date:
> 04/01/12
>

9019. Re: ALA 1530 Update.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-02 19:51:38 UTC
From: qrpbear
Topic: 9005 Message: 9019

Ron,

I have several years background in both 2-way radio and CCTV fields. CCTV cable (the _real_ kind) is RG-59 for runs up to 200ft or RG-11 for runs up to 2000ft. Typically shield coverage is 75-85% and is copper braid. There is a disturbing trend in the CCTV industry to use RG-6 cable which has an aluminized mylar foil shield. There is 100% shield coverage but the problem lies in the fact that electrolysis occurs in the junction between shield and connector when DC passes through that connection. This results in both desired signal attenuation and problems with rectification (mixing) of undesired RF signals interfering with the video. Baseband CCTV signals do go down to DC and DC current must be able to flow through the shield/connector junction. The other problem with RG-6 for CCTV use is that the aluminumized mylar foil does not provide sufficient skin depth for frequencies below 1MHz or thereabouts. RG-6 was designed for the frequency range extending upward from 50MHz.

I would not have a problem using a good grade of RG-59 (such as Belden 8214) with your antenna. It's 85% shield coverage is adequate for most applications. If you do have undesired interference or noise pickup on the cable it can often be cured by judicious grounding at the service entrance, toroidal or snap-on ferrite chokes to prevent the shield acting as an antenna or, in extreme cases, burying the coax at least 6 inches deep in the ground between the antenna and your service entrance. Keep in mind also that any coaxial cable terminations used out of doors will only have a service life of a few years at best even when weatherized. Degradation is typically very gradual and often goes un-noticed until cable failure occurs. It's best to reterminate the cable at intervals of 2 years or less depending on environment. That also provides the opportunity to inspect the cable itself for signs of dielectric contamination or moisture ingress.

73,

'Bear' NH7SR

9020. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-02 21:37:16 UTC
From: Lew
Topic: 8994 Message: 9020

Do you have any pictures of the kits/capacitors?
I'm going to build a loop to cover a lot of bands and need a capacitor with a max value of around 600pf and about 4Kv
How much would that cost in total including shipping to England?

--- In loopantennas@yahoogroups.com, "pop" <pop_vasile@...> wrote:
>
> Hi!
>
>
> I have kits available for:
>
> 3" OD ROTOR + 2 STATOR PLATES $3.50
> 4" OD ROTOR + 2 STATOR PLATES $5.00
> 5" OD ROTOR + 2 STATOR PLATES $5.75
> 6" OD ROTOR + 2 STATOR PLATES $6.75
> 8" OD ROTOR + 2 STATOR PLATES $9.50
>
> the objective of producing and selling a variety of components and
> kits for use in the construction and home-brew of Butterfly Type
> Variable Capacitors,voltage 2.5-15KV
> A "Butterfly Capacitor" is a variable capacitor which usually consists
> of a "cold" rotor plate and two independent stator plates that oppose
> each other. The rotor plate's shape resembles that of a butterfly,
> hence the name "Butterfly Capacitor". Butterfly Capacitors are
> typically used in symmetrical tuned circuits such as RF power
> amplifier stages in push-pull configuration, antenna tuners and in
> high current applications as needed in magnetic loop antenna circuits.
>
> These type of capacitors are no longer main stream, nor widely
> produced any longer, and therefore usually hard to find. When you do
> find them, they are not cheap.
> We are striving to keep costs to a minimum so that the average
> hobbyist can afford to home-brew RF Amplifiers, Antenna Tuners,
> Magnetic Loop Antennas and various other RF related items. One way
> that we are able to make our Butterfly Capacitors affordable is to
> leave the final assembly for the end user to perform.
>
> We provide the parts that require special equipment to manufacture,
> such as our CNCr. With our CNC , we are able to produce precision
> parts, namely the rotor and stator plates. The end user can then stack
> the plates on some threaded aluminum rod, using pieces of tube or nuts
> as spacers, thereby saving a large portion of the cost of what a fully
> assembled unit would be. The items required to finish a capacitor can
> be found at your local hardware store. We can also supply these items

> for a slight additional cost.
>
> WE CAN ALSO SUPPLY THESE PARTS FOR ASSEMBLING (,ALUMINUM SPACERS,PLASTIC END PLATES) FOR AN ADDITIONAL COST
>
> If you are unable, or not interested in constructing your own
> capacitor with the parts we supply and would rather have one delivered
> in ready to install condition, please contact us for a quote.
>
>
> 73 de VA6POP
> Vasile
>
>
> Now I'm building a Jumbo capacitor 15.000V
> using 6" and 8" OD rotor blades
> distance between plates 1.25"
>

9021. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-03 03:16:26 UTC
From: pop
Topic: 8994 Message: 9021

Hi!
Tnx for e-mail!
Here u can see a few capacitors.

http://groups.yahoo.com/group/loopantennas/photos/album/1355109643/pic/list

the shipping can be less then $15.00

in weekend I will do an estimation for yours butterfly capacitor.

73 de VA6POP
Vasile

--- In loopantennas@yahoogroups.com, "Lew" <lew247@...> wrote:
>
>
> Do you have any pictures of the kits/capacitors?
> I'm going to build a loop to cover a lot of bands and need a capacitor with a max value of around 600pf and about 4Kv
> How much would that cost in total including shipping to England?
>
>
>
> --- In loopantennas@yahoogroups.com, "pop" <pop_vasile@> wrote:
> >
> > Hi!
> >
> >
> > I have kits available for:
> >
> > 3" OD ROTOR + 2 STATOR PLATES $3.50
> > 4" OD ROTOR + 2 STATOR PLATES $5.00
> > 5" OD ROTOR + 2 STATOR PLATES $5.75
> > 6" OD ROTOR + 2 STATOR PLATES $6.75
> > 8" OD ROTOR + 2 STATOR PLATES $9.50
> >
> > the objective of producing and selling a variety of components and
> > kits for use in the construction and home-brew of Butterfly Type
> > Variable Capacitors,voltage 2.5-15KV
> > A "Butterfly Capacitor" is a variable capacitor which usually consists
> > of a "cold" rotor plate and two independent stator plates that oppose
> > each other. The rotor plate's shape resembles that of a butterfly,
> > hence the name "Butterfly Capacitor". Butterfly Capacitors are
> > typically used in symmetrical tuned circuits such as RF power
> > amplifier stages in push-pull configuration, antenna tuners and in
> > high current applications as needed in magnetic loop antenna circuits.

> >
> > These type of capacitors are no longer main stream, nor widely
> > produced any longer, and therefore usually hard to find. When you do
> > find them, they are not cheap.
> > We are striving to keep costs to a minimum so that the average
> > hobbyist can afford to home-brew RF Amplifiers, Antenna Tuners,
> > Magnetic Loop Antennas and various other RF related items. One way
> > that we are able to make our Butterfly Capacitors affordable is to
> > leave the final assembly for the end user to perform.
> >
> > We provide the parts that require special equipment to manufacture,
> > such as our CNCr. With our CNC , we are able to produce precision
> > parts, namely the rotor and stator plates. The end user can then stack
> > the plates on some threaded aluminum rod, using pieces of tube or nuts
> > as spacers, thereby saving a large portion of the cost of what a fully
> > assembled unit would be. The items required to finish a capacitor can
> > be found at your local hardware store. We can also supply these items
> > for a slight additional cost.
> >
> > WE CAN ALSO SUPPLY THESE PARTS FOR ASSEMBLING (,ALUMINUM SPACERS,PLASTIC END PLATES)
FOR AN ADDITIONAL COST
> >
> > If you are unable, or not interested in constructing your own
> > capacitor with the parts we supply and would rather have one delivered
> > in ready to install condition, please contact us for a quote.
> >
> >
> > 73 de VA6POP
> > Vasile
> >
> >
> > Now I'm building a Jumbo capacitor 15.000V
> > using 6" and 8" OD rotor blades
> > distance between plates 1.25"
> >
>

9022. Re: ALA 1530 Update.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-03 13:38:31 UTC
From: Mvs
Topic: 9005 Message: 9022

Perhaps the capacitance /m miay be more with RG6 cable. I too use the same, ofcourse with PA0RDT mini active antenna.
it is serving me OK with a 25 m cable length to 4th floor terrace.

--- In loopantennas@yahoogroups.com, "qrpbear" <qrpbear@...> wrote:
>
> Ron,
>
> I have several years background in both 2-way radio and CCTV fields. CCTV cable (the _real_ kind) is RG-59 for runs up to 200ft or RG-11 for runs up to 2000ft. Typically shield coverage is 75-85% and is copper braid. There is a disturbing trend in the CCTV industry to use RG-6 cable which has an aluminized mylar foil shield. There is 100% shield coverage but the problem lies in the fact that electrolysis occurs in the junction between shield and connector when DC passes through that connection. This results in both desired signal attenuation and problems with rectification (mixing) of undesired RF signals interfering with the video. Baseband CCTV signals do go down to DC and DC current must be able to flow through the shield/connector junction. The other problem with RG-6 for CCTV use is that the aluminumized mylar foil does not provide sufficient skin depth for frequencies below 1MHz or thereabouts. RG-6 was designed for the frequency range extending upward from 50MHz.
>
> I would not have a problem using a good grade of RG-59 (such as Belden 8214) with your antenna. It's 85% shield coverage is adequate for most applications. If you do have undesired interference or noise pickup on the cable it can often be cured by judicious grounding at the service entrance, toroidal or snap-on ferrite chokes to prevent the shield acting as an antenna or, in extreme cases, burying the coax at least 6 inches deep in the ground between the antenna and your service entrance. Keep in mind also that any coaxial cable terminations used out of doors will only have a service life of a few years at best even when weatherized. Degradation is typically very gradual and often goes un-noticed until cable failure occurs. It's best to reterminate the cable at intervals of 2 years or less depending on environment. That also provides the opportunity to inspect the cable itself for signs of dielectric contamination or moisture ingress.
>
> 73,
>
> 'Bear' NH7SR
>

9023. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-03 15:44:05 UTC
From: Alex P
Topic: 8994 Message: 9023

Instead of aluminum, can you make the plates out of brass or copper sheet?

--- In loopantennas@yahoogroups.com, "pop" <pop_vasile@...> wrote:
>
>
> Hi!
> Tnx for e-mail!
> Here u can see a few capacitors.
>
>
> http://groups.yahoo.com/group/loopantennas/photos/album/1355109643/pic/list
>
> the shipping can be less then $15.00
>
> in weekend I will do an estimation for yours butterfly capacitor.
>
>
>
> 73 de VA6POP
> Vasile
>
>
>
> --- In loopantennas@yahoogroups.com, "Lew" <lew247@> wrote:
> >
> >
> > Do you have any pictures of the kits/capacitors?
> > I'm going to build a loop to cover a lot of bands and need a capacitor with a max value of around 600pf and about 4Kv
> > How much would that cost in total including shipping to England?
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "pop" <pop_vasile@> wrote:
> > >
> > > Hi!
> > >
> > >
> > > I have kits available for:
> > >
> > > 3" OD ROTOR + 2 STATOR PLATES $3.50
> > > 4" OD ROTOR + 2 STATOR PLATES $5.00
> > > 5" OD ROTOR + 2 STATOR PLATES $5.75
> > > 6" OD ROTOR + 2 STATOR PLATES $6.75
> > > 8" OD ROTOR + 2 STATOR PLATES $9.50

> > >
> > > the objective of producing and selling a variety of components and
> > > kits for use in the construction and home-brew of Butterfly Type
> > > Variable Capacitors,voltage 2.5-15KV
> > > A "Butterfly Capacitor" is a variable capacitor which usually consists
> > > of a "cold" rotor plate and two independent stator plates that oppose
> > > each other. The rotor plate's shape resembles that of a butterfly,
> > > hence the name "Butterfly Capacitor". Butterfly Capacitors are
> > > typically used in symmetrical tuned circuits such as RF power
> > > amplifier stages in push-pull configuration, antenna tuners and in
> > > high current applications as needed in magnetic loop antenna circuits.
> > >
> > > These type of capacitors are no longer main stream, nor widely
> > > produced any longer, and therefore usually hard to find. When you do
> > > find them, they are not cheap.
> > > We are striving to keep costs to a minimum so that the average
> > > hobbyist can afford to home-brew RF Amplifiers, Antenna Tuners,
> > > Magnetic Loop Antennas and various other RF related items. One way
> > > that we are able to make our Butterfly Capacitors affordable is to
> > > leave the final assembly for the end user to perform.
> > >
> > > We provide the parts that require special equipment to manufacture,
> > > such as our CNCr. With our CNC , we are able to produce precision
> > > parts, namely the rotor and stator plates. The end user can then stack
> > > the plates on some threaded aluminum rod, using pieces of tube or nuts
> > > as spacers, thereby saving a large portion of the cost of what a fully
> > > assembled unit would be. The items required to finish a capacitor can
> > > be found at your local hardware store. We can also supply these items
> > > for a slight additional cost.
> > >
> > > WE CAN ALSO SUPPLY THESE PARTS FOR ASSEMBLING (,ALUMINUM SPACERS,PLASTIC END PLATES)
FOR AN ADDITIONAL COST
> > >
> > > If you are unable, or not interested in constructing your own
> > > capacitor with the parts we supply and would rather have one delivered
> > > in ready to install condition, please contact us for a quote.
> > >
> > >
> > > 73 de VA6POP
> > > Vasile
> > >
> > >
> > > Now I'm building a Jumbo capacitor 15.000V
> > > using 6" and 8" OD rotor blades
> > > distance between plates 1.25"
> > >
> >
>

9024. ALA 1530 now perfect.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-03 15:54:38 UTC
From: ronelltom
Topic: 9024 Message: 9024

Hi,
The ALA 1530 is now sited down the garden, and works really well. As I am not still sure whereabouts in the garden to fix it permanently I have mounted it onto a photographic tripopd (from e-bay), making it easy to movbe about different parts until I find the ideal one.
Tracey, G5VU gave me a link to get ready made cables from in the UK at a sensible price,
http://cpc.farnell.com/pro-signal/psg00522/bnc-plug-to-plug-20m/dp/AV14120
Ordered it yesterday and they came today (really feast sedrvice).
So thank you all for the heaps of advice you all gave me.
Best 73s.
Ron GW1HIN, Aberystwyth, Wales, UK

9025. Re: [loopantennas] Co-ax !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-03 16:15:17 UTC
From: brian nsl
Topic: 9025 Message: 9025

Ron,
Looks a good buy until you get to the ' bottom line ' where
£4.57 becomes £12.62 hi!
72, Brian,
----- Original Message -----
From: ronelltom
To: loopantennas@yahoogroups.com
Sent: Tuesday, April 03, 2012 4:54 PM
Subject: [loopantennas] ALA 1530 now perfect.

9026. Photos embedded in messages

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-04 15:35:15 UTC
From: Alberto I2PHD
Topic: 9026 Message: 9026

There is a simple way to embed photos into messages, without resorting to the Photo or the Files folders.
Open an account (free) on Dropbox, then upload there your photo, then compose your message to the
Yahoo group in HTML, putting in it an <img tag, specifying the Dropbox link as source. Quite easy
to do with Thunderbird. And if you specify the same URL for the Alternate Text of the image, it can
be viewed also by those scared by HTML, who read the messages in text mode only, or by those who
prefer to receive messages in Digest form.

Here is an example. This is a MW/SW indoor loop, built by an SWL and showed at the Renon Meeting of last year.

http://dl.dropbox.com/u/15089947/loop1.jpg

--
/*73 Alberto I2PHD*/

9028. Re: Photos embedded in messages

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-05 00:18:09 UTC
From: AlienRelics
Topic: 9026 Message: 9028

Beautiful!

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Alberto I2PHD <i2phd@...> wrote:
>
> There is a simple way to embed photos into messages, without resorting to the Photo or the Files folders.
> Open an account (free) on Dropbox, then upload there your photo, then compose your message to the
> Yahoo group in HTML, putting in it an <img tag, specifying the Dropbox link as source. Quite easy
> to do with Thunderbird. And if you specify the same URL for the Alternate Text of the image, it can
> be viewed also by those scared by HTML, who read the messages in text mode only, or by those who
> prefer to receive messages in Digest form.
>
> Here is an example. This is a MW/SW indoor loop, built by an SWL and showed at the Renon Meeting of last year.
>
> http://dl.dropbox.com/u/15089947/loop1.jpg
>
> --
> /*73 Alberto I2PHD*/
>

9029. Re: [loopantennas] Re: Photos embedded in messages

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-05 09:38:53 UTC
From: brian nsl
Topic: 9026 Message: 9029

Alberto,
Thank you for an interesting photo, have you any idea of the loop size / scale ?????
72, Brian, GØNSL-QRP.
----- Original Message -----
From: AlienRelics
To: loopantennas@yahoogroups.com
Sent: Thursday, April 05, 2012 1:18 AM
Subject: [loopantennas] Re: Photos embedded in messages

9030. Re: Photos embedded in messages

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-05 14:31:50 UTC
From: adibene
Topic: 9026 Message: 9030

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Alberto,
> Thank you for an interesting photo, have you any idea of
> the loop size / scale ?????
> 72, Brian, GÃ□NSL-QRP.

Brian,

no, sorry... I took that photo at a meeting about SDR last year, where an SWL showed his home-built loop. But I have no other data, I don't even remember who was the builder...

I just remember that he claimed a very high Q, and a sharp tuning of the loop, but that's all....

73 Alberto I2PHD

9031. Re: [loopantennas] Re: Photos embedded in messages

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-05 15:43:54 UTC
From: brian nsl
Topic: 9026 Message: 9031

Alberto,
Thank you for the comments.
Using a few ' assumed ' sizes for the plywood and other bits
I guess the diameter to be around 20 - 25 cm diameter.
Does that sound about right from what you recall at the meeting ????
Regards,
72, Brian, GØNSL-QRP.
----- Original Message -----
From: adibene
To: loopantennas@yahoogroups.com
Sent: Thursday, April 05, 2012 3:31 PM
Subject: [loopantennas] Re: Photos embedded in messages

9032. Re: Photos embedded in messages

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-07 13:57:30 UTC
From: adibene
Topic: 9026 Message: 9032

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Alberto,
> Thank you for the comments.
> Using a few ' assumed ' sizes for the plywood and other bits
> I guess the diameter to be around 20 - 25 cm diameter.
> Does that sound about right from what you recall at the meeting ????
> Regards,
> 72, Brian, GØNSL-QRP.

Brian,

maybe a little more... my hand, wide open, measures about 23 cm from the tip of the little finger to the tip of the thumb.

I guess that the top front side of the wooden cabinet has more or less the dimension of my hand so measured. So the loop itself perhaps is near to 35 - 40 cm. A biometric guesswork.... {:)

73 Alberto I2PHD

9033. Re: [loopantennas] Re: Photos embedded in messages

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-07 14:21:36 UTC
From: brian nsl
Topic: 9026 Message: 9033

Alberto,
What is that measured in biblical units, a span hi!
We are getting there slowly bit by bit, just pure curiosity.
Happy Easter,
72, Brian, GØNSL -QRP.
----- Original Message -----
From: adibene
To: loopantennas@yahoogroups.com
Sent: Saturday, April 07, 2012 2:57 PM
Subject: [loopantennas] Re: Photos embedded in messages

9034. CRT Degaussing coil, anybody tried one for a loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-07 17:37:05 UTC
From: Phil
Topic: 9034 Message: 9034

Hi All,
I just found an old TV in the dumpster that had it's back off, so I snagged the circuit board (good for parts) and the degaussing coil. At first I passed the coil by, but then on second thought went back and snagged it.

It's resistance reads 20 Ohms, so it must have a fair number of turns in it. When spread out in rough circle it's a bit over 3 feet in diameter.

Question: Has anybody tried using one as an "untuned loop" for LF (perhaps in the 200-530KCs range)? If so, how well did it work?

--
73 de Phil, KO6BB
http://ko6bb1.multiply.com/ (OTR Blog)
http://www.qsl.net/ko6bb/ (Web Page)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006)& G6 (2011).
Icom: R-75 with Two 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
RFspace: SDR-IQ (circa 2012)
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrewed LF Pre-Amp, MFJ-949E HF Tuner
Homebrewed 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole, Apex at 35 feet.
Ratzlaff Active Whip up 24 feet for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

9035. Re: [loopantennas] CRT Degaussing coil, anybody tried one for a loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-07 20:40:20 UTC
From: Tim Hills
Topic: 9034 Message: 9035

Phil:

Too many turns close together, distributed capacitance on those is VERY high. Most post-tube degaussing coils are an Aluminum alloy wire that has high resistance so even if you could tune it the Q would be very low anyway.

Might be useful on VLF or ELF since it was designed for 50-60Hz. Unwound the wire is too soft to use as antenna wire.

Hooked up to a 12VAC/1A or better transformer you could probably use it as a degaussing coil...

Tim Hills
Sioux Falls, SD

On 4/7/2012 12:37, Phil wrote:
>
> Hi All,
> I just found an old TV in the dumpster that had it's back off, so I
> snagged the circuit board (good for parts) and the degaussing coil. At
> first I passed the coil by, but then on second thought went back and
> snagged it.
>
> It's resistance reads 20 Ohms, so it must have a fair number of turns in
> it. When spread out in rough circle it's a bit over 3 feet in diameter.
>
> Question: Has anybody tried using one as an "untuned loop" for LF
> (perhaps in the 200-530KCs range)? If so, how well did it work?
>

9036. Re: [loopantennas] CRT Degaussing coil, anybody tried one for a loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-07 21:47:39 UTC
From: Phil
Topic: 9034 Message: 9036

Thank you Tim,
I was afraid that was the case, but thought I'd ask anyway as the price
was right. Later this summer, before the winter listening season sets
in I plan on building a Varactor remote tuned loop for the 200-530KHz
range, something small enough to fit on a rotator above the roofline,
but large enough to hear something :)

73 de Phil, KO6BB
http://ko6bb1.multiply.com/ (OTR Blog)
http://www.qsl.net/ko6bb/ (Web Page)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006)& G6 (2011).
Icom: R-75 with Two 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
RFspace: SDR-IQ (circa 2012)
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrewed LF Pre-Amp, MFJ-949E HF Tuner
Homebrewed 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole, Apex at 35 feet.
Ratzlaff Active Whip up 24 feet for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

On 4/7/2012 8:40 PM, Tim Hills wrote:
>
>
> Phil:
>
> Too many turns close together, distributed capacitance on those is
> VERY high. Most post-tube degaussing coils are an Aluminum alloy wire
> that has high resistance so even if you could tune it the Q would be
> very low anyway.
>
> Might be useful on VLF or ELF since it was designed for 50-60Hz.
> Unwound the wire is too soft to use as antenna wire.
>
> Hooked up to a 12VAC/1A or better transformer you could probably use
> it as a degaussing coil...
>
> Tim Hills
> Sioux Falls, SD
>
> On 4/7/2012 12:37, Phil wrote:

>>
>> Hi All,
>> I just found an old TV in the dumpster that had it's back off, so I
>> snagged the circuit board (good for parts) and the degaussing coil. At
>> first I passed the coil by, but then on second thought went back and
>> snagged it.
>>
>> It's resistance reads 20 Ohms, so it must have a fair number of turns in
>> it. When spread out in rough circle it's a bit over 3 feet in diameter.
>>
>> Question: Has anybody tried using one as an "untuned loop" for LF
>> (perhaps in the 200-530KCs range)? If so, how well did it work?
>>
>
>
>
>

9037. Re: [loopantennas] CRT Degaussing coil, anybody tried one for a loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-08 02:07:50 UTC
From: Tim Hills
Topic: 9034 Message: 9037

No problem Phil.

I had the same idea years ago when repairing TVs was my bread and butter.

The one I experimented with was out of a 25" Zenith System II (?)
console. The self resonance of the degaussing coil was about 80KHz so
one might be useful for a WWVB receiver.

Tim Hills
Sioux Falls, SD

On 4/7/2012 16:47, Phil wrote:
>
> Thank you Tim,
> I was afraid that was the case, but thought I'd ask anyway as the price
> was right. Later this summer, before the winter listening season sets
> in I plan on building a Varactor remote tuned loop for the 200-530KHz
> range, something small enough to fit on a rotator above the roofline,
> but large enough to hear something :)
>
> 73 de Phil, KO6BB
> http://ko6bb1.multiply.com/ (OTR Blog)
> http://www.qsl.net/ko6bb/ (Web Page)
>
> RADIOS:
> Grundigs: Satellit 750 (2011), S-350 (2006)& G6 (2011).
> Icom: R-75 with Two 250Hz CW Filters.
> Kenwood: TS130S HF Transceiver (circa 1980).
> Radio Shack: DX-380 digital portable (circa 1990).
> RFspace: SDR-IQ (circa 2012)
> Zenith: Royal-7000 Transoceanic (circa 1969).
>
> ACCESSORIES: Homebrewed LF Pre-Amp, MFJ-949E HF Tuner
> Homebrewed 6 Hz Filter.
>
> ANTENNAS: 88' Long Ladder-line fed dipole, Apex at 35 feet.
> Ratzlaff Active Whip up 24 feet for LF/MW
> Merced, Central California, 37.3N 120.48W CM97sh
>
> On 4/7/2012 8:40 PM, Tim Hills wrote:
> >
> >
> > Phil:
> >
> > Too many turns close together, distributed capacitance on those is
> > VERY high. Most post-tube degaussing coils are an Aluminum alloy wire

> > that has high resistance so even if you could tune it the Q would be
> > very low anyway.
> >
> > Might be useful on VLF or ELF since it was designed for 50-60Hz.
> > Unwound the wire is too soft to use as antenna wire.
> >
> > Hooked up to a 12VAC/1A or better transformer you could probably use
> > it as a degaussing coil...
> >
> > Tim Hills
> > Sioux Falls, SD
> >
> > On 4/7/2012 12:37, Phil wrote:
> >>
> >> Hi All,
> >> I just found an old TV in the dumpster that had it's back off, so I
> >> snagged the circuit board (good for parts) and the degaussing coil. At
> >> first I passed the coil by, but then on second thought went back and
> >> snagged it.
> >>
> >> It's resistance reads 20 Ohms, so it must have a fair number of
> turns in
> >> it. When spread out in rough circle it's a bit over 3 feet in diameter.
> >>
> >> Question: Has anybody tried using one as an "untuned loop" for LF
> >> (perhaps in the 200-530KCs range)? If so, how well did it work?
> >>
> >
> >
> >
> >
>
>
>

9038. Loop in photo (was:Photos embedded in messages)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-08 18:08:59 UTC
From: iv3zbl
Topic: 9026 Message: 9038

http://www.arimontegrappa.it/i3vom.html

Happy Easter.
72/773 de Andrea IV3ZBL

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Alberto,
> What is that measured in biblical units, a span hi!
> We are getting there slowly bit by bit, just pure curiosity.
> Happy Easter,
> 72, Brian, GØNSL -QRP.

9039. Re: [loopantennas] Loop in photo (was:Photos embedded in messages)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-09 06:50:35 UTC
From: brian nsl
Topic: 9026 Message: 9039

Andrea,
Very many thanks for the loop article, most interesting
to read.
Happy Easter,
72, Brian, GØNSL-QRP.
----- Original Message -----
From: iv3zbl
To: loopantennas@yahoogroups.com
Sent: Sunday, April 08, 2012 7:08 PM
Subject: [loopantennas] Loop in photo (was:Photos embedded in messages)

9040. New USA personal (non commercial) TOA Lightning detection network.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-04-27 22:30:45 UTC
From: compu_friend
Topic: 9040 Message: 9040

Hi Everyone,

(Two loops are used for this Lightning detection system.)

We are starting up a new TOA lightning detection network for private weather stations here in the USA. Europe has a well established system that we are expanding to the USA. In a nutshell, you put up your own detection station that feeds the net here in the USA. The system gives only station owners producing data, any data from the system.
This is a private non commercial system for your use only. The software is free, the hardware is at cost for the core parts. Cables, PS module and such have to be obtained. If your interested in finding out what its all about, start here and look the European system over. They have 412 stations in use all over Europe. We are just starting of course. This is an extension of the European system, so its already operating. It's also starting up in the NZ area. Here is a link to look into it.

http://www.usatoa.com/

Here you will find the USA forum and links to all the other info.

Gerry, San Antonio Texas

9041. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-01 11:57:56 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 9041

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

9042. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-01 11:57:56 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 9042

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Please crop in to the important parts. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. Please do not use TIFF/TIF or BMP files, the file size is way too big and I may delete without notice.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

Attachments are now allowed, but please use judiciously. Rather than going out with the messages, they will be stored on the list but you'll get a link with the message.

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

9043. Remote varactor tuning

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-01 22:41:46 UTC
From: Craig Cochran
Topic: 9043 Message: 9043

I post this knowing it does not deal with loop antennas, but with varactor tuning. I know some members are quite proficient at remote tuning.
I listen to shortwave radio in my car using my portable radio. I have built a resonant antenna. The system consists of a magnetic mount base, a loading coil, and a 4 foot whip. The magnetic mount has a coax feed which goes into the external antenna jack of the radio. Of course the antenna is only resonant for a single band. If I want good reception on another band, I have to change the coil.
I would like to tune the antenna from inside the car using a varactor diode mounted inside the loading coil. I suppose the varactor should be connected in parallel with the coil. (I would like to send the DC tuning voltage through the coax feed line, but I doubt that would be possible when using a magnetic mount antenna. I will use a separate pair of wires if I need to.) But the problem I foresee is my DC line will detune my resonating coil unless I can find a method to isolate the coil from my remote tuning circuit. Would a choke (or maybe 2 chokes) work for that?
If someone knows how to solve this problem, I would really appreciate a schematic of the circuitry.

9044. Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-02 09:59:46 UTC
From: Jim
Topic: 5136 Message: 9044

Thanks a lot for compiling all those links. It will make it easier to determine what I need for MW listening. Jim

--- In loopantennas@yahoogroups.com, loopantennas@yahoogroups.com wrote:
>
>
> Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
> http://www.ccrane.com/antennas/am-antennas/
>
> JLKolb's antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
> http://jlkolb.cts.com/site/ant.htm
>
> Directional Terminated MW/LW Loop by WellBroook (UK)
> K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
> http://www.wellbrook.uk.com/K9AY.html
>
> Kiwa - High Performance MW Air-Core Loop Antenna
> High Performance MW Air-Core Loop Antenna by KIWA
> http://www.kiwa.com/kiwaloop.html
>
> Palomar Engineers Loop Antennas LW-MW-SW2
> Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
> http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html
>
> The Quantum loop antennas, now V2.0
> http://www.dxtools.com/
>
> Terk AM loop at Amazon.com
> Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
> http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719
>
> WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
> http://wl1030.com/content/
>
> C Crane Company
> They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
> http://www.ccrane.com
>
> Kiwa Electronics

> Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
> http://www.kiwa.com
>
> Stormwise Ferrite Rods
> Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
> http://www.stormwise.com
>
> Universal Radio Company
> They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
> http://www.rffun.com
>
>
> ALA-1530
> Find the best UK LF/MF antenna here.
> http://www.wellbrook.uk.com/
>
> AOR
> This is the site that sells the AOR loop
> http://www.aorja.com/ant-e.html
>
> Kiwa Electronics
> The maker of the air core loop antenna and other useful items that you may want on your wish list.
> http://www.kiwa.com
>
> LF Engineering Company
> A group of engineers, who make products for VLF/LF listening even ELF loops!
> http://www.lfengineering.com
>
> Select A Tenna by Intensitronics Corp
> The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
> discontinued
>
> Terk Technolegies
> The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
> http://www.terk.com
>
> Torus Tuner Loop Company
> A very specially made loop that is almost as big as a hula hoop
> discontinued
>
>
> GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
> Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW

Reception" ULR Address: http://www.grahn-spezialantennen.de/
> Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
> http://makeashorterlink.com/?Z5F025FE4
>
>
> When considering AM Loop Antennas . . .
> - - - It all comes down to Time? & Money?
>
> How much Time? Are you going to be 'using' the Loop Antenna for
> DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio
> Loop).
>
> How Much Money? Are you willing to spend for a Loop Antenna to get
> the kind of better reception you want.
>
> TBL: Time and Money translates to the AM Loop Antenna's Value to You.
>
>
> The average radio listener (97%), who wants better AM Radio
> Reception, can spend $100 or less and get an AM Loop Antenna that
> meets their needs.
>
> Here is a brief list of the more common AM Loop Antennas for $100 or
> less.
>
> * Twin Coil Ferrite AM Loop Antenna (Active)
> - - - http://www.ccrane.com/antennas/am-antennas/
>
> * Torus Tuner 27" Loop Antenna (Passive)
> - - - discontinued
>
> * Select-A-Tenna Model #541M (Passive)
> - - - discontinued
>
> * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>
> * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)
>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>

> #1. * Justice AM Loop Antenna (Active)
> > - - - discontinued
> >
>
> #2. * Torus Tuner 27" Loop Antenna (Passive)
> > - - - website gone
> >
>
> #3. * Select-A-Tenna Model #541M (Passive)
> > - - - website gone
> >
>
> #4. * Terk AM Advantage Loop Antenna (Passive)
> > - - - http://www.ccrane.com/antennas/am-antennas/
> >
>
> #5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> > - - - Discontinued (Find 'used' on eBay)
>
>
> >
> > * MTM Scientific AM Radio Loop Antenna (Passive)
> > * http://www.mtmscientific.com/loop.html
> > - - - Starter Kit, Deluxe Kit or Finished Antenna!
> >
> > * * * Home made 'Box' AM Loop Antennas
> > - Usually 20" to 24" in size
> > - - Generally a simple Passive antenna
> > - - - Can be made Active with an add-on amplifier
> >
> >
> > NOTE: Beyond $100 in the $200 to $400 range are the
> >
>
> #1.a. Kiwa MW Air Loop Antenna
>
> #1.b. Quantum Loop Antennas
>
> . . . #3. Palomar Loop Antenna
>
>
> Basic Wire Back Yard Loop Antennas
> Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
> http://www.radioworks.com/nloop.html
>
> K9AY: How to Build the K9AY Loop Receiving Antenna
> AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.

> http://www.aytechnologies.com/Products/products.htm
>
> Six Foot Square by Six Turn Loop Antenna
> New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
> http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm
>
> Ten Foot Receiveing Loop for Low-Frequency DXing
> A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
> http://members.shaw.ca/ve7sl/loop.html
>
>
> Dave's HomeMade Loop Antennas
> This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
> http://www.schmarder.com/radios/misc-stuff/loops.htm
>
> 4 Foot Box loop antenna
> Heres a 4 foot loop project by Bruce
> http://www.mindspring.com/~brucec/loop2.htm
>
> ATL-3 Loop Antenna by Graham Maynard (UK)
> Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
> http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm
>
> Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
> The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
> http://www.radiointel.com/anthooploop.htm
>
> DXers Tool Box - DIY - Tuned Loop Antenna
> The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
> http://www.geocities.com/SunsetStrip/Underground/8585/loop.html
>
> Embrodary Loops
> While these loop are for crafts, they can be a craft of art for improved AM radio reception!
> http://www.craftking.com/crafthtml/embroidery_loops.htm
>
> Hard Core DXing
> Here's what nordic dx has to offer in their discription of loops in this website
> http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html
>
> K5DKZ - Three Foot Box Loop Antenna Kit
> Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH

> http://www.k5dkz.com/4loop1.html
>
> KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
> KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
> http://www.mtmscientific.com/loop.html
>
> Long LoopStick Antenna for MW DXing
> Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
> http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm
>
> TL Loop Receiving Antenna 10 KHz - 30 MHz
> The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
> http://ecforster.netfirms.com/LpAnt/Doc1.html
>
>
> W2BRI Xmit Loops Contributed by n3hkn
> Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
> http://www.standpipe.com/w2bri/index.htm
>
> "AM Loop Antenna Calculator" - by Bruce Carter
> Here is a Great Tool for those Loop Antenna => "What Ifs...."
> http://www.mindspring.com/~loop_antenna/amloop_calc4.htm
>
> "Loop Antennas 101" Read This First
> Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
> http://www.frontiernet.net/~jadale/Loop.htm
>
> * NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
> Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
> http://www.mindspring.com/~loop_antenna/
>
> Loop Antennas at Hard Core DX
> TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Loops and Rods =&= The Ferrite Rod Antenna
> Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The

ferrite has the effect of intensifying the magnetic field inside the loop.
> http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html
>
> Modify the common AM Radio Loop Antenna
> Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Sensitivity of Multi Turn Receiving Loops
> LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
> http://www.vlf.it/octoloop/rlt-n4ywk.htm
>
> Using the Small Loop Antenna by Joe Carr
> DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
> http://www.dxing.com/tnotes/tnote09.pdf
>
>
> How to Get Better AM Radio Reception
> Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
> http://geocities.com/SunsetStrip/Towers/3332/amradio.html
>
> Introduction to Broadcast Band AM/BCB/MW DXing
> The International Radio Club of America (IRCA) WebPages
> http://www.geocities.com/Heartland/5792/bcbdx.htm
>
>
> ** Radio-Antenna-PRO ** H.Hertz-Forum
> Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
> http://groups.yahoo.com/group/Hz/
>
>
> Radio DXing with The Interference Problem
> This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
> http://groups.yahoo.com/group/RadioDx/
>
>
> "3805er" 80-Meter balanced coax loop
> Small shielded rx only loop for 80 meters
> http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm
>
> Magnetic Loop Antennas Receiving - by W8JI

> This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
> http://www.w8ji.com/magnetic_receiving_loops.htm
>
> Radiation and Fields (Magnetic Loop Antennas) - by W8JI
> This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
> http://www.w8ji.com/radiation_and_fields.htm
>
> Shielded-Loop Receiving Antenna by N5FC
> Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
> http://www.io.com/~n5fc/loop_ant.html
>
> Antique Electronic Supply
> A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
> http://www.tubesandmore.com
>
> Fair Radio Sales
> A wide variety of electronic components, radios, and variable capacitors for your loop antenna
> http://www.fairradio.com/
>
> Ocean State Electronics
> Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
> http://www.oselectronics.com/ose_p96.htm
>
> The Crystal Set Society
> Here are some capacitor available from a club that devotes to Crystal Set Radio
> http://www.midnightscience.com/catalog5.html
>
> The Surplus Sales of Nebraska
> This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
> http://www.surplussales.com/Variables/AirVariables/AirVar1.html
>
>
> Dan Small Parts and Kits
> Dan's wide selection from Canada.
> http://www.danssmallpartsandkits.net/
>
>
> American Science and Surplus
> A big spool of wire here just about for AM
> http://www.sciplus.com/category.cfm?subsection=15&category=150
>
> DigiKey.com
> For ribbon cable and other sorts of wire.
> http://www.digikey.com

>
> Femco Magnet Wire
> Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
> http://www.femcomagnetwire.com/
>
> Litz-Wire,com
> Welcome to Litz-Wire.com!
> http://www.litz-wire.com/
>
> MCM electronics
> They do sell wire and magnet wire here
> http://www.mcmelectronics.com
>
> MWS Industries
> A place for all sorts of wire for business and industry
> http://www.mwswire.com
>
> Magnet Wire from Radio Shack
> This is what I use often
> http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345
>
> Mouser Electronics
> Mouser has the biggest spools here for a great price, that makes sense
> http://www.mouser.com
>
> Ocean State Electronics
> magnet wire at a good price
> http://www.oselectronics.com
>
> WIRE "Flex-Weave" Antenna Wire
> "Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
> http://www.radio-ware.com/products/fw.htm
>
> WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
> "QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
> http://www.antennasmore.com/wire&.htm
>
> Scanning, Ham Radio and Public Safety Resources
> - Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
> http://myweb.accessus.net/~090/resources-ps.html

>
> Amidon Ferrite rods, bars, plates, and tubes.
> https://www.amidoncorp.com/
>
> Bytemark Ferrite rods, bars, plates, and tubes.
> http://www.bytemark.com/products/rod1.htm
>

9045. RE: [***** SPAM 5.1 *****] [loopantennas] Re: File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-02 20:32:50 UTC
From: David Taylor
Topic: 5136 Message: 9045

Nice list-thanks!

_____

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Jim
Sent: Wednesday, May 02, 2012 3:00 AM
To: loopantennas@yahoogroups.com
Subject: [***** SPAM 5.1 *****] [loopantennas] Re: File - Links.txt

Thanks a lot for compiling all those links. It will make it easier to determine what I need for MW listening. Jim

--- In loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com>, loopantennas@yahoogroups.com <mailto:loopantennas%40yahoogroups.com> wrote:
>
>
> Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
> http://www.ccrane.com/antennas/am-antennas/
>
> JLKolb's antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
> http://jlkolb.cts.com/site/ant.htm
>
> Directional Terminated MW/LW Loop by WellBroook (UK)
> K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
> http://www.wellbrook.uk.com/K9AY.html
>
> Kiwa - High Performance MW Air-Core Loop Antenna
> High Performance MW Air-Core Loop Antenna by KIWA
> http://www.kiwa.com/kiwaloop.html
>
> Palomar Engineers Loop Antennas LW-MW-SW2
> Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
> http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html
>
> The Quantum loop antennas, now V2.0
> http://www.dxtools.com/
>
> Terk AM loop at Amazon.com
> Here is a place you can buy yourself a TERK AM loop antenna, even some

other stuff that is kind of off topic to talk about. 73
>
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=
sr_2_1/102-8712984-4397719
>
> WL1030 by the late Maartenhagg. Plans placed on this website by his
friends in his honor.
> http://wl1030.com/content/
>
> C Crane Company
> They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
> http://www.ccrane.com
>
> Kiwa Electronics
> Kwia makes the best products for you and your radio equipment, and also
improves things that needed improvement a long time ago.
> http://www.kiwa.com
>
> Stormwise Ferrite Rods
> Get some huge ferrite rods and a converter to go along with its, heck it
even comes with project book.
> http://www.stormwise.com
>
> Universal Radio Company
> They sell all sorts of loops big and small for LW/MW/SW and VLF also 10
kHz to 15 MHz
> http://www.rffun.com
>
>
> ALA-1530
> Find the best UK LF/MF antenna here.
> http://www.wellbrook.uk.com/
>
> AOR
> This is the site that sells the AOR loop
> http://www.aorja.com/ant-e.html
>
> Kiwa Electronics
> The maker of the air core loop antenna and other useful items that you may
want on your wish list.
> http://www.kiwa.com
>
> LF Engineering Company
> A group of engineers, who make products for VLF/LF listening even ELF
loops!
> http://www.lfengineering.com
>
> Select A Tenna by Intensitronics Corp
> The maker of the select A tenna, a great AM loop antenna that is a little
bigger than the terk

> discontinued
>
> Terk Technolegies
> The maker of the best sold AM and I use also called the AM-1000 AM loop
antenna, there is also technical information on how it works.
> http://www.terk.com
>
> Torus Tuner Loop Company
> A very specially made loop that is almost as big as a hula hoop
> discontinued
>
>
> GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception
Contributed by radiohighfreq
> Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas.
Translated from the Gremany Language Webpages here is the "Grahn Specialized
Loop Antennas for MW and SW Reception" ULR Address:
http://www.grahn-spezialantennen.de/
> Use the Google Translate a web Page Tool
http://www.google.com/language_tools to convert these webpages to English.
> http://makeashorterlink.com/?Z5F025FE4
>
>
> When considering AM Loop Antennas . . .
> - - - It all comes down to Time? & Money?
>
> How much Time? Are you going to be 'using' the Loop Antenna for
> DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio
> Loop).
>
> How Much Money? Are you willing to spend for a Loop Antenna to get
> the kind of better reception you want.
>
> TBL: Time and Money translates to the AM Loop Antenna's Value to You.
>
>
> The average radio listener (97%), who wants better AM Radio
> Reception, can spend $100 or less and get an AM Loop Antenna that
> meets their needs.
>
> Here is a brief list of the more common AM Loop Antennas for $100 or
> less.
>
> * Twin Coil Ferrite AM Loop Antenna (Active)
> - - - http://www.ccrane.com/antennas/am-antennas/
>
> * Torus Tuner 27" Loop Antenna (Passive)
> - - - discontinued
>
> * Select-A-Tenna Model #541M (Passive)

> - - - discontinued
>
> * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.terk.com/pdfs/Advantage.pdf
>
> * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)
>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html
> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> #1. * Justice AM Loop Antenna (Active)
> > - - - discontinued
> >
>
> #2. * Torus Tuner 27" Loop Antenna (Passive)
> > - - - website gone
> >
>
> #3. * Select-A-Tenna Model #541M (Passive)
> > - - - website gone
> >
>
> #4. * Terk AM Advantage Loop Antenna (Passive)
> > - - - http://www.ccrane.com/antennas/am-antennas/
> >
>
> #5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> > - - - Discontinued (Find 'used' on eBay)
>
>
> >
> > * MTM Scientific AM Radio Loop Antenna (Passive)
> > * http://www.mtmscientific.com/loop.html
> > - - - Starter Kit, Deluxe Kit or Finished Antenna!
> >
> > * * * Home made 'Box' AM Loop Antennas
> > - Usually 20" to 24" in size
> > - - Generally a simple Passive antenna
> > - - - Can be made Active with an add-on amplifier
> >
> >
> > NOTE: Beyond $100 in the $200 to $400 range are the

> >
>
> #1.a. Kiwa MW Air Loop Antenna
>
> #1.b. Quantum Loop Antennas
>
> . . . #3. Palomar Loop Antenna
>
>
> Basic Wire Back Yard Loop Antennas
> Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
> http://www.radioworks.com/nloop.html
>
> K9AY: How to Build the K9AY Loop Receiving Antenna
> AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
> http://www.aytechnologies.com/Products/products.htm
>
> Six Foot Square by Six Turn Loop Antenna
> New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
> http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm
>
> Ten Foot Receiveing Loop for Low-Frequency DXing
> A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
> http://members.shaw.ca/ve7sl/loop.html
>
>
> Dave's HomeMade Loop Antennas
> This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
> http://www.schmarder.com/radios/misc-stuff/loops.htm
>
> 4 Foot Box loop antenna
> Heres a 4 foot loop project by Bruce
> http://www.mindspring.com/~brucec/loop2.htm
>
> ATL-3 Loop Antenna by Graham Maynard (UK)
> Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
> http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm
>
> Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus

> The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
> http://www.radiointel.com/anthooploop.htm
>
> DXers Tool Box - DIY - Tuned Loop Antenna
> The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
> http://www.geocities.com/SunsetStrip/Underground/8585/loop.html
>
> Embrodary Loops
> While these loop are for crafts, they can be a craft of art for improved AM radio reception!
> http://www.craftking.com/crafthtml/embroidery_loops.htm
>
> Hard Core DXing
> Here's what nordic dx has to offer in their discription of loops in this website
> http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html
>
> K5DKZ - Three Foot Box Loop Antenna Kit
> Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
> http://www.k5dkz.com/4loop1.html
>
> KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
> KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
> http://www.mtmscientific.com/loop.html
>
> Long LoopStick Antenna for MW DXing
> Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
> http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm
>
> TL Loop Receiving Antenna 10 KHz - 30 MHz
> The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
> http://ecforster.netfirms.com/LpAnt/Doc1.html
>
>
> W2BRI Xmit Loops Contributed by n3hkn
> Ham Radio xmitting loops. Detailed plans and reports from Hams

experiences. Typical cost is $50 for pipe, capacitor, motor.
> http://www.standpipe.com/w2bri/index.htm
>
> "AM Loop Antenna Calculator" - by Bruce Carter
> Here is a Great Tool for those Loop Antenna => "What Ifs...."
> http://www.mindspring.com/~loop_antenna/amloop_calc4.htm
>
> "Loop Antennas 101" Read This First
> Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
> http://www.frontiernet.net/~jadale/Loop.htm
>
> * NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
> Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
> http://www.mindspring.com/~loop_antenna/
>
> Loop Antennas at Hard Core DX
> TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Loops and Rods =&= The Ferrite Rod Antenna
> Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
> http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html
>
> Modify the common AM Radio Loop Antenna
> Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
> http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html
>
> Sensitivity of Multi Turn Receiving Loops
> LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
> http://www.vlf.it/octoloop/rlt-n4ywk.htm
>
> Using the Small Loop Antenna by Joe Carr
> DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
> http://www.dxing.com/tnotes/tnote09.pdf
>
>
> How to Get Better AM Radio Reception

> Features Loop Antennas and much more. The Antenna is 90% of Your Radio.
Still Need More Signal? Try a Better Antenna.
> http://geocities.com/SunsetStrip/Towers/3332/amradio.html
>
> Introduction to Broadcast Band AM/BCB/MW DXing
> The International Radio Club of America (IRCA) WebPages
> http://www.geocities.com/Heartland/5792/bcbdx.htm
>
>
> ** Radio-Antenna-PRO ** H.Hertz-Forum
> Remember you may need some Russian Text software for this groupThe
international forum for radioengineers, scientists and hams. All about
radioelectronics, radiocommunications, radiophysics, electrodynamics. About
250 members from 20 countries. In Russian language. Very active. Lot of
interesting researches and discussions.
> http://groups.yahoo.com/group/Hz/
>
>
> Radio DXing with The Interference Problem
> This is great for that annoying problem you have with your loop antenna,
and you may think its the loop, think again it could be that messed up
street light, next doors dimmer switch, and other something else you can't
probably solve with just a loop antenna.
> http://groups.yahoo.com/group/RadioDx/
>
>
> "3805er" 80-Meter balanced coax loop
> Small shielded rx only loop for 80 meters
>
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805e
r.htm
>
> Magnetic Loop Antennas Receiving - by W8JI
> This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields -
Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
> http://www.w8ji.com/magnetic_receiving_loops.htm
>
> Radiation and Fields (Magnetic Loop Antennas) - by W8JI
> This WebPage's Topic Are: - Electric Field - Magnetic Field -
ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel
Zone - Farfield - Summary - by W8JI
> http://www.w8ji.com/radiation_and_fields.htm
>
> Shielded-Loop Receiving Antenna by N5FC
> Shielded-Loop antennas have some nice properties that make them desirable
as portable receiving antennas.
> http://www.io.com/~n5fc/loop_ant.html
>
> Antique Electronic Supply
> A sorts of older variable tuning capacitors for your loop antenna that

needs one bad.
> http://www.tubesandmore.com
>
> Fair Radio Sales
> A wide variety of electronic components, radios, and variable capacitors
for your loop antenna
> http://www.fairradio.com/
>
> Ocean State Electronics
> Rhode Island's best selection for a wide variety of the best tuning
capacitors for reasonable price, tell them that electronicdx (Adam Ebel)
sent you.
> http://www.oselectronics.com/ose_p96.htm
>
> The Crystal Set Society
> Here are some capacitor available from a club that devotes to Crystal Set
Radio
> http://www.midnightscience.com/catalog5.html
>
> The Surplus Sales of Nebraska
> This surplus store based in the state of Nebraska, has the one you might
need, but they have minumim order policy
> http://www.surplussales.com/Variables/AirVariables/AirVar1.html
>
>
> Dan Small Parts and Kits
> Dan's wide selection from Canada.
> http://www.danssmallpartsandkits.net/
>
>
> American Science and Surplus
> A big spool of wire here just about for AM
> http://www.sciplus.com/category.cfm?subsection=15
<http://www.sciplus.com/category.cfm?subsection=15&category=150>
&category=150
>
> DigiKey.com
> For ribbon cable and other sorts of wire.
> http://www.digikey.com
>
> Femco Magnet Wire
> Femco Magnet Wire is a joint venture company that has been supplying round
insulated copper magnet (winding) wire to the transplant market since 1988.
> http://www.femcomagnetwire.com/
>
> Litz-Wire,com
> Welcome to Litz-Wire.com!
> http://www.litz-wire.com/
>
> MCM electronics

> They do sell wire and magnet wire here
> http://www.mcmelectronics.com
>
> MWS Industries
> A place for all sorts of wire for business and industry
> http://www.mwswire.com
>
> Magnet Wire from Radio Shack
> This is what I use often
> http://www.radioshack.com/product.asp?catalog%5Fname=CTLG
<http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=C
TLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345>
&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345
>
> Mouser Electronics
> Mouser has the biggest spools here for a great price, that makes sense
> http://www.mouser.com
>
> Ocean State Electronics
> magnet wire at a good price
> http://www.oselectronics.com
>
> WIRE "Flex-Weave" Antenna Wire
> "Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven
#36 solid copper wires that provide high strength and extreme flexibility.
The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire
size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in
areas with high ice and wind loading).
> http://www.radio-ware.com/products/fw.htm
>
> WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong,
Flexible and Durable
> "QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has
more than 41 Strands tightly twisted together under its Flexible Insulation
making it both Strong, Flexible and Durable.
> http://www.antennasmore.com/wire <http://www.antennasmore.com/wire&.htm>
&.htm
>
> Scanning, Ham Radio and Public Safety Resources
> - Links to the various webpages with resources for the Ham Radio Operator
and Scanning Enthusiast. Resources such as; Monitoring Police and Fire
Communications, What Antennas to use, Secret Scanner Frequencies, Radio
Programming Software, Radio Mods and Operating Tips, Professional resources
for Public Safety Management, Guidance and Self-Help.
> http://myweb.accessus.net/~090/resources-ps.html
>
> Amidon Ferrite rods, bars, plates, and tubes.
> https://www.amidoncorp.com/
>
> Bytemark Ferrite rods, bars, plates, and tubes.

> http://www.bytemark.com/products/rod1.htm
>

9046. Spam filters

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-03 18:52:27 UTC
From: AlienRelics
Topic: 5136 Message: 9046

> Subject: [***** SPAM 5.1 *****] [loopantennas] Re: File - Links.txt
>

A reminder to everyone: if your spam filter adds the word "spam" to the subject line, please take it back out before replying.

Thanks,
Steve Greenfield AE7HD

9047. 90 years of loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-04 14:11:57 UTC
From: Bruce Carter
Topic: 9047 Message: 9047

I have often looked into the history of our unique hobby, trying to find out who first patented the idea. And more importantly - the holy grail of the original math behind it. I just discovered this (starting at page 76):

http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf

This shows that the fundamentals of loop design were well known by 90 years ago. So far, this is the earliest documentation I have been able to find.

9048. Re: 90 years of loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-04 14:20:21 UTC
From: Mvs
Topic: 9047 Message: 9048

wow,
really a nice dig into the history of Loop ANTs. thanks foir the info.
--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> I have often looked into the history of our unique hobby, trying to find out who first patented the idea. And more importantly - the holy grail of the original math behind it. I just discovered this (starting at page 76):
>
> http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf
>
> This shows that the fundamentals of loop design were well known by 90 years ago. So far, this is the earliest documentation I have been able to find.
>

9049. Re: [loopantennas] 90 years of loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-04 15:13:10 UTC
From: Jack Smith
Topic: 9047 Message: 9049

Loop antennas predate the 1920s by a long time.

Hertz's discovery of electromagnetic radiation in 1885-1887 used a loop antenna - the transmitting antenna (excited by a spark coil) was a dipole, but he used a loop as the combined receiver antenna, tuned circuit and detector. He called this a "ring detector" but it's recognizable today as a single turn loop.

Greenleaf Whittier Pickard's patent no. 876996, filed June 10, 1907, granted January 21, 1908, covers exactly the subject of a tuned receiving loop - an electrically small closed loop antenna, tuned to resonance with a capacitor. If you read the patent, recall that the term "syntonization" means bringing the circuit to resonance at the desired frequency. This term was widely used in the early days of wireless but has long since dropped out of use.

Lee DeForest's patent 876165, filed May 11, 1904, granted Jan 7, 1908, describes a loop transmitting antenna. In the patent, he notes that loop antennas have long been proposed for receiving but the subject matter of his claims relate to transmitting antennas.

Jack K8ZOA

On 5/4/2012 10:11 AM, Bruce Carter wrote:
>
> I have often looked into the history of our unique hobby, trying to
> find out who first patented the idea. And more importantly - the holy
> grail of the original math behind it. I just discovered this (starting
> at page 76):
>
> http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf
>
> This shows that the fundamentals of loop design were well known by 90
> years ago. So far, this is the earliest documentation I have been able
> to find.
>
>

9050. Re: [loopantennas] Re: 90 years of loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-04 14:39:57 UTC
From: fernando talamantes
Topic: 9047 Message: 9050

WOW: IS AMAZING. Nice piece of history. tks.

--- On Fri, 5/4/12, Mvs <mvs_sarma@...> wrote:

From: Mvs <mvs_sarma@...>
Subject: [loopantennas] Re: 90 years of loop antennas
To: loopantennas@yahoogroups.com
Date: Friday, May 4, 2012, 7:20 AM

wow,
really a nice dig into the history of Loop ANTs. thanks foir the info.
--- In loopantennas@yahoogroups.com, "Bruce Carter" <rbrucecarter@...> wrote:
>
> I have often looked into the history of our unique hobby, trying to find out who first patented the idea. And more importantly - the holy grail of the original math behind it. I just discovered this (starting at page 76):
>
> http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf
>
> This shows that the fundamentals of loop design were well known by 90 years ago. So far, this is the earliest documentation I have been able to find.
>

9051. Re: [loopantennas] 90 years of loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-04 20:04:06 UTC
From: Myamiphil
Topic: 9047 Message: 9051

Great find, thanks for sharing.

I have found similar old documents on Google+ under theiir books selection. They've scanned many books which are out of copyright. I've found many historical document on town history, railroads and trolly system and Interurbans.

I just look up a topic and all sorts of stuff comes up.

Best Regards

Phil
Lat: 40.8367633
Long: -74.1768412

From: Bruce Carter <rbrucecarter@...>
To: loopantennas@yahoogroups.com
Sent: Friday, May 4, 2012 10:11 AM
Subject: [loopantennas] 90 years of loop antennas

I have often looked into the history of our unique hobby, trying to find out who first patented the idea. And more importantly - the holy grail of the original math behind it. I just discovered this (starting at page 76):

http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf

This shows that the fundamentals of loop design were well known by 90 years ago. So far, this is the earliest documentation I have been able to find.

9052. Re: 90 years of loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-04 20:49:08 UTC
From: dannibou
Topic: 9047 Message: 9052

--- In loopantennas@yahoogroups.com, "Mvs" <mvs_sarma@...> wrote:
I just discovered this (starting at page 76)

http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf

This link show a damaged link and I can't get acces to this file. Any suggestion on how I can get acces to this file?
Danny

9053. Re: [loopantennas] Re: 90 years of loop antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-04 21:21:02 UTC
From: Zacharias Liangas
Topic: 9047 Message: 9053

For me it worked

On 4 May 2012 at 20:49, dannibou wrote:

>
>
> --- In loopantennas@yahoogroups.com, "Mvs" <mvs_sarma@...> wrote:
> I just discovered this (starting at page 76)
>
> http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf
>
> This link show a damaged link and I can't get acces to this file. Any suggestion on how I can get acces to this file?
> Danny
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

Standard rig : ICOM R75 / 2x16 V / m@h40 heads Sennheiser
Please read and distribute this 15 year research article http://tinyurl.com/5vzg7e
Please read my article on SINPO at http://tinyurl.com/yt7qjd
_____
http://zlgr.multiply.com (radio monitoring site plus audio clips) MAIN SITE
http://www.delicious.com/gr_greek1/@zach (all mypages !!)
.....
Zacharias Liangas , Thessaloniki Greece
greekdx @ otenet dot gr ---
Pesawat penerima: ICOM R75 , Lowe HF150 , Degen 1102,1103,108,
Tecsun PL200/550/600, Chibo c300/c979, Yupi 7000

Antenna: 16m hor, 2x16 m V invert, 1m australian loop

9072. I have a loop ??

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-08 22:14:06 UTC
From: Dean Wayman
Topic: 9072 Message: 9072

Does anyone have more info on the loop system that is on the page marked 22?(link below) ,and directly above that page is another pic that shows an inside loop system.

http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf
THanks for the link Bruce :) very interesting stuff

These were built for the signal corps it says ,I'm mostly interested in them for the possibility of building one for my setup ,i've seen this picture before ,maybe in the files section?

I'd really like to know the distances between loops on the roof setup and if they were using a phaser ,and any other details we can find,like what freqs they monitored etc.

The indoor loops look to be about 3 feet in size ,which according to my experimentation is all the bigger they would need to be for AM .

It must have been great to DX back then ? i bet it was very quiet compared to what we have now :)

Dean_0

9075. Re: [loopantennas] I have a loop ??

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-08 23:30:08 UTC
From: Tim Hills
Topic: 9072 Message: 9075

Most likely they were each for receiving one transmitting station.

They used to "relay" messages through different stations since range was pretty limited by today's standards. Kinda like the internet routers of their day.

Tim Hills
Sioux Falls, SD

On 5/8/2012 17:14, Dean Wayman wrote:
>
> Does anyone have more info on the loop system that is on the page
> marked 22?(link below) ,and directly above that page is another pic
> that shows an inside loop system.
>
> http://www.americanradiohistory.com/Archive-Whites/Radio-Broadcast-1922.pdf
> THanks for the link Bruce :) very interesting stuff
>
> These were built for the signal corps it says ,I'm mostly interested
> in them for the possibility of building one for my setup ,i've seen
> this picture before ,maybe in the files section?
>
> I'd really like to know the distances between loops on the roof setup
> and if they were using a phaser ,and any other details we can
> find,like what freqs they monitored etc.
>
> The indoor loops look to be about 3 feet in size ,which according to
> my experimentation is all the bigger they would need to be for AM .
>
> It must have been great to DX back then ? i bet it was very quiet
> compared to what we have now :)
>
> Dean_0
>
>
>

9076. Broomstick Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-08 23:11:55 UTC
From: dsears@shout.net
Topic: 9076 Message: 9076

Sorry, I forgot to change the subject.

> Hi All,
>
> I'm thinking about making one of these to use with my software defined
> radio:
>
> http://www.hard-core-dx.com/nordicdx/antenna/special/bromstik.html
>
> Does anyone have any experience with one of these?
>
> Thanks,
> Duane
>
>
>
>

9078. 80 meter delta loop a big success on hillside!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 01:59:38 UTC
From: The Desert Tortoise
Topic: 9078 Message: 9078

I really don't know what I want on the home front yet. A totally vertical Delta or square loop which both would fit, or something with a slope? I just put up an 80 meter delta loop in the mountains a bit of way out of town. The wire height from the ground was awful, about 2 feet high on average, but the slope of the loop left the apex about 30 feet or a little more above the base line of the loop. I had the loop pointing approx sth east. I could receive as high in the east as Nova Scotia and as far south as Florida's southern end. I made contact with the Collins user group on 40 meters and was able to talk with both their east coast and west coast moderators with a signal strength of about 5-9 to 5-10 either way. I had reception up into British Columbia and south into some Spanish speaking countries. The southern states also were an easy contact. The only stations I could hear others talking with that I couldn't even hear were those directly north of my position here in Truth or Consequences New Mexico. Colorado, Idaho, and a few others in that direction. I really am favoring the delta loop in a sloped configuration as I could buy one tower and have four loops facing all directions and just switch out the unused loops as needed. I'm going to the same hillside next week to try a square 80 with the same slope. I'll report back on that one for all.... 73's Ron KF5PTJ (New Ham) PS- I hate my call sign, just applied for a vanity... I'll let you all in on the new one if I get it..

9080. RE: [loopantennas] Broomstick Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 04:01:38 UTC
From: William Young
Topic: 9076 Message: 9080

Yes, I used something like this wound on maybe an 8 foot length of 3 or 4 inch outside diameter black PVC pipe connected to the Drake SW-4A receiver I once owned. I did not have an antenna tuner, and there was no "top hat" for capacitive loading. It lay on the floor of my apartment, and I was able to do some short wave listening with it. I wound the PVC pipe with magnet wire with space between the turns. It wasn't optimum, but it did work. Bill Young WD5HOH

To: loopantennas@yahoogroups.com
From: dsears@shout.net
Date: Tue, 8 May 2012 18:11:55 -0500
Subject: [loopantennas] Broomstick Antenna

Sorry, I forgot to change the subject.

> Hi All,
>
> I'm thinking about making one of these to use with my software defined
> radio:
>
> http://www.hard-core-dx.com/nordicdx/antenna/special/bromstik.html
>
> Does anyone have any experience with one of these?
>
> Thanks,
> Duane
>
>
>
>

9081. What kind of antenna is used for ADF aircraft loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 04:04:53 UTC
From: ka3gea
Topic: 9081 Message: 9081

Can anyone give or refer to information on what kind of loop is inside the oval shaped case used on aircraft for LW/MW NDB navigation? I have searched on line in every way I can think of and found nothing in photo or diagram form.

Thanks: Buck--KA3GEA

9084. Re: [loopantennas] What kind of antenna is used for ADF aircraft loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 06:07:09 UTC
From: Don
Topic: 9081 Message: 9084

Go To:

<http://groups.yahoo.com/group/ndblist/files/Members%27%20Personal%20Folders/steveratz/>

Don
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 08-May-12 21:04, ka3gea wrote:
> Can anyone give or refer to information on what kind of loop is inside the oval shaped case used on aircraft for LW/MW NDB navigation? I have searched on line in every way I can think of and found nothing in photo or diagram form.
>
> Thanks: Buck--KA3GEA
>
>
>

9085. Re: [loopantennas] 80 meter delta loop a big success on hillside!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 05:30:27 UTC
From: Warren McRobie
Topic: 9078 Message: 9085

Ron the delta loop is a good antenna. I am often invited to a club where they have a 80 m delta loop permanently set up - it is magic. At home I only have space for a 40 delta loop it is really good - or was till 40 got crowded out with plasma tvs and other crud producers. The beauty of feeding a delta loop with a balun instead of a matching line of coax is that it loads up perfectly on 80 and 40 or 40 and 20 depending on which band it is cut for. Cut for is a relative term when it come to delta loops they are so broad, they really only have to be in the ballpark. I only use 100 watts and am constantly met with disbelief that I am only running 100 watts, most thinking I must be running linear. The scheme of one tower and four loops sounds really good - the one thing with the delta loop is that it is not rotatable ;(. I spoke to a ham in Russia that had a bi directionally switchable pair of delta loops. He seemed to have a good front to back ratio from where I was listening ;)

73

Warren ZL3LC

> I really don't know what I want on the home front yet. A totally
> vertical Delta or square loop which both would fit, or something with
> a slope? I just put up an 80 meter delta loop in the mountains a bit
> of way out of town. The wire height from the ground was awful, about 2
> feet high on average, but the slope of the loop left the apex about 30
> feet or a little more above the base line of the loop. I had the loop
> pointing approx sth east. I could receive as high in the east as Nova
> Scotia and as far south as Florida's southern end. I made contact with
> the Collins user group on 40 meters and was able to talk with both
> their east coast and west coast moderators with a signal strength of
> about 5-9 to 5-10 either way. I had reception up into British Columbia
> and south into some Spanish speaking countries. The southern states
> also were an easy contact. The only stations I could hear others
> talking with that I couldn't even hear were those directly north of my
> position here in Truth or Consequences New Mexico. Colorado, Idaho,
> and a few others in that direction. I really am favoring the delta
> loop in a sloped configuration as I could buy one tower and have four
> loops facing all directions and just switch out the unused loops as
> needed. I'm going to the same hillside next week to try a square 80
> with the same slope. I'll report back on that one for all.... 73's Ron
> KF5PTJ (New Ham) PS- I hate my call sign, just applied for a vanity...
> I'll let you all in on the new one if I get it..
>
>
>

> No virus found in this message.
> Checked by AVG - www.avg.com <http://www.avg.com>
> Version: 2012.0.2171 / Virus Database: 2425/4985 - Release Date: 05/08/12
>

9086. Re: [loopantennas] What kind of antenna is used for ADF aircraft loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 07:44:23 UTC
From: van wd8aam
Topic: 9081 Message: 9086

<http://en.wikipedia.org/wiki/Adcock_antenna>Adcock<http://en.wikipedia.org/wiki/Adcock_antenna>
antenna - Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/Adcock_antenna
Prior to Adcock's invention, engineers had been using loop antennas
to achieve directional sensitivity. They discovered that due to
atmospheric disturbances ...

At 04:04 5/9/2012, you wrote:
> Can anyone give or refer to information on what kind of loop
> is inside the oval shaped case used on aircraft for LW/MW NDB
> navigation? I have searched on line in every way I can think of
> and found nothing in photo or diagram form.
>
> Thanks: Buck--KA3GEA
>

9087. Re: Broomstick Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 08:00:53 UTC
From: Hue Miller
Topic: 9076 Message: 9087

Loop Antenna News and Information ForumUnless you are going to use the antenna to transmit, don’t waste your time. The helical winding is just intended
to distribute transmitted antenna current over the length of a very short antenna, better than one typical single
loading coil. It will in no way pull in signals better than a plain wire the same length IF that short antenna’s
high impedance is somehow matched to the typical receiver’s low impedance input.
I remember reading in FRENDX (SW club bulletin) two or three decades ago how wonderful it would be to be
able to use the “Joystick” (brand name) short antenna in a small boat with a SW receiver. More advertising
BS: there just is not any magic to a short wire antenna, or a long long wire wound onto a short mast.
One question tho for the older readers: remember those “AM antenna booster coils” that J.C. Whitney
(for example) used to sell? Somehow they mounted on your car antenna. Since the car antenna, on MW AM
band, is very high impedance, and in fact uses low-capacitance coax for that reason on the lead-in, how
could this loading coil possibly work, and work for a 3:1 frequency range? Maybe it didn’t work! Or maybe
it worked “psychologically” only?
-Hue Miller / Newport, Oregon

9088. Re : [loopantennas] Civility, Loops, et al.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 08:14:43 UTC
From: Benoît Mangin
Topic: 9077 Message: 9088

A 160 meters full-wave loop is indeed a vy good antenna, provided you manage to put it reasonably high up from the ground, regarding wavelenght...

The one I used last year was a great performer for close-range (NVIS) QSOs during our 1.8 national contest here in France. It was arranged as a delta configuration, fed in one corner that was 22 meters agl, the two other corners being only 6 meters agl.

I could see there was practically no "cone of silence" effect, so the end of the groundwave range and the beginning of the skywave range must have coïncided in a way or another.

Maybe I should try to model it using MMana... Would you be interested in seeing that ?

de F8GRY/Ben

De : kj4wrk <steve@...>
À : loopantennas@yahoogroups.com
Envoyé le : Mercredi 9 mai 2012 3h15
Objet : [loopantennas] Civility, Loops, et al.

I'm a bit sad to see things degenerate here so much. The tone of the moderators slapdown was a bit over the top, I think. We're supposed to be a community, not a rabble. I completely agree that that kind of comment has no place in this forum, but we need to be nice how we let others know when they've gone too far.

I try to avoid holy wars whenever possible. Being behind the screen and not looking the other person in the face seems to bring out the worst in people.

Nuff said about that

I'm still a huge fan of horizontal loops and will continue to experiment with them as time permits (see? I'm on topic after all).

My next project will be to put up a 160M full-wave loop on our new office building in Chantilly, VA. The powers that be have decreed that our yagi will not be welcome at the new digs, so I'm eager to get the new antenna up once we take occupancy.

My little attic-mounted 40M loop's been a joy to operate. Since it's so close to the ground and is twisted around to fit all that wire in one place, I have some real difficulties getting out beyond 6K miles or so, but I'm able to work all the bands from 40M through 10M. 6M is a bit iffy for me, but it works. Kind of.

Later, Gents (and the occasional lady)

9089. Re: [loopantennas] What kind of antenna is used for ADF aircraft loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 09:47:02 UTC
From: Andy Ikin
Topic: 9081 Message: 9089

Buck wrote on May 9,

Can anyone give or refer to information on what kind of loop is inside the oval shaped case used on aircraft for LW/MW NDB navigation? I have searched on line in every way I can think of and found nothing in photo or diagram form.

Thanks: Buck--KA3GEA

Buck,

I believe the loop is probably a multi-turn one using Litz wire. Page 533-53 of Keen's Wireless Direction Finding (1938 Ed.) describes an RCA Radio Compass Type AVR-8 using an antenna similar to one you mentioned. The loop is 8 inches diam. enclosed in a streamlined bakelite housing.

73

Andrew Ikin G8LUG

9090. Re: Re : [loopantennas] Civility, Loops, et al.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 10:15:35 UTC
From: kj4wrk
Topic: 9077 Message: 9090

My present loop's only about 20 feet off the ground, but performs pretty well in spite of that. I think the reason may be that the middle of each side has been pulled inwards and upwards so it's more or less pyramid shaped with the pulled in sections at the top are about 8 feet above the corners and are about 3 feet from touching in the middle.

The antenna has four fairly pronounced lobes one of which points directly into Europe.

The new office building is about 100 feet tall, so it should perform fairly well.

9091. RE: Re : [loopantennas] Civility, Loops, et al.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 11:15:56 UTC
From: dx11
Topic: 9077 Message: 9091

Hi to all of you,
Now we are back to talking loops, could we, please, use a subject line that covers the content of our messages?

Thanks,

Cor Beijersbergen

9092. Re: [loopantennas] What kind of antenna is used for ADF aircraft loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 11:26:49 UTC
From: Tim Hills
Topic: 9081 Message: 9092

Buck:

The one I have is from a Narco ADF-31 system. It's a ferrite disk about 1/4" thick and 4 1/2" in diameter. It has 3 windings of flat copper conductor at 120* from each other. Protection diodes are across each loop and they are capacitively coupled. One of the diodes was shorted on mine causing the factory smoke to escape some components in the receiver itself.

The ADF unit is actually 3 receivers operated through differential amplifiers to drive the indicating selsyn. I have some photos of the disassembled loop but I'm still on my first cup and can't seem to locate them at the moment :(

It's a real pain to get apart since everything is sealed in foam.

Tim Hills
Sioux Falls, SD

On 5/8/2012 23:04, ka3gea wrote:
>
> Can anyone give or refer to information on what kind of loop is inside
> the oval shaped case used on aircraft for LW/MW NDB navigation? I have
> searched on line in every way I can think of and found nothing in
> photo or diagram form.
>
> Thanks: Buck--KA3GEA
>
>
>

9093. Copper-tube RX loop design - questions + .maa file

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 11:43:21 UTC
From: Benoît Mangin
Topic: 9093 Message: 9093
Attachments: 1 described; binary payloads are missing from this source WARC

Good afternoon all,

I'm at the same time building my first serious loop project and using MMANA for the first time.

The loop is built as follows: 2,5 meters on each side, made out of 18mm copper tube, elevated 1m above ground, mounted on a rotator. Starting design resonant frequency: 1815kCs (160 meters, single-banded).

Calculations an MMANA indicates 920pF for tuning to resonance (1815kHz). But what amazes me is feedpoint impedance.

I wonder if my tuning capacitance is really put in parallel with the inductance formed by the loop itself. Isn't it in series with on end of the loop ?

Could some MMANA pionneer help me with that ?

I would like the loop to be a nice performer, after having tested smaller and less "thought about" models.

Could some loop pionneer help me with that ? Have you got something to suggest me to further increase the antenna performance ?

I keep in mind that nothing replaces on-field testing, but I can only do that on sundays...

Hoping for friendly answers,

de F8GRY/Ben

9095. Re: [loopantennas] 80 meter delta loop a big success on hillside!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 06:34:28 UTC
From: Jim Koshmider
Topic: 9078 Message: 9095

Hi, Warren -

Sorry to jump in on a two-way chat. I hope you will excuse my anxiousness in doing so.

I am curious about the use of the delta loop on two bands. Can you tell me if you are using an 80 meter delta loop on 40 meters, as well as on 80 meters, or is it the other way around. I'm trying to get something up in my small lot that will get my signal across the Pacific.

Do you think the delta loop would be better (for DX) than a tpo-loaded vertical? I can only go about 44 feet in height with either antenna.

Thanks, Warren. Have a good day.

73,

Jim, K8OZ

--- On Tue, 5/8/12, Warren McRobie <w.d.mcrobie@...> wrote:

From: Warren McRobie <w.d.mcrobie@orcon.net.nz>
Subject: Re: [loopantennas] 80 meter delta loop a big success on hillside!
To: loopantennas@yahoogroups.com
Date: Tuesday, May 8, 2012, 11:30 PM

Ron the delta loop is a good antenna. I am often invited to a club where they have a 80 m delta loop permanently set up - it is magic. At home I only have space for a 40 delta loop it is really good - or was till 40 got crowded out with plasma tvs and other crud producers. The beauty of feeding a delta loop with a balun instead of a matching line of coax is that it loads up perfectly on 80 and 40 or 40 and 20 depending on which band it is cut for. Cut for is a relative term when it come to delta loops they are so broad, they really only have to be in the ballpark. I only use 100 watts and am constantly met with disbelief that I am only running 100 watts, most thinking I must be running linear. The scheme of one tower and four loops sounds really good - the one thing with the delta loop is that it is not rotatable ;(. I spoke to a ham in Russia that had a bi directionally switchable pair of delta loops. He seemed to have a good front to back
ratio from where I was listening ;)

73

Warren ZL3LC

I really don't know what I want on the home front yet. A totally vertical Delta or square loop which both would fit, or something with a slope? I just put up an 80 meter delta loop in the mountains a bit of way out of town. The wire height from the ground was awful, about 2 feet high on average, but the slope of the loop left the apex about 30 feet or a little more above the base line of the loop. I had the loop pointing approx sth east. I could receive as high in the east as Nova Scotia and as far south as Florida's southern end. I

made contact with the Collins user group on 40 meters and was able to talk with both their east coast and west coast moderators with a signal strength of about 5-9 to 5-10 either way. I had reception up into British Columbia and south into some Spanish speaking countries. The southern states also were an easy contact. The only stations I could hear others talking with that I couldn't even hear were those directly north of my position here in Truth or Consequences New Mexico. Colorado, Idaho, and a few others in that direction. I really am favoring the delta loop in a sloped configuration as I could buy one tower and have four loops facing all directions and just switch out the unused loops as needed. I'm going to the same hillside next week to try a square 80 with the same slope. I'll report back on that one for all.... 73's Ron KF5PTJ (New Ham) PS- I hate my call sign, just applied for a vanity... I'll let you all in on the new one if I get it..

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2012.0.2171 / Virus Database: 2425/4985 - Release Date: 05/08/12

9096. Re: [loopantennas] Re: Broomstick Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 11:11:09 UTC
From: dsears@shout.net
Topic: 9076 Message: 9096

Thanks, William and Hue, for the info.

Perhaps I will just try to improve my long wire situation.

Best,
Duane

9098. Re: [loopantennas] What kind of antenna is used for ADF aircraft loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 14:08:30 UTC
From: brian nsl
Topic: 9081 Message: 9098

Andy,
The 1922 ' e-book ' copy in the University of Hong Kong library only has 503 pages !!!!!
The book was obviously expanded in later years / editions hence your page references
from a 1937 copy.
Regards,
72, Brian, GØNSL.
----- Original Message -----
From: Andy Ikin
To: loopantennas@yahoogroups.com
Sent: Wednesday, May 09, 2012 10:47 AM
Subject: Re: [loopantennas] What kind of antenna is used for ADF aircraft loops?

9099. Copper-tube RX Loop design + .maa file - Further tests

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 14:58:11 UTC
From: Benoît Mangin
Topic: 9099 Message: 9099
Attachments: 1 described; binary payloads are missing from this source WARC

The file describing the new version of the loop, with a coupling loop 20% the size of the large one, and place 5 cm above the inferior side of the large one.

Sounds better... Is it still "optimizable" ? In terms of feedpoint impedance, of course ?

Would a ferrite-based Z transfo be enough ? Isn't it too "lossy" ?

de F8GRY/Ben

9100. Re: [loopantennas] Copper-tube RX Loop design + .maa file - Further tests [1 Attachment]

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 16:16:45 UTC
From: Rick Karlquist
Topic: 9099 Message: 9100

Beno?t Mangin wrote:
>
> Would a ferrite-based Z transfo be enough ? Isn't it too "lossy" ?
> ?
> de F8GRY/Ben

Ferrite core loss can be nearly eliminated by using Fair-Rite Products
61 material with 125 permeability as described here:

http://www.n6rk.com/loopantennas/NCJ_loop_antenna_N6RK.pdf

Rick N6RK

9101. Re: [loopantennas] What kind of antenna is used for ADF aircraft loops?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 19:38:28 UTC
From: Nick B.
Topic: 9081 Message: 9101

Just to add, there is Aeronautical Radio by Myron F Eddy (1941). Chapter 12 deals with DF systems. It should be freely available in PDF from here: http://www.tubebooks.org/technical_books_online.htm

72+1,
Nick.

On Wed, 09 May 2012 15:08:30 +0100, brian nsl <brian.nsl@...> wrote:

> Andy,
> The 1922 ' e-book ' copy in the University of Hong Kong library
> only has 503 pages !!!!!
> The book was obviously expanded in later years / editions hence your
> page references
> from a 1937 copy.
> Regards,
> 72, Brian, GØNSL.
> ----- Original Message -----
> From: Andy Ikin
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, May 09, 2012 10:47 AM
> Subject: Re: [loopantennas] What kind of antenna is used for ADF
> aircraft loops?
>
>

--
Using Opera's revolutionary e-mail client: http://www.opera.com/mail/

9102. Re : [MMANA-GAL] Copper-tube RX loop design - questions + .maa file

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 21:41:47 UTC
From: Benoît Mangin
Topic: 9102 Message: 9102

That is right, I need this antenna to be a bit lossy. After all (the comparison ends there...) a beverage is a lossy antenna. But it's a wonderful RX antenna for our low bands, provided you've got space.

In what measure could the capacitor quality alter the antenna's overall Q as a tuned circuit ?

Making it 7 meters on a side, like Sigi gently showed me on a .maa file he sent me, would be perfect. But it's perfectly impossible in my case.

I managed to reach an acceptable SWR by launching the optimization option, but as long as the Q will be so high, the antenna will be useless to me. I can't re-tune the antenna every time I QSY 500Hz !!!

De : jdow <jdow@...>
À : MMANA-GAL@yahoogroups.com
Envoyé le : Mercredi 9 mai 2012 23h02
Objet : Re: [MMANA-GAL] Copper-tube RX loop design - questions + .maa file

If he is using it for receiving only loss is, within reason, not a serious problem at 160 meters. A receiving loop can be used to null interference and inherently is lower noise than a dipole with regards to your local noise environment. In the receive only case you can use the losses of a more conventional variable capacitor as a means of widening the bandwidth by lowering the Q.

It is worth experimentation with this. Note that if you switch from the antenna to a dummy load and the receiver noise level goes down you are not sacrificing your ability to detect weak signals. General noise levels at 160 Meters from all sources, atmospheric or man made, are actually quite high. Use this fact to advantage on reception. Inserted attenuation helps IMD performance of the receiver, too.

{^_^}

On 2012/05/09 05:44, chomicz@... wrote:
> HI
>
> It's been a while since I wrote anything new, so this time after receiving some
> interesting details from Jan PA0WIT about his foldable small mag loop he uses
> with his FT817, I was inspired to write an article for this and then continued
> with my own simple experiments.
>
> These are all FREE and are located in the Royal Signals Amateur Radio Society
> (RSARS) e-Library
> http://www.rsars.org.uk/ELIBRARY/docsants.htm there are several simple loop articles

here.
>
> Enjoy reading them, you will see some calcultions on efficiency using caculators from the web. Unfortunatley to get a loop to be efficient on 160m the loop will have to be a lot larger. Loops are generally small compared to a quarterwave and their impedance is very small. Hence that need for large gauge tubes. Copper tubing is preferred and shoudl be silver soldered. Aluminium is more losey with reductions in efficiency of about 20% over copper. You also need very high voltage rated low loss capcitors. These are specially manafactured air spaced with the moving vanes welded to the rotor shaft. Voltages of 3-5kV are often encountered across the capacitors . Additional you need some losses otherwise the Q will be too high and the bandwidth be so small that you may find that it can't accomodate SSB .
>
> Loops don't need to be high and work well at a height equal to their diameter above the ground. Due to the Far Fild's shape that work well at short, medium and long distances.
>
>
>
> Hopefully this helps answer your question.
>
> Anyone wishing to send me details of their experiments for consideration as new RSARS articles
>
> please contact me direct mario-g8ode@... rough sketch, photos and a
> few words are all that's required I can do the rest.
>
> 73's
>
> Mario G8ODE RSARS1691
>
>
>
> ----- Original Message -----
> From: Benoît Mangin<mangin.benoit@...>
> To: loopantennas@yahoogroups.com, MMANA-GAL@yahoogroups.com
> Sent: Wed, 09 May 2012 11:43:21 -0000 (UTC)
> Subject: [MMANA-GAL] Copper-tube RX loop design - questions + .maa file
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
> Good afternoon all,

>
>
>
>
>
> I'm at the same time building my first serious loop project and using MMANA for the first time.
>
>
>
>
>
> The loop is built as follows: 2,5 meters on each side, made out of 18mm copper tube, elevated 1m above ground, mounted on a rotator. Starting design resonant frequency: 1815kCs (160 meters, single-banded).
>
>
>
>
>
> Calculations an MMANA indicates 920pF for tuning to resonance (1815kHz). But what amazes me is feedpoint impedance.
>
>
>
>
>
> I wonder if my tuning capacitance is really put in parallel with the inductance formed by the loop itself. Isn't it in series with on end of the loop ?
>
>
>
>
>
> Could some MMANA pionneer help me with that ?
>
>
>
>
>
> I would like the loop to be a nice performer, after having tested smaller and less "thought about" models.
>
>
>
>
>
> Could some loop pionneer help me with that ? Have you got something to suggest me to further increase the antenna performance ?
>

>
>
>
>
> I keep in mind that nothing replaces on-field testing, but I can only do that on
sundays...
>
>
>
>
>
> Hoping for friendly answers,
>
>
>
>
>
> de F8GRY/Ben
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
>
>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Official English Support Group for MMANA-GAL and MMANA-GAL PRO!Yahoo! Groups Links
>
>
>
>

9103. Tr : Re : [MMANA-GAL] Copper-tube RX loop design - questions + .maa file

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-09 21:42:29 UTC
From: Benoît Mangin
Topic: 9103 Message: 9103

----- Mail transféré -----
De : Benoît Mangin <mangin.benoit@...>
À : "MMANA-GAL@yahoogroups.com" <MMANA-GAL@yahoogroups.com>
Envoyé le : Mercredi 9 mai 2012 23h32
Objet : Re : Re : [MMANA-GAL] Copper-tube RX loop design - questions + .maa file

GE es TNX info

The loop you are talking about reminds me of loops like the Wellbrook series. Very performant, but expensive and, more than anything else, READY BUILT. That's to say, it only seems to be a matter of cash. Plus, It is really too broadbanded for me, including the preamp.
What could be the common-mode immunity of such a design ? Maybe really strong, maybe pointless, I really do not know.

The problems I have are: Very high Q, ie ridiculously narrow bandwidth. Plus, the need to find a very sharp tuning capacitor, because very small variations of C completely deafens the antenna. I would gladly sacrifice a few dBs gain for increased bandwidth.

Maybe my starting idea was a bit foolish, but as has been told, "the thing" is worth a bit of on-field experimentation, even if at the end it looks a bit different.

De : jdow <jdow@...>
À : MMANA-GAL@...m
Envoyé le : Mercredi 9 mai 2012 23h05
Objet : Re: Re : [MMANA-GAL] Copper-tube RX loop design - questions + .maa file

You might look up the "RF Pro-1B" antenna. It is not cheap. But it is
a loop of the sort you are discussing. A friend of mine, N3CKH, has one
and loves it. At the very least study it's descriptions and features.
You will likely want to mimic many of the features if for no other
reason than to protect expensive components such as transceiver inputs.

{^_^} Joanne, W6MKU

On 2012/05/09 06:00, Benoît Mangin wrote:
> Good afternoon Siegfried,
>
> Es thanks for the prompt answer.
>
> I have to tell you, that this loop will NOT be used for TXing. It is meant to be a low-noise receive-only antenna, to be used with a RX preamp for our low bands. In the style of the reception loops for AM broadcasting or NDB DXing, for example. It is meant to be used on 160 meters, single-banded.

>
> I chose it because of its directional azimut pattern, and relatively homegenous elevation pattern.
>
> It will be fed via a balun (to properly feed the unbalanced preamp from this balanced antenna's signals), via 50 ohms coax
>
> Have you seen the .maa file ? What comments can you do ?
>
> How can I cope with such a low feedpoint Z ? Is a ferrite transformer a good idea ? Will I be forced to use a J310 FET in its Z-adaptation applications (such as in the PA0RDT Mini-Whip ?)
>
> Friendly,
>
> de F8GRY/Ben
>
>
> _____
> De : siegfried jackstien<siegfried.jackstien@...>
> À : MMANA-GAL@yahoogroups.com
> Envoyé le : Mercredi 9 mai 2012 14h30
> Objet : AW: [MMANA-GAL] Copper-tube RX loop design - questions + .maa file
>
>
>
>
>
> How do you feed the loop in the model??
>
> Fedpoint-resistance (if you fed direct to the loop) is only a few ohms (or
> tenths of ohms only) --- that is why all magnetic loops are inductively
> couled with a small coupling loop ... ztransforming the low radiation
> resistance close to 50 ohms
>
> If you have 4 tubes and feed into tube 1 (w1c) and you have your cap in
> tube 3 (load at w3c) then it is in line of tube 3 say you would split the
> tube and put the circuit in between)
>
> Any load that is in a wire in mmana is as the tube would be cut at that
> point (except when using the circuit at start or end of a wire)
>
> Use as much tubes as possible with a high diameter would be better for your
> loop ... longer tubes (max would be 4x 10m) would need lower capacitance and
> would have higher impedance ... and so lower loss overall
>
> Yoyur antenna (4x2.5m) would be good for 40 and maybe 80 ... but for 160 it
> is quite small
>
> Doable ... yes ... but then you need very big tubes in diameter to keep the

> losses low ... you have seen a low impedance? .. so any loss resistance of
> only a few ohms would turn your antenna into a dummy load
>
> Use FAT copper tubes (I know hat copper rain gutter tubes are available)
>
> Take care of GOOD soldering the edges
>
> And make the diameter of the loop double what you have now to have a higher
> impedance on 160
>
> Dg9bfc
>
> Sigi
>
>> -----Ursprüngliche Nachricht-----
>> Von: MMANA-GAL@yahoogroups.com [mailto:MMANA-GAL@yahoogroups.com] Im
>> Auftrag von Benoît Mangin
>> Gesendet: Mittwoch, 9. Mai 2012 11:43
>> An: loopantennas@yahoogroups.com; MMANA-GAL@yahoogroups.com
>> Betreff: [MMANA-GAL] Copper-tube RX loop design - questions + .maa file
>>
>>
>>
>> Good afternoon all,
>>
>> I'm at the same time building my first serious loop project and using
>> MMANA for the first time.
>>
>> The loop is built as follows: 2,5 meters on each side, made out of 18mm
>> copper tube, elevated 1m above ground, mounted on a rotator. Starting
>> design resonant frequency: 1815kCs (160 meters, single-banded).
>>
>> Calculations an MMANA indicates 920pF for tuning to resonance (1815kHz).
>> But what amazes me is feedpoint impedance.
>>
>> I wonder if my tuning capacitance is really put in parallel with the
>> inductance formed by the loop itself. Isn't it in series with on end of
>> the loop ?
>>
>> Could some MMANA pionneer help me with that ?
>>
>> I would like the loop to be a nice performer, after having tested smaller
>> and less "thought about" models.
>>
>> Could some loop pionneer help me with that ? Have you got something to
>> suggest me to further increase the antenna performance ?
>>
>> I keep in mind that nothing replaces on-field testing, but I can only do
>> that on sundays...
>>

>> Hoping for friendly answers,
>>
>> de F8GRY/Ben
>>
>> [Non-text portions of this message have been removed]
>>
>>
>>
>>
>
>
>
>
> [Non-text portions of this message have been removed]
>
>
>
> ------------------------------------
>
> Official English Support Group for MMANA-GAL and MMANA-GAL PRO!Yahoo! Groups Links
>
>
>
>

[Non-text portions of this message have been removed]

9115. Re: [loopantennas] Re: Broomstick Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-16 01:20:33 UTC
From: Adrian Flynn
Topic: 9076 Message: 9115

Hi Hue,
Those "Loading coils" did work in my experience, I used a few of them on car radios for friends in Arizona
that could not receive "KOMA Wolf Man Jack" out of Oklahoma even with antenna trimmer set for max gain at around 1400KHz.
I don't know how they worked but they could receive "KOMA" afterwards.
73
Adrian KF7DYU

>
>
> One question tho for the older readers: remember those “AM antenna
> booster coils” that J.C. Whitney
> (for example) used to sell? Somehow they mounted on your car antenna.
> Since the car antenna, on MW AM
> band, is very high impedance, and in fact uses low-capacitance coax for
> that reason on the lead-in, how
> could this loading coil possibly work, and work for a 3:1 frequency
> range? Maybe it didn’t work! Or maybe
> it worked “psychologically” only?
> -Hue Miller / Newport, Oregon
>
>
>

9116. Using CAT cable to feed active antennas, other questions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-19 17:30:38 UTC
From: Phil
Topic: 9116 Message: 9116

NOTE: I also posted the following on the NDB (longwave beacon) list and so all may not be applicable here. . .

I understand that some folks here have used CAT cable to feed their active whips, with great success. I 'presume' that they used a toroid matching transformer at each end to "balance" the feedline and keep noise down.

It seems that for this loop antenna CAT cable would be ideal as it would provide a twisted pair to carry the signal down from the antenna as well as extra pairs for DC feed and tuning Voltage feed to the loop.

Questions:
1. How successful was the "CAT, cable experiment", how did you implement it, and would you do it again?
2. How did rejection of noise pickup compare to installations using coax cable (the cable run will be about 35 feet, mostly over a sheet-metal awning/roof).
3. Final question. I planned on using NTE618 varactor diodes for tuning (4 of them in series/parallel). I noticed that Dan's Small Parts has the original MVAM108 and MVAM109 varactors in stock for about half the cost. Lyle Kohler (sp?) on his LW site says something about the NTE618 has higher "Q". Comments???

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006)& G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff Active Whip up 24 feet AGL for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

9117. OOOPs, Using CAT cable to feed active antennas, other questions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-19 17:48:45 UTC
From: Phil
Topic: 9117 Message: 9117

Sorry, only part of the message got pasted in here. The following was
also put up on the NDB list. . .

Hi All,
I'm just now getting ready to design and then order the parts for a
"tunable NDB loop" that will be mounted just above my roof-line. I
haven't figured out the exact mechanical details yet, but am considering
using a "diamond" comprised of a PVC pipe "+" shaped frame to make it
easier to mount on a rotator. Considering something on the order of 3-5
feet maximum diameter.

But the real questions here are on a slightly different subject.
I intend to also post the following on the Loop Antenna forum. . .

I understand that some folks here have used CAT cable to feed their
active whips, with great success. I 'presume' that they used a toroid
matching transformer at each end to "balance" the feedline and keep
noise down.

It seems that for this loop antenna CAT cable would be ideal as it would
provide a twisted pair to carry the signal down from the antenna as well
as extra pairs for DC feed and tuning Voltage feed to the loop.

Questions:
1. How successful was the "CAT, cable experiment", how did you
implement it, and would you do it again?
2. How did rejection of noise pickup compare to installations using
coax cable (the cable run will be about 35 feet, mostly over a
sheet-metal awning/roof).
3. Final question. I planned on using NTE618 varactor diodes for
tuning (4 of them in series/parallel). I noticed that Dan's Small Parts
has the original MVAM108 and MVAM109 varactors in stock for about half
the cost. Lyle Kohler (sp?) on his LW site says something about the
NTE618 has higher "Q". Comments???

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006)& G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff Active Whip up 24 feet AGL for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

9118. Re: [loopantennas] OOOPs, Using CAT cable to feed active antennas, other questions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-20 00:15:55 UTC
From: Tim Hills
Topic: 9117 Message: 9118

Phil:

I've used CAT 5 cable for an active remote tuned/rotating MW/LW loop, yes there is a balun at each end and noise pickup was less than a single Copper shield RG-6 but not quite as quiet as feeding through the same baluns with twin RG-6 salvaged from a Dish system. The CAT 5 is still there but being used for control and signal lines. Mine is mounted in the attic over the garage and the cable runs close to the main breaker box with very little hum pickup with either the CAT 5 or the twin RG-6.

I used the MVAM109s from Dan's and out of the 200 I have bought from him only 12 have been bad though he throws in extras so about 95 out of an order of 100 are usable. Most of the failures are because they get noisy at the higher end of the tuning range but those should make good noise sources. Twice I've caught MVAM109s on the monthly specials and at $0.20/each in bulk they're much cheaper than I've ever found the NTE618s.

I test and match them because they do vary a bit, from 390 to almost 500pF at 1V (most close to 440pF) and 16 to 24pF at 9V. The last batch of 100 I bought yielded 30 closely matched pairs. I've used the 109s with up to 10V to extend the upper range and down to about 0.7V but going outside the 1 to 9V specs can give poor results unless they are tested and stable at those voltages, about half pass that muster. Intermod at both ends and self generated noise at the upper for the most part. Tuning close to a strong MW station at either end of the scale can also drive them non linear.

The tuned loop (Frankentenna) uses 1 pair back to back for MW, ~ 520 to 1750 Khz and relays switch in another 11 pair for LW with the same loop tuning it from ~140 to 540 KHz. The "Q" without any regen is high enough to make tuning very fussy even with a 10 turn pot at the higher end. The single pair is fed through a 100K resistor but to get it to work with 12 pair the other 11 are tuned through an 18K resistor and that does reduce the Q a bit. The loop is 34 CT turns of 100/46 Litz on a 16" overall bundled ferrite. 2 8"x1/2" rods end to end with 6 8" rods around the center two. All the rods are about 125 permeability except one of the center rods with 400 permeability, the deeper and tighter null is off the end with the higher perm. rod. Inductance measures 224uH. An 8 turn CT pickup winding feeds a balanced, gain controlled MOSFET preamp. An Amidon FT50-43 is used at each end with a 1.6 CT:1 turns ratio at the preamp end and 1.5:1 turns at the 50 Ohm receiver output, works quite well throughout both bands. I'd have to check my notes but I think the # of turns is 16:10 preamp to feedline and 15:10 feedline to receiver. Right now it's working but not at all "pretty" but I should have time to finish it now and write it up.

I've used the MVAM109s on air core loops from 60KHz to 10MHz and
preselector, tuning and VCO circuits up to 50MHz with no problems as
long as I avoid excessive RF levels across the diodes.

Hope I answered more questions than caused confusion ;)

Tim Hills
Sioux Falls, SD.

On 5/19/2012 12:48, Phil wrote:
>
> Sorry, only part of the message got pasted in here. The following was
> also put up on the NDB list. . .
>
> Hi All,
> I'm just now getting ready to design and then order the parts for a
> "tunable NDB loop" that will be mounted just above my roof-line. I
> haven't figured out the exact mechanical details yet, but am considering
> using a "diamond" comprised of a PVC pipe "+" shaped frame to make it
> easier to mount on a rotator. Considering something on the order of 3-5
> feet maximum diameter.
>
> But the real questions here are on a slightly different subject.
> I intend to also post the following on the Loop Antenna forum. . .
>
> I understand that some folks here have used CAT cable to feed their
> active whips, with great success. I 'presume' that they used a toroid
> matching transformer at each end to "balance" the feedline and keep
> noise down.
>
> It seems that for this loop antenna CAT cable would be ideal as it would
> provide a twisted pair to carry the signal down from the antenna as well
> as extra pairs for DC feed and tuning Voltage feed to the loop.
>
> Questions:
> 1. How successful was the "CAT, cable experiment", how did you
> implement it, and would you do it again?
> 2. How did rejection of noise pickup compare to installations using
> coax cable (the cable run will be about 35 feet, mostly over a
> sheet-metal awning/roof).
> 3. Final question. I planned on using NTE618 varactor diodes for
> tuning (4 of them in series/parallel). I noticed that Dan's Small Parts
> has the original MVAM108 and MVAM109 varactors in stock for about half
> the cost. Lyle Kohler (sp?) on his LW site says something about the
> NTE618 has higher "Q". Comments???
>
> --
> 73 de Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
>

9119. Re: [loopantennas] OOOPs, Using CAT cable to feed active antennas, other questions?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-20 02:17:11 UTC
From: Jerry Flanders
Topic: 9117 Message: 9119

I use ordinary unshielded cat-5 cable to bring my HDTV signal from my satellite receiver in the den to the HDTV in my bedroom. Two cat-5 cables, actually - 3 pairs of a 4-pair cable carry the YPbPr signals and two pairs of the second one carry the L and R audio. I have about 80 feet of the cables. All works well. All are unbalanced - I made sure I had connected center to center on all RCA plugs to keep the polarity straight.

Before I did this, I researched the isolation and bandwidth ratings of common cable. Looked good on paper, and worked well in practice.

I wouldn't hesitate to use cat-5 cable in any RF application as long as the power level is reasonable - those wires are pretty thin.

As you say, it would be nice to have those extra wires for the tuning voltage, etc, so this cable would be a convenient choice for a loop.

IIRC, a single pair shows 200 ohms impedance, so you could parallel two pairs for a 100 ohm system, or parallel all 4 pairs for a 50 ohm system. A 4-pair 50 ohm line should work nicely as a lightweight feed for a half-wave dipole.

Jerry W4UK

At 01:48 PM 5/19/2012, you wrote:
>Sorry, only part of the message got pasted in here. The following was
>also put up on the NDB list. . .
>
>Hi All,
>I'm just now getting ready to design and then order the parts for a
>"tunable NDB loop" that will be mounted just above my roof-line. I
>haven't figured out the exact mechanical details yet, but am considering
>using a "diamond" comprised of a PVC pipe "+" shaped frame to make it
>easier to mount on a rotator. Considering something on the order of 3-5
>feet maximum diameter.
>
>But the real questions here are on a slightly different subject.
>I intend to also post the following on the Loop Antenna forum. . .
>
>I understand that some folks here have used CAT cable to feed their
>active whips, with great success. I 'presume' that they used a toroid
>matching transformer at each end to "balance" the feedline and keep
>noise down.
>
>It seems that for this loop antenna CAT cable would be ideal as it would

>provide a twisted pair to carry the signal down from the antenna as well
>as extra pairs for DC feed and tuning Voltage feed to the loop.
>
>Questions:
>1. How successful was the "CAT, cable experiment", how did you
>implement it, and would you do it again?
>2. How did rejection of noise pickup compare to installations using
>coax cable (the cable run will be about 35 feet, mostly over a
>sheet-metal awning/roof).
>3. Final question. I planned on using NTE618 varactor diodes for
>tuning (4 of them in series/parallel). I noticed that Dan's Small Parts
>has the original MVAM108 and MVAM109 varactors in stock for about half
>the cost. Lyle Kohler (sp?) on his LW site says something about the
>NTE618 has higher "Q". Comments???
>
>--
>73 de Phil, KO6BB

9120. Intro,

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-21 14:56:30 UTC
From: g4hds
Topic: 9120 Message: 9120

Hi All,
My name is Paul and my call is G4HDS, i am hoping in the near future to be able to take early retirement, This means I will be moving QTH to the Highlands of Scotland where I can play radio a bit more, and tinker with aerials to boot.... This include's trying to use loops as a low noise option on the LF bands i.e. 160 & 80 for Dxing.

What I would really like are some suggestions about circuit Diags which possibly use small power RF devices to ensure a greater signal level handling without keeling over...

Recent testing whilst house hunting across the border, with a full sized dipole aerial for 160 feeding the rig showed up problems with some of the more modern solid state radios.

Hence the idea to run seperate rx/tx aerials with a low noise loop as the rx setup.

Look forward to any feedback Regards Paul...

9121. ACTIVE LOOP ANTENNA

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-21 18:56:55 UTC
From: MARCIO
Topic: 9121 Message: 9121

I have searched some loop antennas for OM, I came across a model made by Wellbrook ALA - 1530. Investigating the e-bay for sale not found, only the manufacturer's website which is in Wales - UK price £ 200.00 there.
A colleague has information about this antenna to the active (benchmark) and if there is a way to get bring it to Brazil?

http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&product_id=59

thank you
Marcio Dias using GOOGLE TRADUTOR

http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&product_id=59

Márcio Antonio Dias
Marcio.antonio.dias20@...

9122. Re: [loopantennas] ACTIVE LOOP ANTENNA

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-21 22:32:01 UTC
From: Don
Topic: 9121 Message: 9122

Hi Marcio,

I believe Wellbrook will ship anywhere in the world. Just send him (Andy Akin) an email about it.

Don
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 21-May-12 11:56, MARCIO wrote:
> I have searched some loop antennas for OM, I came across a model made by Wellbrook ALA - 1530. Investigating the e-bay for sale not found, only the manufacturer's website which is in Wales - UK price ? 200.00 there.
> A colleague has information about this antenna to the active (benchmark) and if there is a way to get bring it to Brazil?
>
> http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&product_id=59
>
> thank you
> Marcio Dias using GOOGLE TRADUTOR
>
> http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&product_id=59
>
> M?rcio Antonio Dias
> Marcio.antonio.dias20@...
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos

>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.2171 / Virus Database: 2425/5013 - Release Date: 05/21/12
>
>
>

9123. LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-22 01:05:50 UTC
From: MARCIO
Topic: 9123 Message: 9123

Amigos da lista, tive conhecimento de um pequeno projeto para montagem de uma antena loop amplificada que atua na faixa de 100kHz - 30 MHz parecida com a "pa0rdt de Roelof Bakker". Parece-me que um colega do Rio de Janeiro, começou a montar esta antena e até postou em uma lista de discussão do DXCB. Alguém tem conhecimento deste fato e poderia me dar uma pista como entrar em contato com este colega?
73
Márcio Dias

9124. Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-22 14:22:52 UTC
From: AlienRelics
Topic: 9123 Message: 9124

Please post in English.

Thank you,
Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "MARCIO" <marcio.antonio.dias20@...> wrote:
>
> Amigos da lista, tive conhecimento de um pequeno projeto para montagem de uma antena loop amplificada que atua na faixa de 100kHz - 30 MHz parecida com a "pa0rdt de Roelof Bakker".
> Parece-me que um colega do Rio de Janeiro, começou a montar esta antena e até postou em uma lista de discussão do DXCB. Alguém tem conhecimento deste fato e poderia me dar uma pista como entrar em contato com este colega?
> 73
> Márcio Dias
>

9125. Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-22 15:19:10 UTC
From: kd5foy_new
Topic: 9123 Message: 9125

roughly translated:

Friends of the list, I learned a little project for setting up a
amplified loop antenna that operates in the range 100 kHz - 30 MHz similar to "pa0rdt of Roelof Bakker."
It seems to me that a colleague of Rio de Janeiro, began to mount this antenna and up posted in a mailing list DXCB. Anyone aware of this fact and give me a clue how to get in touch with this fellow?

--- In loopantennas@yahoogroups.com, "MARCIO" <marcio.antonio.dias20@...> wrote:
>
> Amigos da lista, tive conhecimento de um pequeno projeto para montagem de uma antena loop amplificada que atua na faixa de 100kHz - 30 MHz parecida com a "pa0rdt de Roelof Bakker".
> Parece-me que um colega do Rio de Janeiro, começou a montar esta antena e até postou em uma lista de discussão do DXCB. Alguém tem conhecimento deste fato e poderia me dar uma pista como entrar em contato com este colega?
> 73
> Márcio Dias
>

9126. Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-22 15:20:26 UTC
From: kd5foy_new
Topic: 9123 Message: 9126

roughly translated:

Friends of the list, I learned a little project for setting up a
amplified loop antenna that operates in the range 100 kHz - 30 MHz similar to "pa0rdt of
Roelof Bakker."
It seems to me that a colleague of Rio de Janeiro, began to mount this antenna and up
posted in a mailing list DXCB. Anyone aware of this fact and give me a clue how to get in
touch with this fellow?

--- In loopantennas@yahoogroups.com, "MARCIO" <marcio.antonio.dias20@...> wrote:
>
> Amigos da lista, tive conhecimento de um pequeno projeto para montagem de uma antena loop
amplificada que atua na faixa de 100kHz - 30 MHz parecida com a "pa0rdt de Roelof Bakker".
> Parece-me que um colega do Rio de Janeiro, começou a montar esta antena e até postou em
uma lista de discussão do DXCB. Alguém tem conhecimento deste fato e poderia me dar uma
pista como entrar em contato com este colega?
> 73
> Márcio Dias
>

9127. Re :en[loopantennas] Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-22 18:05:40 UTC
From: Benoît Mangin
Topic: 9123 Message: 9127

I already did RX tests using a copper-tube loop feeding the PA0RDT Mini-whip preamp via a balanced/Unbalanced, just to see.

It appears to me that the loop HAS to be reasonably sized, otherwise there is really too much input voltage on the preamp, an its performance quickly degrades.

Plus, the miniwhip preamp is a very high impedance design, whereas the loop (especially on VLF/LF) is a very low Z device.

The J310 in its Z-adapter config is meant to deal with very high impedances, bringing them to a reasonable level to deal with 50, 75 or 100 devices (preamps, coaxs...)

OR AM I FOOLING MYSELF ?

de F8GRY/Ben

De : kd5foy_new <buddycl_1948@...>
À : loopantennas@yahoogroups.com
Envoyé le : Mardi 22 mai 2012 17h20
Objet : [loopantennas] Re: LOOP ANTENA pa0rdt - Roelof Bakker

roughly translated:

Friends of the list, I learned a little project for setting up a
amplified loop antenna that operates in the range 100 kHz - 30 MHz similar to "pa0rdt of Roelof Bakker."
It seems to me that a colleague of Rio de Janeiro, began to mount this antenna and up posted in a mailing list DXCB. Anyone aware of this fact and give me a clue how to get in touch with this fellow?

--- In loopantennas@yahoogroups.com, "MARCIO" <marcio.antonio.dias20@...> wrote:
>
> Amigos da lista, tive conhecimento de um pequeno projeto para montagem de uma antena loop amplificada que atua na faixa de 100kHz - 30 MHz parecida com a "pa0rdt de Roelof Bakker".
> Parece-me que um colega do Rio de Janeiro, começou a montar esta antena e até postou em uma lista de discussão do DXCB. Alguém tem conhecimento deste fato e poderia me dar uma pista como entrar em contato com este colega?
> 73
> Márcio Dias
>

9128. RE: [loopantennas] Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-22 19:49:43 UTC
From: dx11
Topic: 9123 Message: 9128

His email adres is: roelof@...
Cor Beijersbergen

Anyone aware of this fact and give me a clue how to get in touch with this fellow?

9129. Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-23 15:04:20 UTC
From: tenorman1952
Topic: 9123 Message: 9129

--- In loopantennas@yahoogroups.com, "kd5foy_new" <buddycl_1948@...> wrote:
>
> roughly translated:
>
> Friends of the list, I learned a little project for setting up a
> amplified loop antenna that operates in the range 100 kHz - 30 MHz similar to "pa0rdt of Roelof Bakker."
> It seems to me that a colleague of Rio de Janeiro, began to mount this antenna and up posted in a mailing list DXCB. Anyone aware of this fact and give me a clue how to get in touch with this fellow?
>
>
> --- In loopantennas@yahoogroups.com, "MARCIO" <marcio.antonio.dias20@> wrote:
> >
> > Amigos da lista, tive conhecimento de um pequeno projeto para montagem de uma antena loop amplificada que atua na faixa de 100kHz - 30 MHz parecida com a "pa0rdt de Roelof Bakker".
> > Parece-me que um colega do Rio de Janeiro, começou a montar esta antena e até postou em uma lista de discussão do DXCB. Alguém tem conhecimento deste fato e poderia me dar uma pista como entrar em contato com este colega?
> > 73
> > Márcio Dias
> >

Congratulations, KD5FOY! You are now the official Spanish-English Translator for the Loop Antenna Group, by acclaim.

;-)

73,
Paul - AE5JU

9130. Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-23 20:36:04 UTC
From: osage_archer
Topic: 9123 Message: 9130

LOL except it's Portuguese, not Spanish...

Tim C.

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "kd5foy_new" <buddycl_1948@> wrote:
> >
> > roughly translated:
> >
> > Friends of the list, I learned a little project for setting up a
> > amplified loop antenna that operates in the range 100 kHz - 30 MHz similar to "pa0rdt of Roelof Bakker."
> > It seems to me that a colleague of Rio de Janeiro, began to mount this antenna and up posted in a mailing list DXCB. Anyone aware of this fact and give me a clue how to get in touch with this fellow?
> >
> >
> > --- In loopantennas@yahoogroups.com, "MARCIO" <marcio.antonio.dias20@> wrote:
> > >
> > > Amigos da lista, tive conhecimento de um pequeno projeto para montagem de uma antena loop amplificada que atua na faixa de 100kHz - 30 MHz parecida com a "pa0rdt de Roelof Bakker".
> > > Parece-me que um colega do Rio de Janeiro, começou a montar esta antena e até postou em uma lista de discussão do DXCB. Alguém tem conhecimento deste fato e poderia me dar uma pista como entrar em contato com este colega?
> > > 73
> > > Márcio Dias
> > >
>
> Congratulations, KD5FOY! You are now the official Spanish-English Translator for the Loop Antenna Group, by acclaim.
>
> ;-)
>
> 73,
> Paul - AE5JU
>

9133. Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-24 12:49:32 UTC
From: tenorman1952
Topic: 9123 Message: 9133

--- In loopantennas@yahoogroups.com, "osage_archer" <timchandler2001@...> wrote:
>
> LOL except it's Portuguese, not Spanish...
>
> Tim C.
>

That's why he's essential.

Paul C.

9134. Re :en[loopantennas] Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-25 04:54:36 UTC
From: longjohn119
Topic: 9123 Message: 9134

That's pretty much it in a nutshell. It's probably going to be noisy and not perform very well ... I never could get a decent wideband match with a tuned loop and a FET as the first amp either. (Technically I was using 2 FETs in cascode to simulate a duel gate MOSFET) ... The preamp I made later with a bipolar was much quieter and even worked reasonably well with the tuning caps out of circuit and operating it as a untuned loop. Still other than the ability to null it still wasn't as quiet as the Lankford Push-pull miniwhip I have hanging from the oak tree out front.

--- In loopantennas@yahoogroups.com, BenoÃ®t Mangin <mangin.benoit@...> wrote:
>
> I already did RX tests using a copper-tube loop feeding the PA0RDT Mini-whip preamp via a balanced/Unbalanced, just to see.
> Â
> It appears to me that the loop HAS to be reasonably sized, otherwise thereÂ is really too much input voltage on the preamp, an its performance quickly degrades.
> Â
> Plus, the miniwhip preamp is a very high impedance design, whereas the loop (especially on VLF/LF) is a very low Z device.
> Â
> The J310 in its Z-adapter config is meant to deal with veryÂ high impedances, bringing them to a reasonable level to deal with 50, 75 or 100 devices (preamps, coaxs...)
> Â
> OR AM I FOOLING MYSELF ?
> Â
> de F8GRY/BenÂ
>

9135. Re: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-25 05:03:45 UTC
From: Steve Greenfield
Topic: 9123 Message: 9135

You sent this to me directly. Did you mean to send this to the loopantennas list?

Steve Greenfield AE7HD
http://www.linkedin.com/in/stevenjgreenfield

>_____
> From: Márcio Antonio Dias <marcio.antonio.dias20@...>
>To: alienrelics@...
>Sent: Thursday, May 24, 2012 1:06 PM
>Subject: Re: LOOP ANTENA pa0rdt - Roelof Bakker
>
>
>I learned a little project for setting up an amplified antenna loop that operates in the range 100 kHz - 30 MHz similar to "pa0rdt of Roelof Bakker."
> It seems to me that a colleague of Rio de Janeiro, began to mount this antenna up and posted in a mailing list DXCB. Does anyone have knowledge of this fact and could give me a clue how to get in touch with this fellow?
>
> 73
>Márcio Antônio Dias
>from BRAZIL
>
>
>

9136. Lankford miniwhip, was: LOOP ANTENA pa0rdt - Roelof Bakker

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-25 08:19:55 UTC
From: dx11
Topic: 9123 Message: 9136

longjohn119 wrote in loopantennas@yahoogroups.com:

"Still other than the ability to null it still wasn't as quiet as the Lankford Push-pull miniwhip I have hanging from the oak tree out front."

Could you elaborate on that, please? What schematic is it and how are your rsults with it?

Regards,

Cor Beijersbergen

9137. pa0rtd project

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-25 12:47:20 UTC
From: MARCIO
Topic: 9137 Message: 9137

I learned a little project for setting up an amplified antenna loop that operates in the range 100 kHz - 30 MHz similar to "pa0rdt of Roelof Bakker."
It seems to me that a colleague of Rio de Janeiro, began to mount this antenna up and posted in a mailing list DXCB. Does anyone have knowledge of this fact and could give me a clue how to get in touch with this fellow?

73
Márcio Antônio Dias
from BRAZIL

9138. Bibliography of QST articles about antenna broadbanding (was: broadbanding an antenna)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-25 22:01:28 UTC
From: Rick Karlquist
Topic: 9123 Message: 9138

Ray wrote:
> Rick,
> Do you remember enough details of the "QST Technical correspondence
> circa 1980", to enable a QST archive search for that article? Maybe a
> key word in the title? I did a multi-year search using "Technical
> Correspondence" and didn't find anything. I would like to find and read
> it.
>
> Ray, W4BYG

Great, we have someone who wants to learn something!

See QST:

April 83 p22
July 84 p45
June 85 p42
January 86, p37
October 86 p27-36
April 89 p22-27
October 91 p21-25
June 92 p71-72

The information in these articles is mostly reliable,
despite being in QST.

Rick N6RK

9139. Re: [loopantennas] Bibliography of QST articles about antenna broadbanding (was: broadbanding an antenna)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-26 17:49:10 UTC
From: Adrian Flynn
Topic: 9123 Message: 9139
Attachments: 2 described; binary payloads are missing from this source WARC

Rick,
How can you say that?
QST never has ERRORS! It is always perfect! [?] [?]
That is the consensus I get from reading many reflectors.

73
Adrian KF7DYU

>
> The information in these articles is mostly reliable,
> despite being in QST.
>
> Rick N6RK
>

9140. Grayland, WA DXpedition with FLG100LN Delta Flag Antennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-26 23:27:59 UTC
From: thinkdx
Topic: 9140 Message: 9140

The members of the Loop Antennas group may be interested to learn how I use Flag antennas (delta configuration) for receiving trans-Pacific medium wave stations from the Washington State coast. This DXpedition took place at Grayland Beach State Park <https://maps.google.com/maps?q=Grayland+Beach+State+Park,+State+Route+105,+Grayland,+WA&hl=en&ll=46.790276,-124.091992&spn=0.016631,0.038581&sll=37.0625,-95.677068&sspn=39.320439,79.013672&oq=grayland+beach&t=h&hq=Grayland+Beach+State+Park,+State+Route+105,+Grayland,+WA&z=15> , Washington on May 7th through 9th.

The month of May is not considered prime time for either DU (Down Under) or Asian medium wave from the Washington coast, so my "DXpectations" weren't very high for this trip. Besides the sub-par season, we're a few years removed from the periods of excellent medium wave DX heard during the low point in the last solar cycle. I had planned to be content with antenna experiments, figuring I may not hear any overseas DX worth logging.

Surprise! The first night of the 7th (UTC) was indeed a bust, but the 8th and 9th progressively improved--all the way through local sunrise and my last recorded Perseus SDR files just past 1300 UTC.

All loggings below were made with a single delta Flag antenna, oriented at 240 degrees. The high, dense brush in the southwest direction from my camp site prevented me from creating a phased array as I had planned, so I erected the 2nd loop at 310 degrees to hopefully be optimum for any Asian TPs. The two loops were identical except for their bearing (60 ft. base wire at 3 feet above ground, 22 ft. apex height, 1150 ohms termination resistor (modeled in EZNEC... thanks KAZ), and using the excellent "LN" (low noise) version of Wellbrook's FLG100 modules.

This was the first time I've used single delta loops rather than arrays of two or four loops, and the directionality was better than I expected. Check out this audio clip <http://www.mediafire.com/?vwasnolghm7m550> which compares approx. 10 seconds each of daytime reception on 820 kHz, as I switch between antennas. One signal is KGNW Seattle and the other is KORC Waldport, OR. I have used FLG100 modules for years, but I'm enjoying DXing with the upgraded FLG100LNs now. They seem "transparent" in use with no detectable noise of their own.

DX reception on the 8th was modest, but it was all Asian until sunrise approached when reception shifted mostly to Australia & New Zealand. Even during the hours well before sunrise, the Japanese, Chinese, and South Korean stations came in best on the southwest delta Flag... evidently a case of skewed path reception, perhaps due to the disturbed geo-conditions.

The last night of the DXpedition on the 9th was almost entirely mid-band DU reception and most of the signals were logged during the last 1-1/2 hours before sunrise. I did note a few very weak Japanese signals and they were best on the northwest loop, as typical. The ability to

"rewind" the entire medium wave band with Perseus WAV files was again the #1 tool for capturing as much DX as possible, especially when propagation is poor and interesting foreign signals are hard to find. A few photos with captions from the DXpedition can be seen in this folder:
https://picasaweb.google.com/114798392023680237679/GraylandDXpeditionMay\
792012
<https://picasaweb.google.com/114798392023680237679/GraylandDXpeditionMa\
y792012> The folder includes photos of the FLG100LN delta Flag setup. The loggings from this DXpedition (MS Word file):
http://www.mediafire.com/view/?k7k35x175bg2468
<http://www.mediafire.com/view/?k7k35x175bg2468> Of interest may be the audio clip of 2XD Southern Star, Napier, New Zealand (909 kHz) linked from the document. It's a good example of what a single loop can accomplish on a frequency one kHz away from a domestic 10 kHz North American signal. When two of these antennas are phased the splatter can often be reduced quite a bit. I plan to return to the state park in August, at a spot where I'll have room again for a phased array.

Guy Atkins KE7MAV
Puyallup, WA USA
DXing at Grayland Beach State Park, WA
Perseus SDR & AR7030 Plus (modded)
Wellbrook FLG100LN Delta Flags at 240 & 310 degrees

9141. Delta flag loop !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-27 13:54:10 UTC
From: brian nsl
Topic: 9141 Message: 9141

Guy,
It was interesting to read of your radio adventure.
Do I understand the antennas Delta configuration correctly,
base 60ft, 3ft over the ground, apex at 22ft ?????
I have a catenary cord between the house roof ridge point and a 35ft mast
90 ft away running North -South.
I my thoughts on your antenna are correct I could hang the loop on the
catenary and revolve it through 360 degrees !!!!!
Particularly as there is the LPL-349.5 beacon just 8 miles away, a real pain hi!
Regards,
72, Brian, GØNSL.

9142. Re: Delta flag loop !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-28 17:15:52 UTC
From: thinkdx
Topic: 9141 Message: 9142

Hi Brian,

You are correct on the dimensions. Others have asked about the details, so I created a diagram that shows the antenna more clearly. Here is the link for download (390kb JPG image): http://www.mediafire.com/i/?gpb6d8vmffdrs91 <http://www.mediafire.com/i/?gpb6d8vmffdrs91> It should work very well on long wave also.

These basic delta dimensions have been used by myself and a number of my MW DXing pals for single delta loops and phased delta loop arrays with Wellbrook ALA100, FLG100, and K9AY hardware over the last few years. I believe that the specific proportions originated with Andy Ikin of Wellbrook through EZNEC modeling, perhaps with some assistance from Neil Kazaross. Both of these gentlemen have been key players in the optimization of Flag antennas for medium wave use.

It's my understanding that this design (FLG100LN + 1150 ohms Rt) is electrically a Flag, but needs only a single center support due to the delta shape. That fact alone is a big "win" for DXpeditions, as you often contend with limitations of the terrain, conveniently (or inconveniently :^) spaced trees, brush & bushes, etc. that restrict the antenna placement.

If you are indeed able to build a rotatable delta Flag as you have described, please share photos and details with the group! It will be very interesting to learn how it performs for you.

73,

Guy Atkins
Puyallup, WA USA

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Guy,
> It was interesting to read of your radio adventure.
> Do I understand the antennas Delta configuration correctly,
> base 60ft, 3ft over the ground, apex at 22ft ?????
> I have a catenary cord between the house roof ridge point and a 35ft mast
> 90 ft away running North -South.
> I my thoughts on your antenna are correct I could hang the loop on the
> catenary and revolve it through 360 degrees !!!!!
> Particularly as there is the LPL-349.5 beacon just 8 miles away, a real pain hi!
> Regards,

> 72, Brian, GØNSL.
>

9143. Re: [loopantennas] Re: Delta flag loop !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-28 18:21:50 UTC
From: brian nsl
Topic: 9141 Message: 9143

Guy,
Very many thanks for the response to my query on your antenna.
Having established the facts as I assumed my problem is that though I have
90ft North / South the garden is only 50ft wide !!!!!!
This of course means that it would not rotate totally from a hung point
as per your sizes.
I assume on the good side a single element loop does not need to rotate through
360 degrees but only 180 degrees ?????
Trial and error is needed hi!
Thanks again,
72, Brian, GØNSL.
----- Original Message -----
From: thinkdx
To: loopantennas@yahoogroups.com
Sent: Monday, May 28, 2012 6:15 PM
Subject: [loopantennas] Re: Delta flag loop !!!!

9144. Experiments with A Loop Stick Antenna using Stacked Toroids

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-29 15:43:19 UTC
From: Everett
Topic: 9144 Message: 9144

Guys,

I just deleted the the file "Experiments with A Loop Stick Antenna using Stacked Toroids" and replaced it with a revised version.

73's Everett

9145. Re: Experiments with A Loop Stick Antenna using Stacked Toroids

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-29 17:31:07 UTC
From: jpopelish
Topic: 9144 Message: 9145

--- In loopantennas@yahoogroups.com, "Everett" <everettsharp@...> wrote:
>
> I just deleted the the file "Experiments with A Loop Stick Antenna using Stacked Toroids" and replaced it with a revised version.
>
> 73's Everett

Have you looked over my experiments regarding coil Q versus gaps between stacked cores to form rods. It is in the Popelish file folder and called "Experiment_Q_vs_F_vs_GAPS_5z.pdf"

Your material is better than the high frequency material I used, but the general pattern of result may apply, especially at the higher frequency end of the test spectrum.

--
Regards,

John Popelish

9146. Re: Delta flag loop !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-29 18:43:00 UTC
From: thinkdx
Topic: 9141 Message: 9146

Hi Brian,

Don't forget that this antenna is a version of the Flag, so it has a cardioid pattern. If your space for the rotation/repositioning is limited you'll want to aim the null at your pest station, or the forward beam towards your DX.

Alternatively, you could reduce the 60 foot baseline to 50 feet, then you can move the delta fully through 360 degrees. I don't think performance will suffer much.

73,

Guy

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Guy,
> Very many thanks for the response to my query on your antenna.
> Having established the facts as I assumed my problem is that though I have
> 90ft North / South the garden is only 50ft wide !!!!!!
> This of course means that it would not rotate totally from a hung point
> as per your sizes.
> I assume on the good side a single element loop does not need to rotate through
> 360 degrees but only 180 degrees ?????
> Trial and error is needed hi!
> Thanks again,
> 72, Brian, GØNSL.
> ----- Original Message -----
> From: thinkdx
> To: loopantennas@yahoogroups.com
> Sent: Monday, May 28, 2012 6:15 PM
> Subject: [loopantennas] Re: Delta flag loop !!!!
>

9147. Re: [loopantennas] Re: Experiments with A Loop Stick Antenna using Stacked To...

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-29 21:28:10 UTC
From: everettsharp@aol.com
Topic: 9147 Message: 9147

John,

I have not looked at you articles yet, but have just printed them out. I saw then listed before, but could not open them up with my PDF program, but I went on line and found another one that would open up the files. So I will give them a read.

Everett

In a message dated 5/29/2012 12:31:11 P.M. Central Daylight Time, jpopelish@... writes:

--- In _loopantennas@yahoogroups.com_ (mailto:loopantennas@yahoogroups.com) , "Everett" <everettsharp@...> wrote:
>
> I just deleted the the file "Experiments with A Loop Stick Antenna using Stacked Toroids" and replaced it with a revised version.
>
> 73's Everett

Have you looked over my experiments regarding coil Q versus gaps between stacked cores to form rods. It is in the Popelish file folder and called "Experiment_Q_vs_F_vs_GAPS_5z.pdf"

Your material is better than the high frequency material I used, but the general pattern of result may apply, especially at the higher frequency end of the test spectrum.

--
Regards,

John Popelish

9148. Re: Delta flag loop !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-30 01:55:27 UTC
From: Alex P
Topic: 9141 Message: 9148

I've built 2 versions of the delta loop with termination resistor. The first had an 8 ft baseline and 6 ft apex located on top of the roof rotated with a RS rotor and gave a nice cardoid response with deep null. The second one was a 53 ft perimeter, 16 ft baseline with a 17 ft apex on top of my 45 ft tower and rotator capable. The termination was remotely adjusted using a homebrew RS LED and non-inductive photocell. This antenna could only provide about a 30 dB null depth from a local 50 KW flame thrower 8 miles away. The null depth varied with the wind.

Hope this helps.

Alex

--- In loopantennas@yahoogroups.com, "thinkdx" <dx@...> wrote:
>
> Hi Brian,
>
> Don't forget that this antenna is a version of the Flag, so it has a cardioid pattern. If your space for the rotation/repositioning is limited you'll want to aim the null at your pest station, or the forward beam towards your DX.
>
> Alternatively, you could reduce the 60 foot baseline to 50 feet, then you can move the delta fully through 360 degrees. I don't think performance will suffer much.
>
> 73,
>
> Guy
>
>
> --- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@> wrote:
> >
> > Guy,
> > Very many thanks for the response to my query on your antenna.
> > Having established the facts as I assumed my problem is that though I have
> > 90ft North / South the garden is only 50ft wide !!!!!!
> > This of course means that it would not rotate totally from a hung point
> > as per your sizes.
> > I assume on the good side a single element loop does not need to rotate through
> > 360 degrees but only 180 degrees ?????
> > Trial and error is needed hi!
> > Thanks again,
> > 72, Brian, GØNSL.
> > ----- Original Message -----
> > From: thinkdx
> > To: loopantennas@yahoogroups.com
> > Sent: Monday, May 28, 2012 6:15 PM
> > Subject: [loopantennas] Re: Delta flag loop !!!!

> >
>

9149. Re: [loopantennas] Re: Delta flag loop !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-05-30 12:18:10 UTC
From: Andy Ikin
Topic: 9141 Message: 9149

The FLG100LN details are now on my web site;
http://www.wellbrook.uk.com/antennashop/index.php?route=product/product&product_id=64

The old FLG100 is still available to special order for those users who require compatibility with existing amplifiers for use with Wellbrook MW phasing System.

73

Andrew Ikin

9150. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-01 11:59:01 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 9150

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio
Reception, can spend $100 or less and get an AM Loop Antenna that
meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or
less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

9151. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-01 11:59:01 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 9151

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Please crop in to the important parts. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. Please do not use TIFF/TIF or BMP files, the file size is way too big and I may delete without notice.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

Attachments are now allowed, but please use judiciously. Rather than going out with the messages, they will be stored on the list but you'll get a link with the message.

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

9152. Can You ID this loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-03 00:33:04 UTC
From: Laurence
Topic: 9152 Message: 9152

Hi,
I bought a very nice old loop antenna at a estate sale. The workmanship is wonderful, dovetail joints,etc.
It has a logo that looks like DTW (the letters run from top to bottom)
It also had a terminal block to enable different frequencies.
Someone at the sale thought it was German. I have done a web search for DTW, but have not come up with anything.

Thanks, Jussi

9154. Re: [loopantennas] Can You ID this loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-03 06:18:35 UTC
From: brian nsl
Topic: 9152 Message: 9154

Jussi,
Could this be the antenna maker ?????

DeTeWe: Loop Antenna
1923-12-01 39 43 Loop Antenna Collapsible. Imported by Tobe Deutschmann, Boston ? inch I'll upload..ggested by user D||Loop Antenna|| 11854 0 0 loopantenna 0 0 detewe_loop_antenna 1 0 2011-06-28 11:44:01.0 loopantenna| loopantenna 0 2010-12-13 13:10:13.0 Vor der Rundfunkzeit hat DeTeWe (DTW) eine grosse.. und Kabelindustrie AG (DTW), Berlin. Anfang 30er Jahre: Die Aktienmehrheit Mehrheit liegt.. und Kabelindustrie (DTW bzw. DeTeWe), Berlin SO33, später SO36. Als Teilbetrieb der Abteilung Hochfrequenz
[radio] http://www.radiomuseum.org/r/detewe_loop_antenna.html

72, Brian, GØNSL.

.
----- Original Message -----
From: Laurence
To: loopantennas@yahoogroups.com
Sent: Sunday, June 03, 2012 1:33 AM
Subject: [loopantennas] Can You ID this loop?

9156. Re: [loopantennas] Can You ID this loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-04 11:57:25 UTC
From: brian nsl
Topic: 9152 Message: 9156

Jussi,
Did the photo of the frame antenna compare with the one you bought ?????
It certainly has the long terminal block on the center post.
72, Brian, GØNSL.

----- Original Message -----
From: Laurence
To: loopantennas@yahoogroups.com
Sent: Sunday, June 03, 2012 1:33 AM
Subject: [loopantennas] Can You ID this loop?

9157. Re: Can You ID this loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-04 15:07:54 UTC
From: Laurence
Topic: 9152 Message: 9157

Dear Brian,
That's IT!! Wow, thanks! I earlier found a bad link to that page on google, and I couldn't find anything searching on the radiomuseum.com site... So it's great to have the correct link.
I'll have fun using this. Many thanks!!!

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Jussi,
> Could this be the antenna maker ?????
>
> DeTeWe: Loop Antenna
> 1923-12-01 39 43 Loop Antenna Collapsible. Imported by Tobe Deutschmann, Boston ? inch I'll upload..ggested by user D||Loop Antenna|| 11854 0 0 loopantenna 0 0 detewe_loop_antenna 1 0 2011-06-28 11:44:01.0 loopantenna| loopantenna 0 2010-12-13 13:10:13.0 Vor der Rundfunkzeit hat DeTeWe (DTW) eine grosse.. und Kabelindustrie AG (DTW), Berlin. Anfang 30er Jahre: Die Aktienmehrheit Mehrheit liegt.. und Kabelindustrie (DTW bzw. DeTeWe), Berlin SO33, später SO36. Als Teilbetrieb der Abteilung Hochfrequenz
> [radio] http://www.radiomuseum.org/r/detewe_loop_antenna.html
>
> 72, Brian, GØNSL.
>
> .
> ----- Original Message -----
> From: Laurence
> To: loopantennas@yahoogroups.com
> Sent: Sunday, June 03, 2012 1:33 AM
> Subject: [loopantennas] Can You ID this loop?
>

9158. Re: [loopantennas] Re: Can You ID this loop?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-04 22:17:48 UTC
From: brian nsl
Topic: 9152 Message: 9158

Jussi,
Great, glad you found the website.
The frame antenna looks a nice piece of ' furniture ' hi!
Are each of the wire turns brought out to that terminal block ?????
a nice idea if so.
72, Brian, G?NSL.

----- Original Message -----
From: "Laurence" <latu@...>
To: <loopantennas@yahoogroups.com>
Sent: Monday, June 04, 2012 4:07 PM
Subject: [loopantennas] Re: Can You ID this loop?

9160. QRP 40 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-09 13:40:10 UTC
From: jose maria
Topic: 9160 Message: 9160

I am new in the QRP for 40 meter ,i need an antenna loop type for transmiting on 40 meter to be used with xmitter Ramsey QRP40C only 1 watt of power out.
If somebody can help me i will be very gratefull.

Jose Mendicoa

9161. Re: QRP 40 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-10 07:25:07 UTC
From: qrp.gaijin
Topic: 9160 Message: 9161

--- In loopantennas@yahoogroups.com, "jose maria" <jmmendicoa@...> wrote:
>
> I am new in the QRP for 40 meter ,i need an antenna loop type for transmiting on 40 meter to be used with xmitter Ramsey QRP40C only 1 watt of power out.
> If somebody can help me i will be very gratefull.

I assume you are speaking of a "small transmitting loop" or "magnetic loop" antenna.

Here is a 70% efficient magnetic loop for 40m. If you look at the dimensions of that antenna, you will immediately see that achieving that level of efficiency at 40m is not a trivial task.

http://www.qsl.net/zp4kfx/Antenne/Magnetic_Loop.htm

Running only 1 watt, it's going to be a challenge to get a significant portion of that 1 watt radiated and not turned into heat. You'll need to minimize ground losses, capacitor losses, resistive losses, and coupling into other nearby conductive structures.

Running some quick numbers in AA5TB's loop calculator spreadsheet, a quarter-wavelength loop (10m circumference) made of thick conductor (1/2 inch or 1 inch copper pipe), resonated with a low-loss capacitor (butterfly or vacuum variable) might get you above 70% radiated power, assuming ground losses and environmental coupling losses could be minimized.

Good luck!

9162. 6 meter (50 Mhz) horizontal concentric magnetic loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-10 09:15:14 UTC
From: riccardodematteis
Topic: 9162 Message: 9162

Inspired by this project
http://www.aricollialbani.it/files/I5MSH%20-%20Hi-Q-Loop%20per%20i%2050MHZ1.pdf , I built my magnetic loop for the magic band. By the way, the experiment was made with loop horizontally mounted to get omnidirectional radiation and horizontal polarization.
I made a mistake cutting the coupling loop too long.
I tried adjusting the impedance by varying the intersection of the two planes, but it was too tricky.
I tried moving the small loop far from the perimeter and I've found 50 ohm position with the coupling loop in the center of the main one.
http://xa.yimg.com/kq/groups/12851910/sn/1167630074/name/DSC_2457.jpg
See in the picture the miniVNA measuring.
http://xa.yimg.com/kq/groups/12851910/or/692274669/name/loop+6+mt+miniVNA.JPG
I5MSH correctly said, "you can get the same curves with a dummy load".
So, I had to try it on the air. I went on Monte Folgorito, about 900 meters in north-west tuscany, and got 55 from Denmark in SSB, during E-sporadic opening.
Height from the ground 1,5 meter. Few centimeters of RG58 acted as tuning capacitor. Yaesu FT817 with self contained batteries.
Since I'm not a pro in this field, please feel free to leave your comments and evaluation on this kind of coupling, regarding radiated power and far field plot, comparing to "traditional" couplings (close to the main loop, opposite side of the capacitor).
73
Riccardo - IZ5VVA

9163. Re: QRP 40 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-10 09:26:49 UTC
From: riccardodematteis
Topic: 9160 Message: 9163

Gaijin (been to japan?)You must be a real QRP addicted.
Maybe I wasn't lucky. I could not get anybody picking up my CQ in 17 meter with 2,5W in SSB with my magnetic loop. To be honest I was on the sea-shore and maybe the gray-line was already too far.
On 6 meter and same power I was lucky at first attempt (a post about this is beeing moderated right now).
Efficient low bands magloops are huge and operated with lot of watts...
Please let me know your achievements.

--- In loopantennas@yahoogroups.com, "jose maria" <jmmendicoa@...> wrote:
>
> I am new in the QRP for 40 meter ,i need an antenna loop type for transmiting on 40 meter to be used with xmitter Ramsey QRP40C only 1 watt of power out.
> If somebody can help me i will be very gratefull.
>
> Jose Mendicoa
>

9164. Re: QRP 40 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-10 13:51:35 UTC
From: Pronto. (Military)
Topic: 9160 Message: 9164

I'm using a 817 into a DCTL loop that I made from copper water pipe .
Because of personal physical limitations the loop stands against the wall in my room yet it still outperforms the G5RV outside. I think that the better performance is also due to the loop being rotatable where as the G5RV is fixed in location.
The original DCTL design was made out of 300 ohm TV twinlead but I'm thinking of trying one made from really heavy duty twin stereo speaker extension cable. The 300 ohm TV twinlead version was inefficient.
The secret is certainly in efficiency but then the "Q" is so sharp that I have to retune if I move too far off frequency.
I can post pictures of my copper pipe DCTL if anyone is interested.
Jim VE3DDY

--- In loopantennas@yahoogroups.com, "qrp.gaijin" <qrp.gaijin@...> wrote:
>
> --- In loopantennas@yahoogroups.com, "jose maria" <jmmendicoa@> wrote:
> >
> > I am new in the QRP for 40 meter ,i need an antenna loop type for transmiting on 40 meter to be used with xmitter Ramsey QRP40C only 1 watt of power out.
> > If somebody can help me i will be very gratefull.
>
> I assume you are speaking of a "small transmitting loop" or "magnetic loop" antenna.
>
> Here is a 70% efficient magnetic loop for 40m. If you look at the dimensions of that antenna, you will immediately see that achieving that level of efficiency at 40m is not a trivial task.
>
> http://www.qsl.net/zp4kfx/Antenne/Magnetic_Loop.htm
>
> Running only 1 watt, it's going to be a challenge to get a significant portion of that 1 watt radiated and not turned into heat. You'll need to minimize ground losses, capacitor losses, resistive losses, and coupling into other nearby conductive structures.
>
> Running some quick numbers in AA5TB's loop calculator spreadsheet, a quarter-wavelength loop (10m circumference) made of thick conductor (1/2 inch or 1 inch copper pipe), resonated with a low-loss capacitor (butterfly or vacuum variable) might get you above 70% radiated power, assuming ground losses and environmental coupling losses could be minimized.
>
> Good luck!
>

9165. Re: QRP 40 meter loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-11 10:51:32 UTC
From: qrp.gaijin
Topic: 9160 Message: 9165

--- In loopantennas@yahoogroups.com, "riccardodematteis" <riccardodematteis@...> wrote:
>
> Gaijin (been to japan?)You must be a real QRP addicted.
[...]
> Efficient low bands magloops are huge and operated with lot of watts...
> Please let me know your achievements.

No achievements to speak of as yet. I am preparing my station for my first QSO (which will be CW), and am still looking for the best antenna solution for my small balcony attached to a concrete building. The rig is an FT-817 with a maximum of 5 watts out. I'd like to get on 40m, as that band is always hopping with CW activity day and night here in Japan, but as was mentioned earlier in the thread, making an efficient small antenna (magloop or otherwise) for 40m is a challenge, especially for QRPers. Personally, I may end up buying a 50 watt amp and use a compromise magloop or short dipole antenna (which will bring my effective radiated power back down to QRP levels).

Like the original poster, I'd be very interested in hearing success stories or recommended (loop) antennas for 40m QRPers, but I suspect the only way will be to follow the normal practices of making the antenna as large as possible, and locating it as high as possible, and as much in the clear as possible.

I've recently been thinking that if one is determined to work QRP, on 40m, with a small loop antenna, then the only saving grace can be a good location, achieved through portable operations. With a QRP rig and a portable loop antenna (even if terribly lossy), a good location like high on a mountain top or over salt water might be able to get enough power radiated and at the right angles for some QSOs.

9166. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-16 13:58:41 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9166

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /ComparativetestingofTheStackedToroidLoopStickAntennaTo
Uploaded by : everettsharp74 <everettsharp@...>
Description : Comparing The Stacked Toroid Loop Stick Antenna to a 2' Box Air Loop

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/ComparativetestingofTheStackedToroidLoopStickAntennaTo

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

everettsharp74 <everettsharp@...>

9167. new member contribution - hf transmitting - small loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-19 20:38:47 UTC
From: m0zeh
Topic: 9167 Message: 9167

I found this article today. This man is genius. Sorry if this is already here.
http://qrpbuilder.com/downloads/loop%20antenna%20110310.pdf

Steve-M0ZEH

9168. Re: new member contribution - hf transmitting - small loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-19 23:29:23 UTC
From: AlienRelics
Topic: 9167 Message: 9168

It is worth reposting.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "m0zeh" <m0zeh@...> wrote:
>
> I found this article today. This man is genius. Sorry if this is already here.
> http://qrpbuilder.com/downloads/loop%20antenna%20110310.pdf
>
> Steve-M0ZEH
>

9169. Re: [loopantennas] Re: new member contribution - hf transmitting - small loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-20 06:05:48 UTC
From: brian nsl
Topic: 9167 Message: 9169

Steve,
Thank you for posting the link on the loop antenna,
a real work of art.
I never looked upon my tin of metal polish as an antenna accessory hi!
72, Brian, GØNSL.

----- Original Message -----
From: AlienRelics
To: loopantennas@yahoogroups.com
Sent: Wednesday, June 20, 2012 12:29 AM
Subject: [loopantennas] Re: new member contribution - hf transmitting - small loop

9170. 80 mtr Skyloop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-26 00:08:18 UTC
From: Phillip
Topic: 9170 Message: 9170
Attachments: 1 described; binary payloads are missing from this source WARC

Hi,
I have built a skywire loop as per the http://www.k5rcd org/hor%20loop%20instruct.htm and the ARRL Simple and fun Antennas book . I find its performance on 80 mtrs disappointing ..

I have it feed with 600 home made feed line which is 71 feet long, 25 ft down the pole and 45 ft to my anchor point on the house and has about 8 mtrs of 213 coax attached to get me inside to the tuner

I have 272 feet plus of wire up and each side is around 73 feet at about 33 feet off the ground,

I did have a 4:1 balun but it was suggested that I take this out so at this stage its out ..

I am running a TS 590s and it appears to be ok with it tunes up good but when I use the MFJ analyzer it tells me its best at 2.900 way off the 3,6 , 3.7 I was looking for

I have set up as per K5RCD a multi band loop ..

Do I shorten it to get it close to 3,6 etc or do I let the tuner do the work ??

73 Phillip
ZL2TZE

9171. Re: Experiments with A Loop Stick Antenna using Stacked Toroids

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-26 05:44:27 UTC
From: lowalacrity
Topic: 9144 Message: 9171

Greetings,
I recently fabricated one one of Everett's stacked toroid loop sticks as I wanted something high performance and relatively portable. I also wound the 3 litz coils on clear plastic forms to allow for interchangeability. The only difference that might affect performance, compared with Everett's, is the litz wire I used has fewer strands, (180 vs 330). I have copious quantities is why I went with it initially. Now that it's proven. I'll have to wind some higher count ones. I got lots of the forms too. As far as it's performance, I will back up Everett's claims, at least om MW, comparable readability with less noise. In one case, Readability seemed better, i.e. barely audible muddy signal was more readable.
This station is actually a Travelers Information Radio Station at 530 KHz. I calculated it is located about 25 miles out. Not sure of the power, but they're not allowed more than 10 watts out. They also employ a low-pass filter that rolls off at 3 khz. Hence the poor audio quality. My 2.5 ft octo air loop picks it up fine... along with plenty of noise. The noise was noticeably less with the STLS, but the signal just as strong and a bit more readable. Mind you this is using the smaller litz. The receiver I used, for the most part was a Tecsun PL-230 as it performed the best for its size. I will put pictures of the test components in the photos section. Also plan on long wave testing as soon as I wind the larger litz coils. His wind counts are dead on. This contra wound loop is worth pursuing...

73,
John

--- In loopantennas@yahoogroups.com, "Everett" <everettsharp@...> wrote:
>
> Guys,
>
> I just deleted the the file "Experiments with A Loop Stick Antenna using Stacked Toroids" and replaced it with a revised version.
>
> 73's Everett
>

9172. Butterfly-capacitor-kits-5-15kv for sale

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-26 17:19:13 UTC
From: pop
Topic: 9172 Message: 9172

http://forums.qrz.com/showthread.php?351604-Butterfly-capacitor-kits-5-15kv

9173. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-29 20:01:50 UTC
From: Lew
Topic: 8994 Message: 9173

Still waiting on prices

> the shipping can be less then $15.00
>
> in weekend I will do an estimation for yours butterfly capacitor.
>
>
>
> 73 de VA6POP
> Vasile

9174. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-06-29 20:03:39 UTC
From: Lew
Topic: 8994 Message: 9174

Still waiting on prices

> the shipping can be less then $15.00
>
> in weekend I will do an estimation for yours butterfly capacitor.
>
>
>
> 73 de VA6POP
> Vasile

9177. small 160m rx loop and ferrite

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-03 19:35:54 UTC
From: Sam Morgan
Topic: 9177 Message: 9177

I'd like to ask about what ferrite mix to use at the feed of a small rx loop I
have built

this is NOT a shielded loop
with the break in the shield half way around the loop

I made the loop out of the 2 turns of 5/8 inch hardline I had available
the circumference is about 12'
I am using only the shield as a continuous 2 turn loop

for the feedline I just attached a 50 ohm coax with the
coax center to one end of the hardline shield
and the coax shield to the other end of the hardline shield

it worked fine for what I wanted
in the sense that it allowed me to null
some thunderstorm crash noise during the Summer Stew
allowing me to diversity receive with my outside vertical on my K3
(it even works on 80m and 40m, so the toroid needs to work 160m-40m)

however the pattern is not symmetrical
(I think this is due to the unbalanced 15' of direct coax feedline?)

so I think my next step would be to use a toroid as a balun
with each end of the hardline loop attached by a couple of turns on the toroid
and maybe twice that many turns on the other side of the toroid
going to my 15 feet of 50 ohm coax to the rig

I might later get around to building a preamp for it
but for now all I want to do is add the toroid
in the hopes that it will maybe make the pattern more symmetrical

if I understand this correctly
I am wanting to use a broadband coupling FTxx-xx ferrite core
rather than a narrow high Q like I would get with powdered iron Txx-xx core

I have an FT240-31, as well as FT37-61, and a FT50-61 on hand in my part bin.
they were left overs from an order from Tony at
http://partsandkits.com/toroids.php

I used all the hard line I had on hand
so different lengths, configurations etc etc etc
is not my question, for now.......

for now I just want to know what mix toroid I need to use
between this loop and the coax feed to it
I'm going at this as a step by step learning experiment

I was planing on 4 turns on the primary and 16 turns on the secondary
my reasoning being that might also give me a little signal increase as well?

perhaps later I might get into the matching aspects of this experiment
but I had plenty of signal strength using the coax directly
with the loop setting in my 'other room' of my ground floor apartment
I just thought it would be nice to have a symmetrical pattern
rather than the odd ball one I have now

--

GB & 73
K5OAI
Sam Morgan

9178. Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-03 20:49:57 UTC
From: Ron
Topic: 9178 Message: 9178

Hi all,

Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.

I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.

In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.

I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.

73' Ron
ON2RON - DXA64
JO21EC

9179. My Helical Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-07 06:21:40 UTC
From: radio_00
Topic: 9179 Message: 9179

Please see my experiment here
http://m0zeh-antennas.blogspot.co.uk/2012/06/helical-wound-loop-antena.h\
tml
<http://m0zeh-antennas.blogspot.co.uk/2012/06/helical-wound-loop-antena.\
html>

I'm struggling with the capacitor at the moment. I need to get remote
control.

Steve-M0ZEH

9180. Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-07 18:27:16 UTC
From: gareywittich2000
Topic: 9180 Message: 9180

From my reading there are 4 Basic Toroid Core Winding Methods:

1) Bifilar Winding Configuration
2) Overlap Winding Config.
3) Autotransformer Config.
4) Opposite-Side Winding Config.

What are the ADVANTAGES/DISADVANTAGES of each and WHERE/WHEN should each be used ????

Always learning,

Garey Wittich
Santa Monica, CA
Palstar R30A + Windom Antenna

9181. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-07 19:39:18 UTC
From: Chris Trask
Topic: 9180 Message: 9181

>
> From my reading there are 4 Basic Toroid Core Winding Methods:
>
> 1) Bifilar Winding Configuration
> 2) Overlap Winding Config.
> 3) Autotransformer Config.
> 4) Opposite-Side Winding Config.
>
> What are the ADVANTAGES/DISADVANTAGES of each and WHERE/WHEN should each be used ????
>

Bifilar (and trifilar) are best when the wire size makes it practical, meaning being able to keep the wires close to the core surface. There is a minimal amount of coupling to the core with this method, and the core provides "magnetization inductance" which extends the low frequency cutoff of wideband transformers. This method also has the lowest degree of losses.

Not sure what you mean by "overlap". I'll assume that you mean winding the turns amongst each other while keeping everything in a single layer. This is slightly less than with #1 and is best used when the wire size makes #1 impractical. The windings should be designed so that the entire core is used with little to no space between the wires, which will minimize coupling to the core.

For #3, I'm assuming you are placing the windings end-to-end on the core. The performance is somewhat less than with #2, and again the wires should use the entire core.

#4 is the worst of all as it results in the highest degree of coupling to the core, which can result in IMD products due to hysteresis nonlinearities as well as higher loss levels.

Take a look at my online paper (and some of the references) for deeper details:

http://www.home.earthlink.net/~christrask/Wideband%20Transformer%20Models.pdf

Chris

9182. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-07 20:13:51 UTC
From: Andy Ikin
Topic: 9180 Message: 9182

Hello Chris,

f is missing off the end of your link to the paper.

73

Andrew

----- Original Message -----
From: Chris Trask
To: loopantennas@yahoogroups.com
Sent: Saturday, July 07, 2012 8:39 PM
Subject: Re: [loopantennas] Toroid Core Winding Methods

>
> From my reading there are 4 Basic Toroid Core Winding Methods:
>
> 1) Bifilar Winding Configuration
> 2) Overlap Winding Config.
> 3) Autotransformer Config.
> 4) Opposite-Side Winding Config.
>
> What are the ADVANTAGES/DISADVANTAGES of each and WHERE/WHEN should each
be used ????
>

Bifilar (and trifilar) are best when the wire size makes it practical, meaning being able to keep the wires close to the core surface. There is a minimal amount of coupling to the core with this method, and the core provides "magnetization inductance" which extends the low frequency cutoff of wideband transformers. This method also has the lowest degree of losses.

Not sure what you mean by "overlap". I'll assume that you mean winding the turns amongst each other while keeping everything in a single layer. This is slightly less than with #1 and is best used when the wire size makes #1 impractical. The windings should be designed so that the entire core is used with little to no space between the wires, which will minimize coupling to the core.

For #3, I'm assuming you are placing the windings end-to-end on the core. The performance is somewhat less than with #2, and again the wires should use the entire core.

#4 is the worst of all as it results in the highest degree of coupling to the core, which can result in IMD products due to hysteresis nonlinearities as well as higher loss levels.

Take a look at my online paper (and some of the references) for deeper details:

http://www.home.earthlink.net/~christrask/Wideband%20Transformer%20Models.pdf

Chris

9183. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-07 21:04:04 UTC
From: Chris Trask
Topic: 9180 Message: 9183

>
> > Take a look at my online paper (and some of the references) for deeper
> > details:
> >
> >
http://www.home.earthlink.net/~christrask/Wideband%20Transformer%20Models.pd
> > f
>
>
> f is missing off the end of your link to the paper.
>

It's there, just not on the same line. Doesn't seem to be any real cure
for that other than using TinyURL. Normally I use one of my permanent
indirect links as TinyURL expires after a length of time.

Chris

9184. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-07 21:26:46 UTC
From: Don
Topic: 9180 Message: 9184

Use < at the start and > at the end for long URLs.

Don
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 07-Jul-12 14:04, Chris Trask wrote:
>>
>>> Take a look at my online paper (and some of the references) for deeper
>>> details:
>>>
>>>
> http://www.home.earthlink.net/~christrask/Wideband%20Transformer%20Models.pd
>>> f
>>
>>
>> f is missing off the end of your link to the paper.
>>
>
> It's there, just not on the same line. Doesn't seem to be any real cure
> for that other than using TinyURL. Normally I use one of my permanent
> indirect links as TinyURL expires after a length of time.
>
> Chris
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than
uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos.
Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos

>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.2195 / Virus Database: 2437/5116 - Release Date: 07/07/12
>
>

9185. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 00:26:11 UTC
From: Chris Trask
Topic: 9180 Message: 9185

```
>
> >
> > >
> > > f is missing off the end of your link to the paper.
> > >
> >
> > It's there, just not on the same line. Doesn't seem to be any real
cure
> > for that other than using TinyURL. Normally I use one of my permanent
> > indirect links as TinyURL expires after a length of time.
> >
>
> Use < at the start and > at the end for long URLs.
>

I do. Many of these list servers strip those off.

Chris
```

9186. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 00:38:31 UTC
From: Chris Trask
Topic: 9180 Message: 9186

Hmmm.... I've never seen that one before. Let's give it a try:

>
http://www.usnews.com/news/articles/2012/07/06/thats-no-baloney-lobster-chea
per-than-deli-meat

Chris

9187. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 00:40:10 UTC
From: Chris Trask
Topic: 9180 Message: 9187

>
> Hmmm.... I've never seen that one before. Let's give it a try:
>
> >
>
http://www.usnews.com/news/articles/2012/07/06/thats-no-baloney-lobster-chea
> per-than-deli-meat
>

Nope. Got a broken line once again. Always been that way no matter
what.

Chris

9188. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 00:37:40 UTC
From: Sam Morgan
Topic: 9180 Message: 9188

you can also use a >

on an empty line above the line with the url
for example

>
http://www.usnews.com/news/articles/2012/07/06/thats-no-baloney-lobster-cheaper-than-deli-meat

--
GB & 73
K5OAI
Sam Morgan

On 7/7/2012 7:26 PM, Chris Trask wrote:

> I do. Many of these list servers strip those off.
>
> Chris
>

9189. Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 17:59:38 UTC
From: enriqueeeeee2001
Topic: 9178 Message: 9189

Hello Ron,

Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.
You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?

By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.

Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.

Cheers.

--- In loopantennas@yahoogroups.com, "Ron" <bikeron@...> wrote:
>
> Hi all,
>
> Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
>
> I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.
>
> In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
>
> I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
>
> 73' Ron
> ON2RON - DXA64
> JO21EC
>

9190. Odd display of messages in Outlook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 19:48:58 UTC
From: xtemporize
Topic: 9190 Message: 9190

Since the recent change to Yahoo Groups mail, when reading these in Outlook/ Windows Live Mail, i see the first message normally, but all the rest display in a single column. Yes, one word on a line! What gives? Thanks- Hue Miller

9191. Re: [loopantennas] Odd display of messages in Outlook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 21:13:38 UTC
From: Adrian Flynn
Topic: 9190 Message: 9191

Hi Hue,

I don't remember the list but there is a lot of conversation on this problem
Yahoo is aware of it and trying to cure it.
If you get individual emails no problem
Just on the digest.

73
Adrian KF7DYU

On Sun, Jul 8, 2012 at 3:48 PM, xtemporize <kargo_cult@...> wrote:

> **
>
>
> Since the recent change to Yahoo Groups mail, when reading these in
> Outlook/ Windows Live Mail, i see the first message normally, but all the
> rest display in a single column. Yes, one word on a line! What gives?
> Thanks- Hue Miller
>
>
>

9192. Re: [loopantennas] Odd display of messages in Outlook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 23:15:39 UTC
From: Adrian Flynn
Topic: 9190 Message: 9192

Hi Hue,
This is the yahoo group that has all the talk on the new format problem.
Amateur-repairs@yahoogroups.com

If you want information on it join or I can forward the emails to you,
currently I
think there are about 20+

73
Adrian KF7DYU

On Sun, Jul 8, 2012 at 3:48 PM, xtemporize <kargo_cult@msn.com> wrote:

> **
>
>
> Since the recent change to Yahoo Groups mail, when reading these in
> Outlook/ Windows Live Mail, i see the first message normally, but all the
> rest display in a single column. Yes, one word on a line! What gives?
> Thanks- Hue Miller
>
>
>

9193. Re: Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-09 15:14:05 UTC
From: AlienRelics
Topic: 9180 Message: 9193

<http://www.home.earthlink.net/~christrask/Wideband%20Transformer%20Models.pdf>

<
http://www.home.earthlink.net/~christrask/Wideband%20Transformer%20Models.pdf
>

<
http://www.home.earthlink.net/~christrask/Wideband%20Transformer%20Models.pdf

Test

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Sam Morgan <k5oai.sam@...> wrote:
>
> you can also use a >
>
> on an empty line above the line with the url
> for example
>
> >
> http://www.usnews.com/news/articles/2012/07/06/thats-no-baloney-lobster-cheaper-than-del
i-meat
>
> --
> GB & 73
> K5OAI
> Sam Morgan
>
>
> On 7/7/2012 7:26 PM, Chris Trask wrote:
>
> > I do. Many of these list servers strip those off.
> >
> > Chris
> >
>

9194. Re: Odd display of messages in Outlook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-09 16:30:16 UTC
From: Mike Parker
Topic: 9190 Message: 9194

OK there is an official thread on the Yahoo help site here:

http://help.yahoo.com/communities/index?page=forums&topic=679f4462f0374ad181e2a94d6972d4e8&forumname=Known%20issues%20and%20FAQ&topicname=%28KNOWN+ISSUE%29+Daily+Digests+displaying+one+word+per+line.

I just fixed one of the emails by deleting some offending 's from the end of the 2nd message... took me less than 5 mins to fix - Yahoo with all their wealth and people "on it", makes you wonder what they are doing.... I have posted a response to that thread but so far it hasn't shown (not sure if posts are moderated or if they don't like URLs as I sent them a link to a fixed email).

For those who are interested this is the last digest I have fixed:

www.lrgsoftware.com/mike/yahoo_groups_mail_fix.eml

Hopefully this Group allows URLS :)

73

Mike
M0SAZ

--- In loopantennas@yahoogroups.com, "xtemporize" <kargo_cult@...> wrote:
>
> Since the recent change to Yahoo Groups mail, when reading these in
> Outlook/ Windows Live Mail, i see the first message normally, but all the rest display in a single column. Yes, one word on a line! What gives? Thanks- Hue Miller
>

9195. Re: [loopantennas] Toroid Core Winding Methods

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-08 04:35:47 UTC
From: Tom Humes
Topic: 9180 Message: 9195

Copy to Word all lines that are part of the url. Then you can go to the url without interuption.

From: Sam Morgan <k5oai.sam@...>
To: loopantennas@yahoogroups.com
Cc: Chris Trask <christrask@...>
Sent: Saturday, July 7, 2012 5:37 PM
Subject: Re: [loopantennas] Toroid Core Winding Methods

you can also use a >

on an empty line above the line with the url
for example

>
http://www.usnews.com/news/articles/2012/07/06/thats-no-baloney-lobster-cheaper-than-deli-meat

--
GB & 73
K5OAI
Sam Morgan

On 7/7/2012 7:26 PM, Chris Trask wrote:

> I do. Many of these list servers strip those off.
>
> Chris
>

9196. Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-09 17:08:28 UTC
From: Ron
Topic: 9178 Message: 9196

Hi Enrique,

Congratulations on the purchase of the ALA100LN! No I cannot say that i notice any overloading or distortion with the 30 meter coax nor as i was using 30 meters of wire before that. My strongest broadcast station is 65 km from my home and produces a -21 dBm signal on my perseus SDR.

If you can, try to use a shielded loop as it gives you 4 dBm more S/N as with a wire. Also try not to use 2.5 mm electrical wire as it tends to stretch in time. Use copperweld or as i do use some military grade telephone wire witch has stainless steel and copper strands. It will last a lifetime!

I will however mount the shielded loop on my roof with a slightly smaller size loop to stay there permanently as the now used antenna is a temporarily setup.

Good luck with your new antenna.

73' Ron
ON2RON / DXA64 @ jo21ec

>
>
> Hello Ron,
>
> Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.
> You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?
>
> By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.
>
> Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.
>
> Cheers.
>
> --- In loopantennas@yahoogroups.com, "Ron" <bikeron@> wrote:
> >
> > Hi all,
> >
> > Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
> >
> > I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N

of 12 dBm for the first time in my life and with this flag.
> >
> > In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
> >
> > I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
> >
> > 73' Ron
> > ON2RON - DXA64
> > JO21EC
> >
>

9197. Re: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-09 17:38:17 UTC
From: Don
Topic: 9178 Message: 9197

Hi All,

Also use the largest diameter wire that you can - it helps and I've done
it on my ALA-100L's.

Don WPC6NDB
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 09-Jul-12 10:08, Ron wrote:
> Hi Enrique,
>
> Congratulations on the purchase of the ALA100LN! No I cannot say that i notice any overloading or distortion with the 30 meter coax nor as i was using 30 meters of wire before that. My strongest broadcast station is 65 km from my home and produces a -21 dBm signal on my perseus SDR.
>
> If you can, try to use a shielded loop as it gives you 4 dBm more S/N as with a wire. Also try not to use 2.5 mm electrical wire as it tends to stretch in time. Use copperweld or as i do use some military grade telephone wire witch has stainless steel and copper strands. It will last a lifetime!
>
> I will however mount the shielded loop on my roof with a slightly smaller size loop to stay there permanently as the now used antenna is a temporarily setup.
>
> Good luck with your new antenna.
>
> 73' Ron
> ON2RON / DXA64 @ jo21ec
>
>
>>
>>
>> Hello Ron,
>>
>> Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.
>> You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?
>>
>> By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.

>>
>> Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.
>>
>> Cheers.
>>
>> --- In loopantennas@yahoogroups.com, "Ron" <bikeron@> wrote:
>>>
>>> Hi all,
>>>
>>> Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
>>>
>>> I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.
>>>
>>> In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
>>>
>>> I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
>>>
>>> 73' Ron
>>> ON2RON - DXA64
>>> JO21EC
>>>
>>
>
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos

>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.2195 / Virus Database: 2437/5121 - Release Date: 07/09/12
>
>

9198. HF antenna cookbook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-10 20:30:48 UTC
From: leo
Topic: 9198 Message: 9198

I'm lost when it comes to loops but I found this. I don't remember where but it might help someone.
Look in the file section the name is HF antenna cookbook
and it is by Texas Instruments..

9199. Re: HF antenna cookbook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-10 21:50:01 UTC
From: AlienRelics
Topic: 9198 Message: 9199

Nice!

I took the space out of the file name so it is easier to link to it, and changed the capitalization.

http://groups.yahoo.com/group/loopantennas/files/AntennaCookbook.pdf

It is about HF RFID tag readers, which operate at 13.56MHz so it is a great loop antenna reference.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "leo" <kg6wni@...> wrote:
>
> I'm lost when it comes to loops but I found this. I don't remember where but it might help someone.
> Look in the file section the name is HF antenna cookbook
> and it is by Texas Instruments..
>

9200. RE: WebSDR University of Twente is back

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-11 08:04:17 UTC
From: dx11
Topic: 9200 Message: 9200

The webSDR of the Univerity of Twente has been inactive since november
because of lack of an antenna facility.
It's back on the air right now!,

WebSDR on eight bands <http://websdr.ewi.utwente.nl:8901/>
http://websdr.ewi.utwente.nl:8901/

During its absence I have been listening to:

The experimental WebSDR located at PA3FWM's home
<http://websdr.ewi.utwente.nl:8903/> http://websdr.ewi.utwente.nl:8903/

This is also still active and worth a try.

Cor Beijersbergen

9201. Re: HF antenna cookbook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-11 12:41:07 UTC
From: Bruce Carter
Topic: 9198 Message: 9201

It is a good thing you archived this document here, the RFID group at Texas instruments was shut down over three years ago - everybody went in the massive lay off they had. I don't know how long it will be before TI shuts off the applications material for RFID. They tend to do a pre-frontal lobotomy on applications material they deem outdated / not applicable.

9202. Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-11 20:52:45 UTC
From: enriqueeeeee2001
Topic: 9178 Message: 9202

Thank you Ron and Don for the advices,

I have already received the ALA100LN, next week I will try it.

Regarding the wire, I have been surfing the web and some people recommend twimax 100 Ohms cable, it is shielded has two wires that in parallel are 50 Ohms. I think that is a better option than the 2,5 mm electrical wire.

By the way, since I am going to have two antennas,a Wellbrook 330S and an ala100LN I would like to get a phaser in order to null some interferences that comes from the elevator.

Anybody knows one that covers both MW and SW?

Best Regards

--- In loopantennas@yahoogroups.com, Don <stb55@...> wrote:
>
> Hi All,
>
> Also use the largest diameter wire that you can - it helps and I've done
> it on my ALA-100L's.
>
> Don WPC6NDB
> Upland, CA
> 34.10 -117.63 1250ft
> R-75 w/250Hz 2x R-71A w/250Hz R-70
> SDR-IQ SR-AF & LPF DSP599zx
> MFJ-784B HD-1418 AF-1 MSB-1
> PA0RDT Mini-Whip x2 @ 15ft
> LFL1010 ALA100L x2
>
>
> On 09-Jul-12 10:08, Ron wrote:
> > Hi Enrique,
> >
> > Congratulations on the purchase of the ALA100LN! No I cannot say that i notice any overloading or distortion with the 30 meter coax nor as i was using 30 meters of wire before that. My strongest broadcast station is 65 km from my home and produces a -21 dBm signal on my perseus SDR.
> >
> > If you can, try to use a shielded loop as it gives you 4 dBm more S/N as with a wire. Also try not to use 2.5 mm electrical wire as it tends to stretch in time. Use copperweld or as i do use some military grade telephone wire witch has stainless steel and copper strands. It will last a lifetime!
> >
> > I will however mount the shielded loop on my roof with a slightly smaller size loop to

stay there permanently as the now used antenna is a temporarily setup.
> >
> > Good luck with your new antenna.
> >
> > 73' Ron
> > ON2RON / DXA64 @ jo21ec
> >
> >
> >>
> >>
> >> Hello Ron,
> >>
> >> Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.
> >> You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?
> >>
> >> By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.
> >>
> >> Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.
> >>
> >> Cheers.
> >>
> >> --- In loopantennas@yahoogroups.com, "Ron" <bikeron@> wrote:
> >>>
> >>> Hi all,
> >>>
> >>> Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
> >>>
> >>> I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.
> >>>
> >>> In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
> >>>
> >>> I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
> >>>
> >>> 73' Ron
> >>> ON2RON - DXA64
> >>> JO21EC
> >>>

> >>
> >
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> > -----
> > No virus found in this message.
> > Checked by AVG - www.avg.com
> > Version: 2012.0.2195 / Virus Database: 2437/5121 - Release Date: 07/09/12
> >
> >
>

9203. Re: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-11 22:29:13 UTC
From: Andy Ikin
Topic: 9178 Message: 9203

Juan,

The ALA100LN I sent to you was a special extended HF version (JFET/Bipolar cascode). Therefore, there may be a problem with loop to screen capacity slugging the HF responce. I would recommend that the keep the loop to 8m circumfrence or smaller is MW overload is an issue; 2.5mm sq. wire is okay.

At HF the loop size will affect the loops ability to reject near field electrical noise, so the smaller the loop size the better.

73

Andrew

----- Original Message -----
From: enriqueeeeee2001
To: loopantennas@yahoogroups.com
Sent: Wednesday, July 11, 2012 9:52 PM
Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN

Thank you Ron and Don for the advices,

I have already received the ALA100LN, next week I will try it.

Regarding the wire, I have been surfing the web and some people recommend twimax 100 Ohms cable, it is shielded has two wires that in parallel are 50 Ohms. I think that is a better option than the 2,5 mm electrical wire.

By the way, since I am going to have two antennas,a Wellbrook 330S and an ala100LN I would like to get a phaser in order to null some interferences that comes from the elevator.

Anybody knows one that covers both MW and SW?

Best Regards

--- In loopantennas@yahoogroups.com, Don <stb55@...> wrote:
>
> Hi All,
>
> Also use the largest diameter wire that you can - it helps and I've done
> it on my ALA-100L's.
>
> Don WPC6NDB
> Upland, CA
> 34.10 -117.63 1250ft
> R-75 w/250Hz 2x R-71A w/250Hz R-70
> SDR-IQ SR-AF & LPF DSP599zx
> MFJ-784B HD-1418 AF-1 MSB-1

> PA0RDT Mini-Whip x2 @ 15ft
> LFL1010 ALA100L x2
>
>
> On 09-Jul-12 10:08, Ron wrote:
> > Hi Enrique,
> >
> > Congratulations on the purchase of the ALA100LN! No I cannot say that i notice any overloading or distortion with the 30 meter coax nor as i was using 30 meters of wire before that. My strongest broadcast station is 65 km from my home and produces a -21 dBm signal on my perseus SDR.
> >
> > If you can, try to use a shielded loop as it gives you 4 dBm more S/N as with a wire. Also try not to use 2.5 mm electrical wire as it tends to stretch in time. Use copperweld or as i do use some military grade telephone wire witch has stainless steel and copper strands. It will last a lifetime!
> >
> > I will however mount the shielded loop on my roof with a slightly smaller size loop to stay there permanently as the now used antenna is a temporarily setup.
> >
> > Good luck with your new antenna.
> >
> > 73' Ron
> > ON2RON / DXA64 @ jo21ec
> >
> >
> >>
> >>
> >> Hello Ron,
> >>
> >> Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.
> >> You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?
> >>
> >> By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.
> >>
> >> Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.
> >>
> >> Cheers.
> >>
> >> --- In loopantennas@yahoogroups.com, "Ron" <bikeron@> wrote:
> >>>
> >>> Hi all,
> >>>
> >>> Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
> >>>
> >>> I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and

repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.
> >>>
> >>> In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
> >>>
> >>> I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
> >>>
> >>> 73' Ron
> >>> ON2RON - DXA64
> >>> JO21EC
> >>>
> >>
> >
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> >
> > -----
> > No virus found in this message.
> > Checked by AVG - www.avg.com
> > Version: 2012.0.2195 / Virus Database: 2437/5121 - Release Date: 07/09/12
> >
> >
>

9204. Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-12 10:24:41 UTC
From: Ron
Topic: 9178 Message: 9204

Andrew,

On this moment the ALA100LN - shielded loop is my best antenna besides my beverage, the 10 by 4 meters FLG100LN is the inferiour antenna at the moment. All antennas are pointed in the same direction but the shielded loop has no attenuation on the "back" side of course.

How is the JFET/Bipolar ALA100LN different from the standard model?

My ALA100LN has no problem with strong MW signals. My strongest station is -16 dBm at night with the 30 meter coax. I have however connected the coax shield directly to a separate earth right under the antenna. The coax is a RG6 with a solid aluminum shield and a normal woven shield to double it up. I did receive the SAQ signal with a S/N of 12 dB on the FLG100LN and 26 dB S/N on the shielded ALA100LN loop. Signal strenghts on both antennas was the same. I remember you mailed me that the ALA and FLG amps where not designed to recieve so low in frequency but obviously they do a good job at it!

73' Ron
ON2RON / DXA64 @ jo21ec

>
> Juan,
>
> The ALA100LN I sent to you was a special extended HF version (JFET/Bipolar cascode). Therefore, there may be a problem with loop to screen capacity slugging the HF responce. I would recommend that the keep the loop to 8m circumfrence or smaller is MW overload is an issue; 2.5mm sq. wire is okay.
>
> At HF the loop size will affect the loops ability to reject near field electrical noise, so the smaller the loop size the better.
>
> 73
>
> Andrew
>
>
>
> ----- Original Message -----
> From: enriqueeeeee2001
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, July 11, 2012 9:52 PM
> Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN
>
>
>
> Thank you Ron and Don for the advices,
>

> I have already received the ALA100LN, next week I will try it.
>
> Regarding the wire, I have been surfing the web and some people recommend twimax 100 Ohms cable, it is shielded has two wires that in parallel are 50 Ohms. I think that is a better option than the 2,5 mm electrical wire.
>
> By the way, since I am going to have two antennas,a Wellbrook 330S and an ala100LN I would like to get a phaser in order to null some interferences that comes from the elevator.
>
> Anybody knows one that covers both MW and SW?
>
> Best Regards
>
> --- In loopantennas@yahoogroups.com, Don <stb55@> wrote:
> >
> > Hi All,
> >
> > Also use the largest diameter wire that you can - it helps and I've done
> > it on my ALA-100L's.
> >
> > Don WPC6NDB
> > Upland, CA
> > 34.10 -117.63 1250ft
> > R-75 w/250Hz 2x R-71A w/250Hz R-70
> > SDR-IQ SR-AF & LPF DSP599zx
> > MFJ-784B HD-1418 AF-1 MSB-1
> > PA0RDT Mini-Whip x2 @ 15ft
> > LFL1010 ALA100L x2
> >
> >
> > On 09-Jul-12 10:08, Ron wrote:
> > > Hi Enrique,
> > >
> > > Congratulations on the purchase of the ALA100LN! No I cannot say that i notice any overloading or distortion with the 30 meter coax nor as i was using 30 meters of wire before that. My strongest broadcast station is 65 km from my home and produces a -21 dBm signal on my perseus SDR.
> > >
> > > If you can, try to use a shielded loop as it gives you 4 dBm more S/N as with a wire. Also try not to use 2.5 mm electrical wire as it tends to stretch in time. Use copperweld or as i do use some military grade telephone wire witch has stainless steel and copper strands. It will last a lifetime!
> > >
> > > I will however mount the shielded loop on my roof with a slightly smaller size loop to stay there permanently as the now used antenna is a temporarily setup.
> > >
> > > Good luck with your new antenna.
> > >
> > > 73' Ron

> > > ON2RON / DXA64 @ jo21ec
> > >
> > >
> > >>
> > >>
> > >> Hello Ron,
> > >>
> > >> Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.
> > >> You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?
> > >>
> > >> By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.
> > >>
> > >> Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.
> > >>
> > >> Cheers.
> > >>
> > >> --- In loopantennas@yahoogroups.com, "Ron" <bikeron@> wrote:
> > >>>
> > >>> Hi all,
> > >>>
> > >>> Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
> > >>>
> > >>> I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.
> > >>>
> > >>> In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
> > >>>
> > >>> I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
> > >>>
> > >>> 73' Ron
> > >>> ON2RON - DXA64
> > >>> JO21EC
> > >>>
> > >>
> > >
> > >
> > >

> > >
> > > ------------------------------------
> > >
> > > If you've got links, post them in the Links section!
> > > http://groups.yahoo.com/group/loopantennas/links
> > >
> > > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > > http://groups.yahoo.com/group/loopantennas/files
> > >
> > > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > >
> > > And please trim all this when replying!Yahoo! Groups Links
> > >
> > >
> > >
> > >
> > >
> > > -----
> > > No virus found in this message.
> > > Checked by AVG - www.avg.com
> > > Version: 2012.0.2195 / Virus Database: 2437/5121 - Release Date: 07/09/12
> > >
> > >
> >
>

9205. Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-12 10:57:19 UTC
From: enriqueeeeee2001
Topic: 9178 Message: 9205

Hello Andrew,

I will try with a single loop (8 m) and with two turns (4x4) in the same pole I have the 330S.

Any chance in getting your old APU-100 antenna phaser? I would like to get one for MW and SW.

Kind Regards.

--- In loopantennas@yahoogroups.com, "Ron" <bikeron@...> wrote:
>
> Andrew,
>
> On this moment the ALA100LN - shielded loop is my best antenna besides my beverage, the 10 by 4 meters FLG100LN is the inferiour antenna at the moment. All antennas are pointed in the same direction but the shielded loop has no attenuation on the "back" side of course.
>
> How is the JFET/Bipolar ALA100LN different from the standard model?
>
> My ALA100LN has no problem with strong MW signals. My strongest station is -16 dBm at night with the 30 meter coax. I have however connected the coax shield directly to a separate earth right under the antenna. The coax is a RG6 with a solid aluminum shield and a normal woven shield to double it up. I did receive the SAQ signal with a S/N of 12 dB on the FLG100LN and 26 dB S/N on the shielded ALA100LN loop. Signal strenghts on both antennas was the same. I remember you mailed me that the ALA and FLG amps where not designed to recieve so low in frequency but obviously they do a good job at it!
>
> 73' Ron
> ON2RON / DXA64 @ jo21ec
>
> >
> > Juan,
> >
> > The ALA100LN I sent to you was a special extended HF version (JFET/Bipolar cascode). Therefore, there may be a problem with loop to screen capacity slugging the HF responce. I would recommend that the keep the loop to 8m circumfrence or smaller is MW overload is an issue; 2.5mm sq. wire is okay.
> >
> > At HF the loop size will affect the loops ability to reject near field electrical noise, so the smaller the loop size the better.
> >
> > 73
> >
> > Andrew
> >

> >
> >
> > ----- Original Message -----
> > From: enriqueeeeee2001
> > To: loopantennas@yahoogroups.com
> > Sent: Wednesday, July 11, 2012 9:52 PM
> > Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN
> >
> >
> >
> > Thank you Ron and Don for the advices,
> >
> > I have already received the ALA100LN, next week I will try it.
> >
> > Regarding the wire, I have been surfing the web and some people recommend twimax 100 Ohms cable, it is shielded has two wires that in parallel are 50 Ohms. I think that is a better option than the 2,5 mm electrical wire.
> >
> > By the way, since I am going to have two antennas,a Wellbrook 330S and an ala100LN I would like to get a phaser in order to null some interferences that comes from the elevator.
> >
> > Anybody knows one that covers both MW and SW?
> >
> > Best Regards
> >
> > --- In loopantennas@yahoogroups.com, Don <stb55@> wrote:
> > >
> > > Hi All,
> > >
> > > Also use the largest diameter wire that you can - it helps and I've done
> > > it on my ALA-100L's.
> > >
> > > Don WPC6NDB
> > > Upland, CA
> > > 34.10 -117.63 1250ft
> > > R-75 w/250Hz 2x R-71A w/250Hz R-70
> > > SDR-IQ SR-AF & LPF DSP599zx
> > > MFJ-784B HD-1418 AF-1 MSB-1
> > > PA0RDT Mini-Whip x2 @ 15ft
> > > LFL1010 ALA100L x2
> > >
> > >
> > > On 09-Jul-12 10:08, Ron wrote:
> > > > Hi Enrique,
> > > >
> > > > Congratulations on the purchase of the ALA100LN! No I cannot say that i notice any overloading or distortion with the 30 meter coax nor as i was using 30 meters of wire before that. My strongest broadcast station is 65 km from my home and produces a -21 dBm signal on my perseus SDR.

> > > >
> > > > If you can, try to use a shielded loop as it gives you 4 dBm more S/N as with a wire. Also try not to use 2.5 mm electrical wire as it tends to stretch in time. Use copperweld or as i do use some military grade telephone wire witch has stainless steel and copper strands. It will last a lifetime!
> > > >
> > > > I will however mount the shielded loop on my roof with a slightly smaller size loop to stay there permanently as the now used antenna is a temporarily setup.
> > > >
> > > > Good luck with your new antenna.
> > > >
> > > > 73' Ron
> > > > ON2RON / DXA64 @ jo21ec
> > > >
> > > >
> > > >>
> > > >>
> > > >> Hello Ron,
> > > >>
> > > >> Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.
> > > >> You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?
> > > >>
> > > >> By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.
> > > >>
> > > >> Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.
> > > >>
> > > >> Cheers.
> > > >>
> > > >> --- In loopantennas@yahoogroups.com, "Ron" <bikeron@> wrote:
> > > >>>
> > > >>> Hi all,
> > > >>>
> > > >>> Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
> > > >>>
> > > >>> I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.
> > > >>>
> > > >>> In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
> > > >>>

> > > >>> I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
> > > >>>
> > > >>> 73' Ron
> > > >>> ON2RON - DXA64
> > > >>> JO21EC
> > > >>>
> > > >>
> > > >
> > > >
> > > >
> > > >
> > > > ------------------------------------
> > > >
> > > > If you've got links, post them in the Links section!
> > > > http://groups.yahoo.com/group/loopantennas/links
> > > >
> > > > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > > > http://groups.yahoo.com/group/loopantennas/files
> > > >
> > > > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > > >
> > > > And please trim all this when replying!Yahoo! Groups Links
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > -----
> > > > No virus found in this message.
> > > > Checked by AVG - www.avg.com
> > > > Version: 2012.0.2195 / Virus Database: 2437/5121 - Release Date: 07/09/12
> > > >
> > > >
> > >
> >
>

9206. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-12 12:25:07 UTC
From: Lew
Topic: 8994 Message: 9206

and still waiting...
What's the point in someone advertising something saying how good they are, waits a few months and posts it again, and then posts on other places as well yet never comes back with a price
Pointless.

--- In loopantennas@yahoogroups.com, "Lew" <lew247@...> wrote:
>
> Still waiting on prices
>
>
> > the shipping can be less then $15.00
> >
> > in weekend I will do an estimation for yours butterfly capacitor.
> >
> >
> >
> > 73 de VA6POP
> > Vasile
>

9207. Re: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-12 13:18:16 UTC
From: Andy Ikin
Topic: 9178 Message: 9207

Ron,

The ALA100LN has higher gain than the FGL100LN Flag antenna because the Flag has a higher loss due to the termination resistor. The Flag antenna loss is approx. -10dB per octave. That's why the gain drops off significantly at low frequencies.

The JFET/Bipolar version of the ALA100LN just has more gain above 10MHz due to the reduction of the FET Miller capacitance; by using the transistors in cascode.

73

Andrew

----- Original Message -----

From: Ron
To: loopantennas@yahoogroups.com
Sent: Thursday, July 12, 2012 11:24 AM
Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN

Andrew,

On this moment the ALA100LN - shielded loop is my best antenna besides my beverage, the 10 by 4 meters FLG100LN is the inferiour antenna at the moment. All antennas are pointed in the same direction but the shielded loop has no attenuation on the "back" side of course.

How is the JFET/Bipolar ALA100LN different from the standard model?

My ALA100LN has no problem with strong MW signals. My strongest station is -16 dBm at night with the 30 meter coax. I have however connected the coax shield directly to a separate earth right under the antenna. The coax is a RG6 with a solid aluminum shield and a normal woven shield to double it up. I did receive the SAQ signal with a S/N of 12 dB on the FLG100LN and 26 dB S/N on the shielded ALA100LN loop. Signal strenghts on both antennas was the same. I remember you mailed me that the ALA and FLG amps where not designed to recieve so low in frequency but obviously they do a good job at it!

73' Ron
ON2RON / DXA64 @ jo21ec

>
> Juan,
>
> The ALA100LN I sent to you was a special extended HF version (JFET/Bipolar cascode). Therefore, there may be a problem with loop to screen capacity slugging the HF responce. I would recommend that the keep the loop to 8m circumfrence or smaller is MW overload is an issue; 2.5mm sq. wire is okay.
>
> At HF the loop size will affect the loops ability to reject near field electrical noise,

so the smaller the loop size the better.
>
> 73
>
> Andrew
>
>
>
> ----- Original Message -----
> From: enriqueeeeee2001
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, July 11, 2012 9:52 PM
> Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN
>
>
>
> Thank you Ron and Don for the advices,
>
> I have already received the ALA100LN, next week I will try it.
>
> Regarding the wire, I have been surfing the web and some people recommend twimax 100 Ohms cable, it is shielded has two wires that in parallel are 50 Ohms. I think that is a better option than the 2,5 mm electrical wire.
>
> By the way, since I am going to have two antennas,a Wellbrook 330S and an ala100LN I would like to get a phaser in order to null some interferences that comes from the elevator.
>
> Anybody knows one that covers both MW and SW?
>
> Best Regards
>
> --- In loopantennas@yahoogroups.com, Don <stb55@> wrote:
> >
> > Hi All,
> >
> > Also use the largest diameter wire that you can - it helps and I've done
> > it on my ALA-100L's.
> >
> > Don WPC6NDB
> > Upland, CA
> > 34.10 -117.63 1250ft
> > R-75 w/250Hz 2x R-71A w/250Hz R-70
> > SDR-IQ SR-AF & LPF DSP599zx
> > MFJ-784B HD-1418 AF-1 MSB-1
> > PA0RDT Mini-Whip x2 @ 15ft
> > LFL1010 ALA100L x2
> >
> >
> > On 09-Jul-12 10:08, Ron wrote:
> > > Hi Enrique,

> > >
> > > Congratulations on the purchase of the ALA100LN! No I cannot say that i notice any overloading or distortion with the 30 meter coax nor as i was using 30 meters of wire before that. My strongest broadcast station is 65 km from my home and produces a -21 dBm signal on my perseus SDR.
> > >
> > > If you can, try to use a shielded loop as it gives you 4 dBm more S/N as with a wire. Also try not to use 2.5 mm electrical wire as it tends to stretch in time. Use copperweld or as i do use some military grade telephone wire witch has stainless steel and copper strands. It will last a lifetime!
> > >
> > > I will however mount the shielded loop on my roof with a slightly smaller size loop to stay there permanently as the now used antenna is a temporarily setup.
> > >
> > > Good luck with your new antenna.
> > >
> > > 73' Ron
> > > ON2RON / DXA64 @ jo21ec
> > >
> > >
> > >>
> > >>
> > >> Hello Ron,
> > >>
> > >> Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.
> > >> You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?
> > >>
> > >> By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.
> > >>
> > >> Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.
> > >>
> > >> Cheers.
> > >>
> > >> --- In loopantennas@yahoogroups.com, "Ron" <bikeron@> wrote:
> > >>>
> > >>> Hi all,
> > >>>
> > >>> Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
> > >>>
> > >>> I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.
> > >>>
> > >>> In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3

dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
> > >>>
> > >>> I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
> > >>>
> > >>> 73' Ron
> > >>> ON2RON - DXA64
> > >>> JO21EC
> > >>>
> > >>
> > >
> > >
> > >
> > >
> > > ------------------------------------
> > >
> > > If you've got links, post them in the Links section!
> > > http://groups.yahoo.com/group/loopantennas/links
> > >
> > > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > > http://groups.yahoo.com/group/loopantennas/files
> > >
> > > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > >
> > > And please trim all this when replying!Yahoo! Groups Links
> > >
> > >
> > >
> > >
> > >
> > > -----
> > > No virus found in this message.
> > > Checked by AVG - www.avg.com
> > > Version: 2012.0.2195 / Virus Database: 2437/5121 - Release Date: 07/09/12
> > >
> > >
> >
>

9208. Re: HIGH VOLTAGE BUTTERFLY CAPACITOR'S KITS FOR SALE

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-13 04:26:01 UTC
From: AlienRelics
Topic: 8994 Message: 9208

Perhaps you should try emailing him directly, if you haven't done so yet.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "Lew" <lew247@...> wrote:
>
> and still waiting...
> What's the point in someone advertising something saying how good they are, waits a few months and posts it again, and then posts on other places as well yet never comes back with a price
> Pointless.
>
> --- In loopantennas@yahoogroups.com, "Lew" <lew247@> wrote:
> >
> > Still waiting on prices
> >
> >
> > > the shipping can be less then $15.00
> > >
> > > in weekend I will do an estimation for yours butterfly capacitor.
> > >
> > >
> > >
> > > 73 de VA6POP
> > > Vasile
> >
>

9209. Power Supply Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-16 11:43:45 UTC
From: Ralph
Topic: 9209 Message: 9209

Gents,

I've built a 5' square loop, framed in 1" PVC and amplified via a Ramsey AA broadband amplifier. In tests so far, it has provided me very nice, clean signal-to-noise compared to my longwire antenna.

I have situated the loop about 50 feet from my house, away from any sources of electrical noise (my biggest goal).

Right now, the amplifier runs off of a 9v battery, so this is not a workable permanent situation. The battery drains down in a few days of use. I certainly don't want to have to be going outside during the winter to change batteries on the amplifier unit!

Question: If I use a 9v DC power source (hundreds of them are available on Amazon), will (a) this create noise at the loop, defeating the main goal of the remote loop? and (b) can I run the DC power line 50 or 100 feet to the antenna -- will this weak current dissipate over that length of wire?

I am aware that somehow the Wellbrook loops supply DC power to the remote loop, so I suspect I indeed can feed this with a lonnnnnnng DC power line, but would like confirmation from others' experience.

Regards,

Ralph

9210. Re: [loopantennas] Power Supply Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-16 14:07:51 UTC
From: John Popelish
Topic: 9209 Message: 9210

On 07/16/2012 07:43 AM, Ralph wrote:
> Gents,
>
> I've built a 5' square loop, framed in 1" PVC and
> amplified via a Ramsey AA broadband amplifier. In tests
> so far, it has provided me very nice, clean
> signal-to-noise compared to my longwire antenna.
>
> I have situated the loop about 50 feet from my house,
> away from any sources of electrical noise (my biggest
> goal).
>
> Right now, the amplifier runs off of a 9v battery, so
> this is not a workable permanent situation. The battery
> drains down in a few days of use. I certainly don't want
> to have to be going outside during the winter to change
> batteries on the amplifier unit!
>
> Question: If I use a 9v DC power source (hundreds of
> them are available on Amazon), will (a) this create noise
> at the loop, defeating the main goal of the remote loop?
> and (b) can I run the DC power line 50 or 100 feet to the
> antenna -- will this weak current dissipate over that
> length of wire?
>
> I am aware that somehow the Wellbrook loops supply DC
> power to the remote loop, so I suspect I indeed can feed
> this with a lonnnnnnng DC power line, but would like
> confirmation from others' experience.

Even wire as small as used for a doorbell would carry this small current for 50 feet with only a fraction of a volt lost to resistance. And that can be made up for by starting with a slightly higher supply voltage. But most RF amplifiers are quite tolerant of small supply voltage errors, either way.

I would find a simple transformer, rectifier, capacitor type supply, not a switching regulated type, to keep the RF noise low. You may want to add a solid state linear regulator, but that would best be placed at the amplifier end of the wire. Don't forget to add a capacitor to the input end of that regulator (at least twice what the data sheet says is minimum), to suppress its tendency to oscillate when fed from a long wire (highly inductive source).

--
Regards,

John Popelish

9211. Re: [loopantennas] Power Supply Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-16 16:11:45 UTC
From: Don
Topic: 9209 Message: 9211

You could run the 9vdc on the coax and block it at both ends with capacitors so it does not enter the RF out of the Amp or the RF input to your radio.

Don WPC6NDB
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 16-Jul-12 07:07, John Popelish wrote:
> On 07/16/2012 07:43 AM, Ralph wrote:
>> Gents,
>>
>> I've built a 5' square loop, framed in 1" PVC and
>> amplified via a Ramsey AA broadband amplifier. In tests
>> so far, it has provided me very nice, clean
>> signal-to-noise compared to my longwire antenna.
>>
>> I have situated the loop about 50 feet from my house,
>> away from any sources of electrical noise (my biggest
>> goal).
>>
>> Right now, the amplifier runs off of a 9v battery, so
>> this is not a workable permanent situation. The battery
>> drains down in a few days of use. I certainly don't want
>> to have to be going outside during the winter to change
>> batteries on the amplifier unit!
>>
>> Question: If I use a 9v DC power source (hundreds of
>> them are available on Amazon), will (a) this create noise
>> at the loop, defeating the main goal of the remote loop?
>> and (b) can I run the DC power line 50 or 100 feet to the
>> antenna -- will this weak current dissipate over that
>> length of wire?
>>
>> I am aware that somehow the Wellbrook loops supply DC
>> power to the remote loop, so I suspect I indeed can feed
>> this with a lonnnnnnng DC power line, but would like
>> confirmation from others' experience.
>
> Even wire as small as used for a doorbell would carry this

> small current for 50 feet with only a fraction of a volt
> lost to resistance. And that can be made up for by starting
> with a slightly higher supply voltage. But most RF
> amplifiers are quite tolerant of small supply voltage
> errors, either way.
>
> I would find a simple transformer, rectifier, capacitor type
> supply, not a switching regulated type, to keep the RF noise
> low. You may want to add a solid state linear regulator,
> but that would best be placed at the amplifier end of the
> wire. Don't forget to add a capacitor to the input end of
> that regulator (at least twice what the data sheet says is
> minimum), to suppress its tendency to oscillate when fed
> from a long wire (highly inductive source).
>

9212. Loop calculator softwares

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-07-31 20:41:29 UTC
From: Benoît Mangin
Topic: 9212 Message: 9212

Good evening all,

I'm in trouble using all my loop calculation softwares under windows seven. My favorite, rjeloop3 (from the zerobeat download page) just does not open.

What do you use for your multiturn loop calculations (softwares) ?

I could use the thomson formula, but I also want to approach the thing with the use of softwares. I haven't got any mini-VNA, nor do I have a precise enough inductance and capacitance meter (mine does mesure @ abt 1kHz frequency, which I do not find useful for RF design).

It's a PIC-controlled LCmeter I ebayed myself couple of months ago. Do you think It could be useful nonetheless ?

Do some of you use some Windows7 friendly loop calculators ?

de F8GRY/Ben

9213. Re: Loop calculator softwares

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-01 10:50:17 UTC
From: qrp.gaijin
Topic: 9212 Message: 9213

--- In loopantennas@yahoogroups.com, Benoît Mangin <mangin.benoit@...> wrote:
> What do you use for your multiturn loop calculations (softwares) ?

Are you talking about a small loop (magnetic loop) antenna?

If so, I use 4nec2 for this sort of thing. It can load EZNEC files. The following post contains an EZNEC file of a multi-turn loop:
http://www.eham.net/ehamforum/smf/index.php/topic,83624.msg603106.html#msg603106

As a fully-featured NEC2-based antenna modeling suite, 4nec2's features may seem overwhelming at first, but it's actually very easy to use, and I'm sure it gives you far more information than a simple loop calculator program would (information like current distribution around the loop, 3D radiation pattern, etc.).

9214. Re: [loopantennas] Re: Loop calculator softwares

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-01 16:20:44 UTC
From: Benoît Mangin
Topic: 9212 Message: 9214

OK,

For modelling purposes I use MMANA, because of the graphical functionalities of the thing. But modeling a octogonal 25 turns 2m diameter loop takes some art...

Plus, the loop should be made with litz wire (for LF/MF use or MF/160meters use), so modeling is out of the question, because of stray capacitance of such a cooil. All I have to do, I guess, is build, then measure, then apply Thomson formulas. But it is in the peasuring part that I doubt the thing. My LC-meter just seems not reliable enough to me, for RF applications. I guess it samples the inductance es capacitance @ 1kHz.

I would like to build it for 100-600kHz or 400/2000kHz use, which can be a bit tricky...

Have you got any measuring procedures ? I do not care about SWR at this stage, this will be dealt with using proper ferrite transformer and/or coupling loop inside of the main - that's to say, tuned - loop arrangement.
I will need to get L of course, and C, due to Litz wire use and the increased stray capacitance it produces. Then, I could get the antenna self-resonant frequency -without connecting a capacitor - and calculate how much C I need to resonate it on other frequencies.

Any suggestion ?

VY73

de F8GRY/Ben

De : qrp.gaijin <qrp.gaijin@...>
À : loopantennas@yahoogroups.com
Envoyé le : Mercredi 1 août 2012 12h50
Objet : [loopantennas] Re: Loop calculator softwares

--- In mailto:loopantennas%40yahoogroups.com, Benoît Mangin <mangin.benoit@...> wrote:
> What do you use for your multiturn loop calculations (softwares) ?

Are you talking about a small loop (magnetic loop) antenna?

If so, I use 4nec2 for this sort of thing. It can load EZNEC files. The following post contains an EZNEC file of a multi-turn loop:
http://www.eham.net/ehamforum/smf/index.php/topic,83624.msg603106.html#msg603106

As a fully-featured NEC2-based antenna modeling suite, 4nec2's features may seem overwhelming at first, but it's actually very easy to use, and I'm sure it gives you far more information than a simple loop calculator program would (information like current distribution around the loop, 3D radiation pattern, etc.).

9215. Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-05 18:23:08 UTC
From: enriqueeeeee2001
Topic: 9178 Message: 9215

Hello,

I have already intalled my ALA 100LN on the roof. It is a 21 m loop in a single turn. It offers a big signal on MW and LW frequencies, I would need more attenuation on most of the cases , I have s external one but I would like to know if there is a lineal potentiometer or similar that can work as an attenuator.

My next step it is to build a 2X 1,5 m frame with three turns of wire, maybe this configuration will work better, but I want to keep the 21 m loop for weak signals.

I have tested this ALA with my 330S and I have realized how good is the latter on the SW segment.

Regards.

--- In loopantennas@yahoogroups.com, "Andy Ikin" <andrew.ikin@...> wrote:
>
> Ron,
>
> The ALA100LN has higher gain than the FGL100LN Flag antenna because the Flag has a higher loss due to the termination resistor. The Flag antenna loss is approx. -10dB per octave. That's why the gain drops off significantly at low frequencies.
>
> The JFET/Bipolar version of the ALA100LN just has more gain above 10MHz due to the reduction of the FET Miller capacitance; by using the transistors in cascode.
>
> 73
>
> Andrew
>
>
>
> ----- Original Message -----
>
> From: Ron
> To: loopantennas@yahoogroups.com
> Sent: Thursday, July 12, 2012 11:24 AM
> Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN
>
>
>
>
> Andrew,
>
> On this moment the ALA100LN - shielded loop is my best antenna besides my beverage, the 10 by 4 meters FLG100LN is the inferiour antenna at the moment. All antennas are pointed in the same direction but the shielded loop has no attenuation on the "back" side of course.

>
> How is the JFET/Bipolar ALA100LN different from the standard model?
>
> My ALA100LN has no problem with strong MW signals. My strongest station is -16 dBm at night with the 30 meter coax. I have however connected the coax shield directly to a separate earth right under the antenna. The coax is a RG6 with a solid aluminum shield and a normal woven shield to double it up. I did receive the SAQ signal with a S/N of 12 dB on the FLG100LN and 26 dB S/N on the shielded ALA100LN loop. Signal strenghts on both antennas was the same. I remember you mailed me that the ALA and FLG amps where not designed to recieve so low in frequency but obviously they do a good job at it!
>
> 73' Ron
> ON2RON / DXA64 @ jo21ec
>
> >
> > Juan,
> >
> > The ALA100LN I sent to you was a special extended HF version (JFET/Bipolar cascode). Therefore, there may be a problem with loop to screen capacity slugging the HF responce. I would recommend that the keep the loop to 8m circumfrence or smaller is MW overload is an issue; 2.5mm sq. wire is okay.
> >
> > At HF the loop size will affect the loops ability to reject near field electrical noise, so the smaller the loop size the better.
> >
> > 73
> >
> > Andrew
> >
> >
> >
> > ----- Original Message -----
> > From: enriqueeeeee2001
> > To: loopantennas@yahoogroups.com
> > Sent: Wednesday, July 11, 2012 9:52 PM
> > Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN
> >
> >
> >
> > Thank you Ron and Don for the advices,
> >
> > I have already received the ALA100LN, next week I will try it.
> >
> > Regarding the wire, I have been surfing the web and some people recommend twimax 100 Ohms cable, it is shielded has two wires that in parallel are 50 Ohms. I think that is a better option than the 2,5 mm electrical wire.
> >
> > By the way, since I am going to have two antennas,a Wellbrook 330S and an ala100LN I would like to get a phaser in order to null some interferences that comes from the elevator.

> >
> > Anybody knows one that covers both MW and SW?
> >
> > Best Regards
> >
> > --- In loopantennas@yahoogroups.com, Don <stb55@> wrote:
> > >
> > > Hi All,
> > >
> > > Also use the largest diameter wire that you can - it helps and I've done
> > > it on my ALA-100L's.
> > >
> > > Don WPC6NDB
> > > Upland, CA
> > > 34.10 -117.63 1250ft
> > > R-75 w/250Hz 2x R-71A w/250Hz R-70
> > > SDR-IQ SR-AF & LPF DSP599zx
> > > MFJ-784B HD-1418 AF-1 MSB-1
> > > PA0RDT Mini-Whip x2 @ 15ft
> > > LFL1010 ALA100L x2
> > >
> > >
> > > On 09-Jul-12 10:08, Ron wrote:
> > > > Hi Enrique,
> > > >
> > > > Congratulations on the purchase of the ALA100LN! No I cannot say that i notice any overloading or distortion with the 30 meter coax nor as i was using 30 meters of wire before that. My strongest broadcast station is 65 km from my home and produces a -21 dBm signal on my perseus SDR.
> > > >
> > > > If you can, try to use a shielded loop as it gives you 4 dBm more S/N as with a wire. Also try not to use 2.5 mm electrical wire as it tends to stretch in time. Use copperweld or as i do use some military grade telephone wire witch has stainless steel and copper strands. It will last a lifetime!
> > > >
> > > > I will however mount the shielded loop on my roof with a slightly smaller size loop to stay there permanently as the now used antenna is a temporarily setup.
> > > >
> > > > Good luck with your new antenna.
> > > >
> > > > 73' Ron
> > > > ON2RON / DXA64 @ jo21ec
> > > >
> > > >
> > > >>
> > > >>
> > > >> Hello Ron,
> > > >>
> > > >> Quite sure that my ALA 100LN will arrive this week. Just a question,according to the Wellbrook site this antenna can be used with 8-20 metres of wire.

> > > >> You say that have made a 30 m loop, Have you noted any distortion or overloading using this lenght?
> > > >>
> > > >> By the way, I am going to use 2,5mm electrical multi wire to make a 23 m loop.
> > > >>
> > > >> Nowadays, I am using a Wellbrook 330S I hope with the 100LN I will able to pick up more weak stations on the tropical band.
> > > >>
> > > >> Cheers.
> > > >>
> > > >> --- In loopantennas@yahoogroups.com, "Ron" <bikeron@> wrote:
> > > >>>
> > > >>> Hi all,
> > > >>>
> > > >>> Since past sunday there was a transmission from SAQ in Grimeton Sweden on 17.2 khz i decided to make a new antenna.
> > > >>>
> > > >>> I had a flag antenna with a home build balun and a dx-engineering rpa-1 amplifier and repaced the balun with a Wellbrook FLG100LN module. Sadly it was at the end of the TA-MW season so had only a short time testing this antenna. Last sunday i received SAQ with a S/N of 12 dBm for the first time in my life and with this flag.
> > > >>>
> > > >>> In a hurry i made a 30 meter shielded delta loop with RG6 coax and a new ALA100LN module. When SAQ came back on the air for the second time the signal was received with 26.3 dBm S/N. A vast improvement on the flag antenna. On monday i had the time to ground the loop shield and got a 4 dBm lower noise level but and received signals did not suffer. The delta loop is only 1.2 meters above ground and the highest point is 5 meters. I live at 5 meters ASL with a moist clay soil under my antennas.
> > > >>>
> > > >>> I noted Andy Ikin from Wellbrook mailed me, that the ALA and FLG modules were not designed to perform so low in frequency but they effectively do so. My beverage pointing in the same direction had only 8 dBm S/N and my MiniWhip did not hear the transmission.
> > > >>>
> > > >>> 73' Ron
> > > >>> ON2RON - DXA64
> > > >>> JO21EC
> > > >>>
> > > >>
> > > >
> > > >
> > > >
> > > >
> > > > ------------------------------------
> > > >
> > > > If you've got links, post them in the Links section!
> > > > http://groups.yahoo.com/group/loopantennas/links
> > > >
> > > > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > > > http://groups.yahoo.com/group/loopantennas/files

> > > >
> > > > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > > > http://ph.groups.yahoo.com/group/loopantennas/photos
> > > >
> > > > And please trim all this when replying!Yahoo! Groups Links
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > -----
> > > > No virus found in this message.
> > > > Checked by AVG - www.avg.com
> > > > Version: 2012.0.2195 / Virus Database: 2437/5121 - Release Date: 07/09/12
> > > >
> > > >
> > >
> >
>

9216. Re: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-06 10:10:55 UTC
From: brian nsl
Topic: 9178 Message: 9216

Hi,
Interesting comments, will your three turn loop have spaced wires or just a bundle ?????
A nice size antenna to rotate.
72, Brian, GØNSL.
----- Original Message -----
From: enriqueeeeee2001
To: loopantennas@yahoogroups.com
Sent: Sunday, August 05, 2012 7:23 PM
Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN

9217. Re: Shielded loop with Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-06 16:31:43 UTC
From: enriqueeeeee2001
Topic: 9178 Message: 9217

Hello Brian,

Spaced at least 3-4 inches and triangular in shape. 6,3 metres each turn, maybe I will have to use two turns if overloads.

I will start the project tomorrow morning.

Regards.

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Hi,
> Interesting comments, will your three turn loop have spaced wires or just a bundle ?????
> A nice size antenna to rotate.
> 72, Brian, GØNSL.
> ----- Original Message -----
> From: enriqueeeeee2001
> To: loopantennas@yahoogroups.com
> Sent: Sunday, August 05, 2012 7:23 PM
> Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN
>

9218. Wellbrook ALA100LN

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-06 16:46:31 UTC
From: brian nsl
Topic: 9218 Message: 9218

Hi,
Thank you for the mail and comments.
Having acquired an ALA-100LN last week from Andy it is similar to the idea I have for a rotating antenna.
I will send you a photo when it is built if you wish ?????
pass along a direct e-mail to me.
Best wishes,
72, Brian.
----- Original Message -----
From: enriqueeeeee2001
To: loopantennas@yahoogroups.com
Sent: Monday, August 06, 2012 5:31 PM
Subject: [loopantennas] Re: Shielded loop with Wellbrook ALA100LN

9219. Palomar LA-1 schematic

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-12 05:24:01 UTC
From: yb2aro
Topic: 9219 Message: 9219

Looking for a schematic for the Palomar LA-1 loop antenna base. I picked one up at an estate sale and the smoke had been previously let out.

tnx de Robert, KR7O

9220. Re-wind a ferrite rod AM/FM Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-16 21:58:24 UTC
From: David
Topic: 9220 Message: 9220

All,

I restore antique radios, and the one I opened up last night has a problem I haven't seen before. The Ferrite Rod antenna broke lose and some of the windings un-wound. In addition, the insulation on the windings is damaged in places, so I'm thinking the best option is to re-wind the antenna. I'm curious though how many windings there should be, and what guage wire to use and what spacing is appropriate. Because the antenna has unwound itself, I can't just replicate the number of windings that were on there...I don't know how many were originally there.

It seems the windings at each end have no spacing, while about 4" near the center have about a mm of space between each winding (2x wire guage).

The Ferrite core is 6 3/16" long and 1/2" in diameter. I think this antenna is used for both AM and FM, only but not 100% confident of that. There appears to be only two connections from the antenna to the radio. I assume the ferrite core is type 61 based on the fact that it is in an AM radio.

Any advice you can give would be much appreciated.

Dave Castor

9221. RE: [loopantennas] Re-wind a ferrite rod AM/FM Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-17 11:25:57 UTC
From: dx11
Topic: 9220 Message: 9221

Hi Dave,
Perhaps you could meaqsure the length of the wire that came unwound from the rod. Together with the diameter of the rod you can calculate the maximum number of windings that that piece of wire could have occupied on the rod. Perhaps you can also determine the distance that piece of wire had from the rod it was wound on to the electronics it is or was soldered to. This may help you to refine the estimated number of windings on the rod.
I hope this helps.

Cor Beijersbergen

All,

I restore antique radios, and the one I opened up last night has a problem I haven't seen before. The Ferrite Rod antenna broke lose and some of the windings un-wound. In addition, the insulation on the windings is damaged in places, so I'm thinking the best option is to re-wind the antenna. I'm curious though how many windings there should be, and what guage wire to use and what spacing is appropriate. Because the antenna has unwound itself, I can't just replicate the number of windings that were on there...I don't know how many were originally there.

It seems the windings at each end have no spacing, while about 4" near the center have about a mm of space between each winding (2x wire guage).

The Ferrite core is 6 3/16" long and 1/2" in diameter. I think this antenna is used for both AM and FM, only but not 100% confident of that. There appears to be only two connections from the antenna to the radio. I assume the ferrite core is type 61 based on the fact that it is in an AM radio.

Any advice you can give would be much appreciated.

Dave Castor

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

9222. Re: [loopantennas] Re-wind a ferrite rod AM/FM Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-17 11:50:56 UTC
From: toddroberts2001@aol.com
Topic: 9220 Message: 9222

Even if some of the windings came loose off of the ferrite rod is the wire still there and intact? You could take the wire and rewind it over the rod just so you could re-count the number of turns. It doesn't have to be neat. All you want to do is recount the number of turns of wire. Once that is done you could order some new wire and try again.

Depending how much of the original wire is still on the rod, if you could count how many turns of wire there are per inch of length you could come up with a pretty good guess of the size wire used. Most wire charts have the number of turns per inch. I would guess they must have used extremely fine wire like #34 or smaller.

That would be the way I would approach the problem. You should be in pretty good shape as long as the original wire is still intact. You may need
some good patience to work with extremely fine wire size. You can stretch coiled-up wire out to a straight length again to try and count the number of turns as long as it is not kinked up badly.

A ferrite rod antenna would only be used for AM reception, not FM.

73 - Todd WD4NGG

9223. Re: [loopantennas] Re-wind a ferrite rod AM/FM Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-17 13:26:36 UTC
From: Dave Castor
Topic: 9220 Message: 9223

I considered that idea, but it's not clear how much was previously wound on the core and how much was used as a lead. I haven't been able to determine where the antenna was mounted so the distance to the mount point doesn't help either.

I should be able to follow Steve's advice...I'll let you know how it turns out.

Dave C

9224. Crankup and Tiltover towers

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-17 23:33:00 UTC
From: NN4ZZ
Topic: 9224 Message: 9224

If you have one of these towers you might be interested in joining a new discussion group, here is a link:

http://groups.yahoo.com/group/CrankupTiltoverTowers/

Regards, Al / NN4ZZ

Here is some info about the discussion group:
****

Crankup and tiltover towers are becoming more popular for several reasons.

- the safety and convenience of working from the ground

- many hams don't want to climb guyed towers any more

- many of popular new antennas (e.g. SteppIR, Ultrabeam) require more maintenance

This group is open to all amateurs interested in these towers and offers a place to discuss the vendors, tower options, installation, and accessories.

The mission for this discussion group is to provide a focal point to share your experience and questions.

9225. Re: [loopantennas] Crankup and Tiltover towers

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-18 00:35:02 UTC
From: Rick Karlquist
Topic: 9224 Message: 9225

There is already a well established discussion group about towers:

towertalk@...

that you have posted to.

Can you tell us why another tower discussion group is needed?

73

Rick N6RK

NN4ZZ wrote:
> If you have one of these towers you might be interested in joining a new
> discussion group, here is a link:
>
> http://groups.yahoo.com/group/CrankupTiltoverTowers/
>
> Regards, Al / NN4ZZ
>
>
> Here is some info about the discussion group:
> **
>
> Crankup and tiltover towers are becoming more popular for several reasons.
>
> - the safety and convenience of working from the ground
>
> - many hams don't want to climb guyed towers any more
>
> - many of popular new antennas (e.g. SteppIR, Ultrabeam) require more
> maintenance
>
>
> This group is open to all amateurs interested in these towers and offers a
> place to discuss the vendors, tower options, installation, and
> accessories.
>
>
> The mission for this discussion group is to provide a focal point to share
> your experience and questions.
>
>

9226. Re: Crankup and Tiltover towers

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-18 00:48:08 UTC
From: NN4ZZ
Topic: 9224 Message: 9226

Hi Rick,
Nothing wrong with tower talk but the new group is just for tiltover towers. There seems to be a lot of interest in this subset. We have added over 100 members since launching yesterday morning (adding a new one every 20 minutes or so)

The yahoo group format is also nice for pix, links, etc.

Regards, Al / NN4ZZ

--- In loopantennas@yahoogroups.com, "Rick Karlquist" <richard@...> wrote:
>
> There is already a well established discussion group about towers:
>
> towertalk@...
>
> that you have posted to.
>
> Can you tell us why another tower discussion group is needed?
>
> 73
>
> Rick N6RK
>
> NN4ZZ wrote:
> > If you have one of these towers you might be interested in joining a new
> > discussion group, here is a link:
> >
> > http://groups.yahoo.com/group/CrankupTiltoverTowers/
> >
> > Regards, Al / NN4ZZ
> >
> >
> > Here is some info about the discussion group:
> > **********
> >
> > Crankup and tiltover towers are becoming more popular for several reasons.
> >
> > - the safety and convenience of working from the ground
> >
> > - many hams don't want to climb guyed towers any more
> >
> > - many of popular new antennas (e.g. SteppIR, Ultrabeam) require more
> > maintenance
> >
> >
> > This group is open to all amateurs interested in these towers and offers a

> > place to discuss the vendors, tower options, installation, and
> > accessories.
> >
> >
> > The mission for this discussion group is to provide a focal point to share
> > your experience and questions.
> >
> >
>

9227. Re: Re: Re-wind a ferrite rod AM/FM Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-19 11:45:23 UTC
From: Laurence Taylor
Topic: 9220 Message: 9227

"toddroberts2001@..." wrote

> A ferrite rod antenna would only be used for AM reception, not FM.

The mode of transmission is not, of course, relevant to the type
of aerial.

However, you can use ferrite rods at VHF, although I've never
seen it done in domestic equipment.

rgds
LAurence
<><
... Beware makers of crop circles; they are cereal killers.
~~~ Tag-O-Matic V.13F
~~~

9228. Re: [loopantennas] Re: Re: Re-wind a ferrite rod AM/FM Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-19 13:18:33 UTC
From: Jack Smith
Topic: 9220 Message: 9228

Motorola pagers used ferrite loop antennas at both 150 and 450 MHz for
many years.

Jack

On 8/19/2012 7:45 AM, Laurence Taylor wrote:
>
>
> "toddroberts2001@... <mailto:toddroberts2001%40aol.com>" wrote
>
> > A ferrite rod antenna would only be used for AM reception, not FM.
>
> The mode of transmission is not, of course, relevant to the type
> of aerial.
>
> However, you can use ferrite rods at VHF, although I've never
> seen it done in domestic equipment.
>
> rgds
> LAurence
> <><
> ... Beware makers of crop circles; they are cereal killers.
> ~~~ Tag-O-Matic V.13F
>
>

9229. Re: [loopantennas] Re: Re: Re-wind a ferrite rod AM/FM Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-19 14:17:13 UTC
From: toddroberts2001@aol.com
Topic: 9220 Message: 9229

In a message dated 8/19/2012 7:37:36 A.M. Eastern Daylight Time,
lozt@... writes:

"toddroberts2001@..." wrote

> A ferrite rod antenna would only be used for AM reception, not FM.

The mode of transmission is not, of course, relevant to the type
of aerial.

However, you can use ferrite rods at VHF, although I've never
seen it done in domestic equipment.

rgds
LAurence

Thanks for the correction. I had no idea ferrite rods could
be usable at VHF frequencies. Would those be some kind of
miniature ferrite rods? I still don't think a regular ferrite rod
like what would be used on a typical AM/FM radio
perhaps 5-6 inches long would be practical on VHF?

73 - Todd WD4NGG

9230. ham loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-20 02:51:18 UTC
From: JR
Topic: 9230 Message: 9230

any ideas on building a ham loop from 30 on down

thanks
Preston

9231. Re: ham loops

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-20 16:31:08 UTC
From: tenorman1952
Topic: 9230 Message: 9231

--- In loopantennas@yahoogroups.com, "JR" <kf5evv73@...> wrote:
>
> any ideas on building a ham loop from 30 on down
>
> thanks
> Preston
>

Preston, a number of net controls and asst net controls of my favorite evening 75 m net use the "Super Loop 80".

http://larc.hamgate.net/SuperLoop.htm

http://www.radioworks.com/csuperlo.html

http://web.archive.org/web/20080612065919/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

The Balun is a 4:1 current balun.

Also:

http://www.donkeith.com/n4kc/article.php?p=12

73,
Paul - AE5JU

9232. LOOP ANTENNAS FOR AM RADIO BAND.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-22 16:31:22 UTC
From: abdullah b
Topic: 9232 Message: 9232

Dear Sir,

I wish to construct a loop antennas for medium and shortwaves bands. Anybody who can help me to construct the same.

Thanks and Regards

Abdullah Bawaney

9233. RE: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-22 22:03:58 UTC
From: dx11
Topic: 9232 Message: 9233

Hello Abdullah and others,
There is an awful lot of information about building loop antennas for the AM BC band on the net. I hope you have good access to the net.
Try "AM loop antenna" in Google and you will be busy for the next couple of days reading it all. I tried it again and on the first Google results page I found among others the following relevant pages.

http://www.mtmscientific.com/loop.html
http://www.iw5edi.com/ham-radio/files/AM_loop_antennas.pdf
http://www.frontiernet.net/~jadale/Loop.htm
http://www.dxzone.com/catalog/Antennas/Loop/
http://www.eagle3.net/n4ywn/docs/Am_Loop_Antennas_2004.pdf

In the last PDF file youi will find several construction descriptions. There must be something for your needs in it.

Regards,
Cor Beijerbergen

Dear Sir,

I wish to construct a loop antennas for medium and shortwaves bands. Anybody who can help me to construct the same.

Thanks and Regards

Abdullah Bawaney

9234. Re: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-23 17:34:27 UTC
From: Benoît Mangin
Topic: 9232 Message: 9234

GE Abdullah,

Maybe could you tell me a bit more about your project...

What would you like to use your antenna for (local radios ? DXing ?) ?

Available space ?

Do you use preamps ?

Are you in a noisy location, RF-wise ?

What are the material you already have available (wood, PVC, wire) ?

What are the main things you would like to get (proper nulling ? High output, ie Gain ?)

Have you got an idea of the design (single turn, multi-turn, shielded or not ?)

How would you like to get it tuned : Variable capacitor ? Varicap diode for remote tuning ? Broadband ? Untuned ? Band-pass ? You could make you loop as part of a filter design, so it can be low pass, band pass, high pass...

I'll gladly help you, so do not hesitate to e-mail me, even off-list if you wish.

I can even take time to model your antenna-to-be using antenna modeling software.

VY 73 es SU

de F8GRY/Ben

De : abdullah b <abawaney69@...>
À : loopantennas@yahoogroups.com
Envoyé le : Mercredi 22 août 2012 18h31
Objet : [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.

Dear Sir,

I wish to construct a loop antennas for medium and shortwaves bands. Anybody who can help me to construct the same.

Thanks and Regards

Abdullah Bawaney

9235. Re: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-25 15:45:06 UTC
From: abdullah bawaney
Topic: 9232 Message: 9235

Dear Benoit Mangin,

Thanks for your reply. Given below the details information for your necessary action.

1. I wish to receive local Medium Wave Band and Short Wave Band (A.M.Bands) with clear audioable and best selectivity and sensitivity from long distance Radio station specially at night.

2. My room space 10' x 10' available.

3. No I don't have pre-amplifiers or don't used for this.

4. Yes, my location is little bit noisy.

5. Yes, I have wood, PVC pipe 1/2" dia, and enamelled copper wire guage # 22,24 SWG.

6. Getting high gain output from weakest signals received.

7. As I told you before that I contruct a ' X ' loop antenna having single turns about 8 to ten turns of wire on a 2 wooden frame cut to 16" in length with 22 swg wire and attached a variable capacitor 365pf.

8. I used variable capacitor 365pf for tuning purpose, to get best results.But don't used any bypass filter to resonant to high pass or low pass bandwidth.

I hope that the above details will fulfill your requirement, and let me have your best suggestion soonest possible for which I thank you in advance.

Best Regards

Abdullah Bawaney

--- On Thu, 8/23/12, Benoît Mangin <mangin.benoit@...> wrote:

From: Benoît Mangin <mangin.benoit@...>
Subject: Re: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.
To: "loopantennas@yahoogroups.com" <loopantennas@yahoogroups.com>
Date: Thursday, August 23, 2012, 10:34 PM

GE Abdullah,
Maybe could you tell me a bit more about your project...
What would you like to use your
antenna for (local radios ? DXing ?) ?
Available space ?
Do you use preamps ?
Are you in a noisy location, RF-wise ?
What are the material you already have available (wood, PVC, wire) ?
What are the main things you would like to get (proper nulling ? High output, ie Gain ?)
Have you got an idea of the design (single turn, multi-turn, shielded or not ?)

How
would you like to get it tuned : Variable capacitor ? Varicap diode for remote tuning ? Broadband ? Untuned ? Band-pass ? You could make you loop as part of a filter design, so it can be low pass, band pass, high pass...
I'll gladly help you, so do not hesitate to e-mail me, even off-list if you wish.
I can even take time to model your antenna-to-be using antenna modeling software.
VY 73 es SU
de F8GRY/Ben
De : abdullah b <abawaney69@...>
À : loopantennas@yahoogroups.com
Envoyé le : Mercredi 22 août 2012 18h31
Objet : [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.

Dear Sir,

I wish to construct a loop antennas for medium and shortwaves bands. Anybody who can help me to construct the same.

Thanks and Regards

Abdullah Bawaney

9236. RE: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-23 16:16:01 UTC
From: abdullah bawaney
Topic: 9232 Message: 9236

Dear Cor Beijerbergen,
I thankyou very much for the instant reply.
I have already visited those websites which you mentioned, and contruct various loop antennas, but unfortunately it does not work. Acctually I wish to construct those loop antennas which not need connection with the receiver, you only place the received inside the loop and it work good compared to selectivity and sencitivity.It is a great project for those who are very found of dxing. I have seen videos at youtube.com .
Kindly visit youtube, and check at your end. If you have an idea or suggestion please let me know.
Thanks again, and looking forward to the pleasure of hearing from you soon.
With Best Regards
Abdullah Bawaney
(Note: if possible please let me have your details i.e.sex and location.)

--- On Thu, 8/23/12, dx11 <dx11@...> wrote:

From: dx11 <dx11@...>
Subject: RE: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.
To: loopantennas@yahoogroups.com
Date: Thursday, August 23, 2012, 3:03 AM

Hello Abdullah and others,
There is an awful lot of information about building loop antennas for the AM BC band on the net. I hope you have good access to the net.
Try "AM loop antenna" in Google and you will be busy for the next couple of days reading it all. I tried it again and on the first Google results page I found among others the following relevant pages.

http://www.mtmscientific.com/loop.html
http://www.iw5edi.com/ham-radio/files/AM_loop_antennas.pdf
http://www.frontiernet.net/~jadale/Loop.htm
http://www.dxzone.com/catalog/Antennas/Loop/
http://www.eagle3.net/n4ywn/docs/Am_Loop_Antennas_2004.pdf

In the last PDF file youi will find several construction descriptions. There must be something for your needs in it.

Regards,
Cor Beijerbergen

Dear Sir,

I wish to construct a loop antennas for medium and shortwaves bands. Anybody who can help me to construct the same.

Thanks and Regards

Abdullah Bawaney

9237. Re: LOOP ANTENNAS FOR AM RADIO BAND.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-25 15:49:17 UTC
From: AlienRelics
Topic: 9232 Message: 9237

--- In loopantennas@yahoogroups.com, abdullah bawaney <abawaney69@...> wrote:
...
> With Best Regards
> Abdullah Bawaney
> (Note: if possible please let me have your details i.e.sex and location.)

What is the reason for this request?

Steve Greenfield AE7HD

9238. Re: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-25 16:03:58 UTC
From: EDUARDO
Topic: 9232 Message: 9238

Hi,

See this model ANTENA LOOP DE QUADRO X-10

http://www.radiodx.qsl.br/radioescuta.htm

73,

Eduardo

----- Original Message -----
From: abdullah bawaney
To: loopantennas@yahoogroups.com
Sent: Thursday, August 23, 2012 1:16 PM
Subject: RE: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.

Dear Cor Beijerbergen,
I thankyou very much for the instant reply.
I have already visited those websites which you mentioned, and contruct various loop antennas, but unfortunately it does not work. Acctually I wish to construct those loop antennas which not need connection with the receiver, you only place the received inside the loop and it work good compared to selectivity and sencitivity.It is a great project for those who are very found of dxing. I have seen videos at youtube.com .
Kindly visit youtube, and check at your end. If you have an idea or suggestion please let me know.
Thanks again, and looking forward to the pleasure of hearing from you soon.
With Best Regards
Abdullah Bawaney
(Note: if possible please let me have your details i.e.sex and location.)

--- On Thu, 8/23/12, dx11 <dx11@xs4all.nl> wrote:

From: dx11 <dx11@...>
Subject: RE: [loopantennas] LOOP ANTENNAS FOR AM RADIO BAND.
To: loopantennas@yahoogroups.com
Date: Thursday, August 23, 2012, 3:03 AM

Hello Abdullah and others,
There is an awful lot of information about building loop antennas for the AM BC band on the net. I hope you have good access to the net.
Try "AM loop antenna" in Google and you will be busy for the next couple of days reading it all. I tried it again and on the first Google results page I found among others the following relevant pages.

http://www.mtmscientific.com/loop.html
http://www.iw5edi.com/ham-radio/files/AM_loop_antennas.pdf
http://www.frontiernet.net/~jadale/Loop.htm

http://www.dxzone.com/catalog/Antennas/Loop/
http://www.eagle3.net/n4ywn/docs/Am_Loop_Antennas_2004.pdf

In the last PDF file youi will find several construction descriptions. There must be something for your needs in it.

Regards,
Cor Beijerbergen

Dear Sir,

I wish to construct a loop antennas for medium and shortwaves bands. Anybody who can help me to construct the same.

Thanks and Regards

Abdullah Bawaney

9239. Re: LOOP ANTENNAS FOR AM RADIO BAND.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-26 17:01:19 UTC
From: tenorman1952
Topic: 9232 Message: 9239

This small UNTUNED loop works just fine for AM 530-1700 khz. There is no tuning capacitor, just the wire. It measures 12" (305 mm) on the sides, and 17" (431 mm) across the diagonal.

http://socalradiowaves.com/columns/am_antenna.html

I've build several of these for my stereo systems' tuners.

I have also built this tuned loop.

http://www.mtmscientific.com/loop.html

If you click on "Photos and Review from Customers", the second antenna on that page is mine.

Specifications are: 17" (431 mm) on the sides, and 24" on the diagonal (607 mm). There are 15 turns of 22 ga "magnet wire" (or "enameled wire"), with a separate pickup loop just inside of the 15 turns. The 15 turns of wire are spaced 1/8" (3.2 mm) apart. The tuning capacitor is the common 10 - 365 pf.

I have also built a shortwave (HF) loop similar to this one:

http://www.mtmscientific.com/swloop.html

It used a single turn of wire and the same type of 10 - 365 pf tuning capacitor, the loop measuring 36" (914 mm) on each side.. This was rigged up from scraps of wood molding and parts in my shop after a hurricane, when my main SWL dipole had been blown down. Since we had no electricity, my receiver was operated from batteries, and to make the loop I simply twisted the wires together, no soldering.

I was able to hear everyone on a regional 75 meter net, from my home in Louisiana, to net participants in Texas, Mississippi, and Arkansas. And this was INSIDE of my metal shop building using an Icom R75 receiver.

I've experimented with loops using the same capacitor and various number of turns of wire using these online calculators by Bruce Carter.

http://www.angelfire.com/mb/amandx/loop.html

Paul C.

9240. EZNEC+ model for 80 meter superloop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-26 17:20:14 UTC
From: Frederick Benson
Topic: 9240 Message: 9240

Does anyone have a functional EZNEC+ model of an 80 meter superloop antenna? See the diagram at the link below.

http://ars.nc4fb.org/80-meter-superloop/superloop-80-dimensions.jpg
<http://ars.nc4fb.org/80-meter-superloop/superloop-80-dimensions.jpg>

This antenna works as a Full Wave Loop on 80 Meters and also works as a 2 wavelength open loop or Bi-Square on the 40 Meter band. The 450 ohm ladder line stub acts as a switch on 40 meters to create the Bi-Square configuration.

If anyone has an EZNEC+ model of the antenna to share, please send me a copy as an Email attachment to nc4fb@....com.

Thanks,

F. Benson
http://nc4fb.org <http://nc4fb.org>

9241. 9209 Power Supply Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-27 11:05:55 UTC
From: jurgen.brac
Topic: 9241 Message: 9241

9209 Power Supply Question

Hi Ralph,
for best S/N better do not use a mains power supply, for even with filtering some mains noise will be capacitively induced. This is true not only for the antenna, but also for the rx. Use batteries or NiMgH. Disconnect the charger from mains when operating. Juergen

9242. Re: EZNEC+ model for 80 meter superloop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-28 12:47:02 UTC
From: tenorman1952
Topic: 9240 Message: 9242

--- In loopantennas@yahoogroups.com, "Frederick Benson" <flbenson@...> wrote:
>
> Does anyone have a functional EZNEC+ model of an 80 meter superloop
> antenna? See the diagram at the link below.
>
(trimmed)

> Thanks,
>
> F. Benson
> http://nc4fb.org <http://nc4fb.org>
>

No, but a number of net controls and assistant net controls of one of my favorite 75 meter nets use the Superloop 80 to good effect. They really like it.

73,
Paul - AE5JU

9243. Re: [loopantennas] EZNEC+ model for 80 meter superloop antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-28 14:20:05 UTC
From: Dick Bingham
Topic: 9240 Message: 9243

Hello

I modeled this antenna using EZNEC and it works much better on 40-meters compared to 80-meters with the top section 60-feet high. The radiation pattern displayed for 40M was quite flat-topped (not much vertically being radiated but no null at 90-degrees) while on 80M it was radiating most of the power straight-up showing something like 6dB gain at 90-degrees.

I should have moved the wires up to maybe 80-feet and observed the gains on both bands but, then, most folks will have a hard time getting the top wires up to 60 feet so I didn't bother to make that evaluation.

73 - Dick/w7wkr/CN98pi

On Sun, Aug 26, 2012 at 10:20 AM, Frederick Benson <flbenson@....com>wrote:

> **
>
>
> Does anyone have a functional EZNEC+ model of an 80 meter superloop
> antenna? See the diagram at the link below.
>
> http://ars.nc4fb.org/80-meter-superloop/superloop-80-dimensions.jpg
>
> This antenna works as a Full Wave Loop on 80 Meters and also works as a 2
> wavelength open loop or Bi-Square on the 40 Meter band. The 450 ohm ladder
> line stub acts as a switch on 40 meters to create the Bi-Square
> configuration.
>
> If anyone has an EZNEC+ model of the antenna to share, please send me a
> copy as an Email attachment to nc4fb@....
>
> Thanks,
>
> F. Benson
> http://nc4fb.org
>
>

--
Dick Bingham - W7WKR
Stehekin, WA CN98pi

OR

East Wenatchee, WA CN97uj

9244. 160 meter delta loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-29 02:31:36 UTC
From: don.stefanik
Topic: 9244 Message: 9244

Hidee ho good neighbours.
Just joined the group and am planning on putting up a 160 meter loop antenna hopefully up 75 to 100 feet high.
My question is ...is it ok to have the antenna run over a couple of buildings with steel roofs? The one is 80X60 and the other is 40X50.
600 ohm ladder line going to a 4to1 balun.
Is there any reason why I shouldn,t run it over the buildings?

If this is not acceptible then I can run it shorter about 550'to 530' and in a delta configuration.
Thanks.
73, DJ
VA3KBC

9245. Re: 160 meter delta loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-29 17:20:29 UTC
From: bk915
Topic: 9244 Message: 9245

Welcome! I had an 80 meter loop up, in a square, with one leg about 20ft above a steel-roofed/steel-sided pole barn. The only problems I had was the deep nulls when I would tune it up on 20m. On 75m it was killer, and on 20m it had some lobes with lots of gain, but it had those deep nulls in between, too.

Bill W2NVD

--- In loopantennas@yahoogroups.com, "don.stefanik" <don.stefanik@...> wrote:
>
> Hidee ho good neighbours.
> Just joined the group and am planning on putting up a 160 meter loop antenna hopefully up 75 to 100 feet high.
> My question is ...is it ok to have the antenna run over a couple of buildings with steel roofs? The one is 80X60 and the other is 40X50.
> 600 ohm ladder line going to a 4to1 balun.
> Is there any reason why I shouldn,t run it over the buildings?
>
> If this is not acceptible then I can run it shorter about 550'to 530' and in a delta configuration.
> Thanks.
> 73, DJ
> VA3KBC
>

9246. Re: 160 meter delta loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-08-29 18:31:57 UTC
From: vaclav_sal
Topic: 9244 Message: 9246

It will have effect, but on 160 I would not worry about it.
I would keep the feed point away fron the buildings, just for good measure.
However, keep in mind that on 160 the loop feedpoint impedance is around 25 Ohms at 10 meters high, and goes up with an additional height.

My experience with "nulls" at higher frequencies - the antenna automatically (!) "picks" the best propagation path for you!
I newer used it on 160, and it may be just a great cloud burner due to the height.
73 AA7EJ Vaclav

9247. Car reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-01 19:20:20 UTC
From: jim_waris
Topic: 9247 Message: 9247

Hello. I was wondering what options there exist for someone with a modern car with a rear window-mounted antenna and near-useless or intermittent AM reception to improve AM reception? I am referring to stations that are easily picked up by older cars with external antennas.

Thanks,
Jim

9248. Re: Car reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-02 00:09:19 UTC
From: David
Topic: 9247 Message: 9248

Jim,

You could replace your current antenna with something like this <http://www.carid.com/metra/item-1185428.html?CAWELAID=1498516837&> . It would make your embedded antenna useless, but it sounds like you already feel that way about it :)

It also looks like this one requires a hole drilled in your car...not sure you want to do that. There are mounts that could be found that would allow you to mount on a gap...like between your trunk and rear quarterpanel.

Dave

--- In loopantennas@yahoogroups.com, "jim_waris" <lostinwoods@...> wrote:
>
> Hello. I was wondering what options there exist for someone with a modern car with a rear window-mounted antenna and near-useless or intermittent AM reception to improve AM reception? I am referring to stations that are easily picked up by older cars with external antennas.
>
> Thanks,
> Jim
>

9249. Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 05:06:31 UTC
From: claudio
Topic: 9249 Message: 9249

Hi all,I'm IT9JCB, Claudio from Italy. I've just joined the group today because of my great interest on quiet receiving loop antennas.The man made noise has been always a problem for me, frustrating all time long for years. I'm also an old enginneer so I've decided to start an investigation about a suitable loop antenna able to reduce such a terrible noise.Starting with the commercial products the most attractive one at the moment seems to be the well known Wellbrook loop, manufactured in the UK by a Ham. I've heard good reviews about it but being an engineer I tried to better understand how this magic loop works, sent an email to Wellbrook got no results: secret project !
I think that we can split the small loop antennas into two main categories:
- tuned, and then "narrowband"- untuned or so called "wideband" as the Wellbrook one.
Leaving the tuned loops out for a moment, it seems that a wideband loop has severall advantages especially if you use the antenna over a wide range of frequencies and got tired to tune and tune the loop each time, furthemore a remote tuning circuit is needed plus a suitable tuning element in the loop.
Tuned loops have solid bases today, but first we have to remember that the effective lenght (He) of a small loop is only a little fraction of that of a whip with the same length, that means that we need to increase this figure by means of matching or/and amplifier. In the case of a tuned loop just adding a capacitor to form a resonator boosts up He to (Q*He) without noise issues being a totally passive matching, here we have the well celebrated tuned loop, Q could be eventually 200-300 so we did the job even without any amplifier. But ....we have to manage something like a 10KHz BW on the 40m ham band !!!
Now comes the magic "low noise" untuned loop. Untuned loops supply very low voltages in response to the incoming magnetic field, a loop of area A has an effective length of
He = 6.28*A/ lambda (lambda = wavelength)
so for example a 1 sq meter loop (1x1m) has
He = 6.28/40=0.157m on 40m ham band
To comparison, an half wave dipole has He=13m and a Q=100 tuned loop has 15.7m providing an active high impedance buffer to feed the 50Ohm load of the receiver, so....it seems that we need some magic preamplifier having nearly 0 dB noise figure.
The Wellbrook loop is for sure a well designed product and the designer has spent lot of energies and waste of time to do it, for sure, but I don't believe on magic.
Here enters the NIC, also known as Negative Impedance Converter. If we look to the small loop equivalent circuit we'll se a series of:
a voltage source V + resistor R (loss+radiation) + an inductor L

In the case of the tuned loop, the inductor L is cancelled by the tuning capacitor, so at resonance the loop current will be simply I=V/R (Q boost), its "ultimate" maximum value. In the case of the no tune one we have
I=V / |R+jXL|
that can be many orders of magnitude lower, especially at high frequencies and with practical loops (L can be lowered but would require an unrealistic conductor diameter).
The first attempt could be to close such untuned loop to a short circuit to maximize the current, a loop closed to a common base amplifier with enough rest current does the job but how much is the output SNR ? I've used spice to simulate many of these amps, the best results I got is for a BC550 20mA with inductive compensated load + voltage follower-buffer, it gaves me a remarkable 0.4nV/sqrt(Hz) input noise voltage in the 1-15 MHz band.In this case an incoming 1 uV/m electric field that produces on the half wave dipole (40m band) a 13uV input to a receiver (or a S5 signal), will induce on a 1 sqm loop only a miserable 0.157 uV !!
Assuming a 2500 Hz BW the out SNR of my amp is 157nV/(0.4*50 nV) --> 7.85 --> 18 dB which is not bad at all if we take into account that the man made noise floor can eventually be higher than the amp noise.
Can we do better ? Yes, if we had an ideal NIC.The ideal NIC is as follows: you put an inductor L on its output and it appears as a -L (minus L) inductor on its input, if we put this NIC in series to the loop it will cancel its inductive component at
"all frequencies"
This is something magic ! The final result would be that we get the Q-boost effect at all frequencies, with the relating SNR boost.But what really happens ? I've performed intensive spice simulations over a large number of transistors based NIC and the results can be summarized as follows:
The goods ones
- The Q-boost effect really exists- The loop works wideband as expected
The very bad one:
- The noise introduced by the positive feedback's nature of the NIC is so high that the resulting SNR is well below that of the simple common base amp described here before. Any attempt to reduce the NIC noise, even using ultra low noise LF transistors, has simply failed.
I wonder if the Wellbrook loop uses some form of NIC-like circuit with better noise figures, as said before I didn't receive any answer from the designer.
If anyone did some experiments with NIC or has some others useful infos about, please write.
73s IT9JCBClaudio
PS: simulations performed assuming a 1m dia loop made-up by 12mm dia conductor, inductance of the loop 3uH, frequency range 1-15 MHz.

9250. Re: [loopantennas] Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 13:42:08 UTC
From: Chris Trask
Topic: 9249 Message: 9250

>
>Hi all,I'm IT9JCB, Claudio from Italy. I've just joined the group today
>because of my great interest on quiet receiving loop antennas.
>

<<SNIP>>

>
> - The noise introduced by the positive feedback's nature of the NIC is
> so high that the resulting SNR is well below that of the simple common
> base amp described here before. Any attempt to reduce the NIC noise,
> even using ultra low noise LF transistors, has simply failed.
> I wonder if the Wellbrook loop uses some form of NIC-like circuit with
> better noise figures, as said before I didn't receive any answer from
> the designer.
> If anyone did some experiments with NIC or has some others useful infos
> about, please write.
>

I've experimented with numerous approaches to an NIC amplifier for active loop antenna applications, but have had no success to date. I have a couple of ideas that I have yet to try.

In the meantime, I did design a wideband amplifier for loop antennas that outperforms the Wellbrook and Pixel commercial products:

http://www.home.earthlink.net/~christrask/Paper009.html

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

9251. Re: [loopantennas] Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 15:49:15 UTC
From: Richard (Rick) Karlquist
Topic: 9249 Message: 9251

This is a very old idea. For example, see:

http://www.loe.ee.upatras.gr/MW/Papers/2009_APS_Non-Foster%20Circuits%20for%20Small%20Broadband%20Antennas.pdf

which cites a 1957 paper.

If this concept worked, you would be seeing it in extensive use. However, there is no magic, no free lunch. Negative resistors may have negative resistance, but the noise temperature is still positive. I did some simulations a few years ago and confirmed the bad news.

Rick N6RK

9252. Re: Car reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 14:25:17 UTC
From: jim_waris
Topic: 9247 Message: 9252

Thanks for your suggestion Dave. I looked at their website and it appears they have other types as well, including the following:

http://www.carid.com/metra/item-1185404.html

which might work well enough for me inside the car.

Jim

loopantennas@yahoogroups.com, "David" <dcastor@...> wrote:
>
>
>
>
> Jim,
>
> You could replace your current antenna with something like this
> <http://www.carid.com/metra/item-1185428.html?CAWELAID=1498516837&> .
> It would make your embedded antenna useless, but it sounds like you
> already feel that way about it :)
>
> It also looks like this one requires a hole drilled in your car...not
> sure you want to do that. There are mounts that could be found that
> would allow you to mount on a gap...like between your trunk and rear
> quarterpanel.
>
> Dave
>
>
>
> --- In loopantennas@yahoogroups.com, "jim_waris" <lostinwoods@>
> wrote:
> >
> > Hello. I was wondering what options there exist for someone with a
> modern car with a rear window-mounted antenna and near-useless or
> intermittent AM reception to improve AM reception? I am referring to
> stations that are easily picked up by older cars with external antennas.
> >
> > Thanks,
> > Jim
> >
>

9253. Re: Car reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 15:45:10 UTC
From: wa1edn
Topic: 9247 Message: 9253

AM car reception often depends on the radio itself and not just the antenna. My 2004 Bonneville with a rear window antenna easily outperforms my 2005 Mustang with a fender mounted whip. Stations come in stronger and with less electrical noise in the Bonneville. Best car dx was KOA Denver and WOAI San Antonio into Mass. Jim

--- In loopantennas@yahoogroups.com, "jim_waris" <lostinwoods@...> wrote:
>
> Hello. I was wondering what options there exist for someone with a modern car with a rear window-mounted antenna and near-useless or intermittent AM reception to improve AM reception? I am referring to stations that are easily picked up by older cars with external antennas.
>
> Thanks,
> Jim
>

9254. Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 16:33:11 UTC
From: Stacey yip
Topic: 9254 Message: 9254

Hello, I'm from Singapore. My friend and I are doing a project on Lightning Observatory in our school campus and we are considering using Loop Antennas to obtain our results since they are both VLF. We are completely clueless about these stuff and could only help ourselves with the information on the internet (hence do bear with me with the terminologies...). We were wondering if you guys have any tips to give us to built the loop antennas and also if loop antennas can record up to 180º or 360º (signal wise). Thanks!

If there is any other information you need to know, do ask :)

9255. Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 22:09:43 UTC
From: claudio
Topic: 9249 Message: 9255

--- In loopantennas@yahoogroups.com, "Richard (Rick) Karlquist" <richard@...> wrote:
>
>
> This is a very old idea. For example, see:
>
> http://www.loe.ee.upatras.gr/MW/Papers/2009_APS_Non-Foster%20Circuits%20for%20Small%20Broadband%20Antennas.pdf
>
> which cites a 1957 paper.
>
> If this concept worked, you would be seeing it in extensive
> use. However, there is no magic, no free lunch. Negative
> resistors may have negative resistance, but the noise
> temperature is still positive. I did some simulations a
> few years ago and confirmed the bad news.
>
> Rick N6RK
>

Hi Rick,
I know that is a very old idea (I guess dated in the 50's) as well as the first NIC introduced by Linvill, what sounds strange to me is that with the today's semiconductors the noise introduced by the NIC is still so high. To be honest I didn't preform any special analysis on this, simply observing the simulation results.
Your statement is correct, a negative resistor -R has same noise voltage -kTR as the positive one, but here we have a boost in noise which has no explanations for me up to now. A detailed noise analysis is strongly required.
To be continued....

73s
Claudio IT9JCB

9256. Re: [loopantennas] Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 22:30:19 UTC
From: Phil
Topic: 9254 Message: 9256

Unless you're wanting to be able to "Null" a signal, I would highly recommend that you use an active "Whip" antenna for your project. Many (most) are wideband, will work well down into the VLF range, be non-directional and most likely outperform any but the largest loops.

I've built and used many of them using various circuits (google the web for "Active Whip Antenna"), AND in fact am using one here for my Primary DXing hobby of chasing NDB's (longwave Non-Directional Beacons). Used them for MANY years.

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Blog)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff Active Whip up 24 feet AGL for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

On 9/3/2012 4:33 PM, Stacey yip wrote:
> Hello, I'm from Singapore. My friend and I are doing a project on Lightning Observatory in our school campus and we are considering using Loop Antennas to obtain our results since they are both VLF. We are completely clueless about these stuff and could only help ourselves with the information on the internet (hence do bear with me with the terminologies...). We were wondering if you guys have any tips to give us to built the loop antennas and also if loop antennas can record up to 180? or 360? (signal wise). Thanks!
>
> If there is any other information you need to know, do ask :)
>

9257. Question About Homebrew Shortwave Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-03 23:24:25 UTC
From: Nick
Topic: 9257 Message: 9257

Hi All,
My name is Nick, and I live in central North Carolina. I have been a radio listener for over 40 years, and have used loops for the broadcast band...but never for shortwave. So, I decided to try it just to see how it turned out. I looked up all of the parts that I needed from my "junk box", and more or less threw together a prototype to just test it out. I was quite impressed with the performance, but not happy with the construction. It was held together with garbage bag ties and zip ties. I decided to dismantle it and build it more sturdy. I also decided rather than using the old parts, that I would go with all new parts. So...my question is, I have a new 2 gang 350 pf capacitor which I thought about enclosing in a metal (aluminum) project box for mounting on the antenna mast (PVC pipe). If I bolt the capacitor to the metal box, would I not effectively be putting the metal of the box in series with the rotor blades and frame of the capacitor? Would this not affect the tuning range of the whole antenna? Has anyone on the list here tried this before?, and if so, what were the results? Hope someone can help with this one?

Thanks for any help,
Nick Rumple

9258. Re: Car reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 01:09:02 UTC
From: jim_waris
Topic: 9247 Message: 9258

Hmm... Thanks. Food for thought. I will try to not loose sight of this advice. I hate tossing the stock set since it has an integrated cassette player, and I have found a source for auxiliary adapters for ipods and stuff like that should I need them.

--- In loopantennas@yahoogroups.com, "wa1edn" <jim01028@...> wrote:
>
>
>
> AM car reception often depends on the radio itself and not just the antenna. My 2004 Bonneville with a rear window antenna easily outperforms my 2005 Mustang with a fender mounted whip. Stations come in stronger and with less electrical noise in the Bonneville. Best car dx was KOA Denver and WOAI San Antonio into Mass. Jim
>
> --- In loopantennas@yahoogroups.com, "jim_waris" <lostinwoods@> wrote:
> >
> > Hello. I was wondering what options there exist for someone with a modern car with a rear window-mounted antenna and near-useless or intermittent AM reception to improve AM reception? I am referring to stations that are easily picked up by older cars with external antennas.
> >
> > Thanks,
> > Jim
> >
>

9259. Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 07:00:28 UTC
From: claudio
Topic: 9249 Message: 9259

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> >Hi all,I'm IT9JCB, Claudio from Italy. I've just joined the group today
> >because of my great interest on quiet receiving loop antennas.
> >
>
> <<SNIP>>
>
> >
> > - The noise introduced by the positive feedback's nature of the NIC is
> > so high that the resulting SNR is well below that of the simple common
> > base amp described here before. Any attempt to reduce the NIC noise,
> > even using ultra low noise LF transistors, has simply failed.
> > I wonder if the Wellbrook loop uses some form of NIC-like circuit with
> > better noise figures, as said before I didn't receive any answer from
> > the designer.
> > If anyone did some experiments with NIC or has some others useful infos
> > about, please write.
> >
>
> I've experimented with numerous approaches to an NIC amplifier for active loop antenna applications, but have had no success to date. I have a couple of ideas that I have yet to try.
>
> In the meantime, I did design a wideband amplifier for loop antennas that outperforms the Wellbrook and Pixel commercial products:
>
> http://www.home.earthlink.net/~christrask/Paper009.html
>
>
> Chris Trask
> N7ZWY / WDX3HLB
> Senior Member IEEE
> http://www.home.earthlink.net/~christrask/
>

Hi Chris,
good news, I'll be brief now but I'll give a more detailed report later on. I added the augmenting circuit to my amp (you find it in the file section as "IT9JCB's...etc") using an ideal VCVS as tranformer to simplify the job. The ratio used is 5 (best one).
These are the interesting results:

W/O AUG:
emitter imput impedance ~1.2 Ohm, freq. dependent
Gain 30 dB in 1-15MHz
noise voltage rti 0.47 nV/sqrt(Hz)

W AUG
(I'd to increase the input transformer ratio from 3:1 to 5:1 to better match the new low impedance)

emitter imput impedance ~0.3 Ohm, freq. flat
Gain 42 dB in 1-18MHz
noise voltage rti 0.25 nV/sqrt(Hz)

In few words we gained about 6 dB in SNR, furthermore it seems that the impedance seen by the loop is now much resistive and flat on frequency.

Is this the Andy's secret ?
Anyway, could you provide me more info about your results with NIC and some schematic, if possible, thanks in advance.

73s
Claudio IT9JCB

9260. Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 12:42:14 UTC
From: AlienRelics
Topic: 9249 Message: 9260

Claudio, one of your files has no extension. Could you correct that please?

And could you crop and reupload the JPG? It is rather large and takes up way more space in the Files than necessary. We only have 18% space left out of 100MB.

Thanks,
Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, "claudio" <aetna50@...> wrote:

> Hi Chris,
> good news, I'll be brief now but I'll give a more detailed report later on. I added the augmenting circuit to my amp (you find it in the file section as "IT9JCB's...etc") using an ideal VCVS as tranformer to simplify the job. The ratio used is 5 (best one).

9261. Re: Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 15:53:13 UTC
From: Stacey yip
Topic: 9254 Message: 9261

My teacher wants us to construct the antenna ourselves and not buy an antenna as it will be the "engineering" part in the report we would have to write later on. He suggested us to research on circular antennas but its a VHF so I don't think it would work. Do you have suggestions on what other possible kind of antennas we could use?

--- In loopantennas@yahoogroups.com, Phil <ko6bb1@...> wrote:
>
> Unless you're wanting to be able to "Null" a signal, I would highly
> recommend that you use an active "Whip" antenna for your project. Many
> (most) are wideband, will work well down into the VLF range, be
> non-directional and most likely outperform any but the largest loops.
>
> I've built and used many of them using various circuits (google the web
> for "Active Whip Antenna"), AND in fact am using one here for my Primary
> DXing hobby of chasing NDB's (longwave Non-Directional Beacons). Used
> them for MANY years.
>
> 73 de Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
> http://www.ipernity.com/home/ko6bb (NDB Blog)
>
> RADIOS:
> Grundigs: Satellit 750 (2011), S-350 (2006) & G6 (2011).
> Icom: R-75 with Cascaded 250Hz CW Filters.
> Kenwood: TS130S HF Transceiver (circa 1980).
> Radio Shack: DX-380 digital portable (circa 1990).
> Zenith: Royal-7000 Transoceanic (circa 1969).
>
> ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
> Timewave DSP-599zx and Homebrew 6 Hz Filter.
>
> ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
> Ratzlaff Active Whip up 24 feet AGL for LF/MW
> Merced, Central California, 37.3N 120.48W CM97sh
>
> On 9/3/2012 4:33 PM, Stacey yip wrote:
> > Hello, I'm from Singapore. My friend and I are doing a project on Lightning Observatory in our school campus and we are considering using Loop Antennas to obtain our results since they are both VLF. We are completely clueless about these stuff and could only help ourselves with the information on the internet (hence do bear with me with the terminologies...). We were wondering if you guys have any tips to give us to built the loop antennas and also if loop antennas can record up to 180º or 360º (signal wise). Thanks!
> >
> > If there is any other information you need to know, do ask :)
> >

>

9262. Re: [loopantennas] Re: Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 17:34:53 UTC
From: Phil
Topic: 9254 Message: 9262

Here are some links to reference material that should get you started.
http://sivantoledotech.wordpress.com/2010/09/17/an-active-whip-receiving-antenna/
http://www.qrp.pops.net/probe1.asp
http://yu1lm.qrpradio.com/pa0rdt%20whip.pdf
http://www.arimodena.it/progetti/mini-whip/documentazione/doc/article-pa0rdt-mini-whip.pdf
http://www.arrl.org/files/file/Technology/tis/info/pdf/0109031.pdf

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Blog)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff Active Whip up 24 feet AGL for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

On 9/4/2012 3:53 PM, Stacey yip wrote:
> My teacher wants us to construct the antenna ourselves and not buy an antenna as it will be the "engineering" part in the report we would have to write later on. He suggested us to research on circular antennas but its a VHF so I don't think it would work. Do you have suggestions on what other possible kind of antennas we could use?
>
> --- In loopantennas@yahoogroups.com, Phil <ko6bb1@...> wrote:
>> Unless you're wanting to be able to "Null" a signal, I would highly
>> recommend that you use an active "Whip" antenna for your project. Many
>> (most) are wideband, will work well down into the VLF range, be
>> non-directional and most likely outperform any but the largest loops.
>>
>> I've built and used many of them using various circuits (google the web
>> for "Active Whip Antenna"), AND in fact am using one here for my Primary
>> DXing hobby of chasing NDB's (longwave Non-Directional Beacons). Used
>> them for MANY years.
>>

9263. Re: [loopantennas] Question About Homebrew Shortwave Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 17:56:48 UTC
From: Andy
Topic: 9257 Message: 9263

> If I bolt the capacitor to the metal box, would I not effectively be putting the
> metal of the box in series with the rotor blades and frame of the capacitor?

Maybe not really "in series" but maybe "in parallel".

But the box isn't really a 2-terminal element. It's more of a big
hunk of metal, bent into a shield.

> Would this not affect the tuning range of the whole antenna?

Could, depending mainly on its proximity to, and coupling to, the loop
itself. And to some degree, if the box couples to the capacitor
blades inside the box.

You could always try using a plastic box instead of metal.

Back when I used to fool around with old radios, some of those 365 uF
capacitors were, I think, insulated from their mounting screws. (Or
maybe I am just remembering this wrong.)

I don't know if your loop (and the circuit it connects to) tries to
maintain any sort of electrical balance, but a box connected to one
end of the loop probably upsets the loop's balance.

Andy

9264. Re: Car reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 18:23:39 UTC
From: Craig Smith
Topic: 9247 Message: 9264

I hope you and others on this list won't find this post offensive, but here is an approach that - depending on your priorities - you may want to consider.

Let me begin by saying that I too am a lover of good AM repletion while in the car, to the extent that I've let it influence what car I bought. But, like it or not, times are changing. Some factors that make it more difficult than in the past are: As you point out, car radio antennas are no longer performance oriented. Cosmetics are more important. The same can be said for the in-car receiver itself. As more and more AM transmitters are loading up their sidebands with extra services, the adjacent channel interference wipes out many stations. The addition of more and more in-car electronics, including several processors and computers creates a much noisier RF environment. Modification of the antenna, possibly the head unit and addition of filtering are often required to obtain only mediocre reception.

OK, time for the blasphemy - Use streaming audio from the hundreds (probably including the ones you want) of AM stations offering it. I stopped fighting with conventional reception a year or so ago and am happy I did. On long distance trips I just connect the audio from my iPad into the car's audio in jack. Free applications such as IHeartRadio, TuneinRadio, RadioBox and NPR easily provide one-touch selection of dozens of your favorite stations from all over the country (and beyond). Streaming audio isn't data intensive. I have the $20 a month Verizon 1 GB data plan on my iPad and only use a very small fraction of it for streaming radio stations.

Of course this all depends on your motivation for wanting better AM reception. You might be looking for the satisfaction of solving an interesting engineering challenge. I can totally understand that - I've been there for many decades myself. On the other hand, if your main objective is obtaining the content of the AM stations with high listenability while in the car, the streaming audio solution is the way to go. Essentially hassle free compared with the other alternatives.

By the way, this advice applies equally well to AM reception in many of today's homes. With the EMC environment of all the computers, smart appliances and close neighbors with the same, its a similar problem as in a car unless you have the space to install an outside antenna that is 50 ft or more away from any houses.

73 Craig AC0DS

9265. Re: [loopantennas] Re: Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 17:37:59 UTC
From: Sam Morgan
Topic: 9254 Message: 9265

On 9/4/2012 10:53 AM, Stacey yip wrote:
> later on. He suggested us to research on circular antennas but its a VHF so I
> don't think it would work.
>
I wonder if, when the teacher said circular antennas,
what he was thinking of, was something like a VHF halo antenna

http://en.wikipedia.org/wiki/Halo_antenna

http://www.dxzone.com/catalog/Antennas/Halo/

something like this:
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=25719

http://ea4eoz.ure.es/halo1445.jpg

--
GB & 73
K5OAI
Sam Morgan

On 9/4/2012 10:53 AM, Stacey yip wrote:
> My teacher wants us to construct the antenna ourselves and not buy an antenna
> as it will be the "engineering" part in the report we would have to write
> later on. He suggested us to research on circular antennas but its a VHF so I
> don't think it would work. Do you have suggestions on what other possible
> kind of antennas we could use?
>
> --- In loopantennas@yahoogroups.com, Phil <ko6bb1@...> wrote:
>>
>> Unless you're wanting to be able to "Null" a signal, I would highly
>> recommend that you use an active "Whip" antenna for your project. Many
>> (most) are wideband, will work well down into the VLF range, be
>> non-directional and most likely outperform any but the largest loops.
>>
>> I've built and used many of them using various circuits (google the web for
>> "Active Whip Antenna"), AND in fact am using one here for my Primary DXing
>> hobby of chasing NDB's (longwave Non-Directional Beacons). Used them for
>> MANY years.
>>
>> 73 de Phil, KO6BB http://www.qsl.net/ko6bb/ (Web Page)
>> http://www.ipernity.com/home/ko6bb (NDB Blog)
>>
>> RADIOS: Grundigs: Satellit 750 (2011), S-350 (2006) & G6 (2011). Icom: R-75
>> with Cascaded 250Hz CW Filters. Kenwood: TS130S HF Transceiver (circa
>> 1980). Radio Shack: DX-380 digital portable (circa 1990). Zenith:

>> Royal-7000 Transoceanic (circa 1969).
>>
>> ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner Timewave DSP-599zx
>> and Homebrew 6 Hz Filter.
>>
>> ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL. Ratzlaff Active
>> Whip up 24 feet AGL for LF/MW Merced, Central California, 37.3N 120.48W
>> CM97sh
>>
>> On 9/3/2012 4:33 PM, Stacey yip wrote:
>>> Hello, I'm from Singapore. My friend and I are doing a project on
>>> Lightning Observatory in our school campus and we are considering using
>>> Loop Antennas to obtain our results since they are both VLF. We are
>>> completely clueless about these stuff and could only help ourselves with
>>> the information on the internet (hence do bear with me with the
>>> terminologies...). We were wondering if you guys have any tips to give us
>>> to built the loop antennas and also if loop antennas can record up to
>>> 180? or 360? (signal wise). Thanks!
>>>
>>> If there is any other information you need to know, do ask :)
>>>
>>

9266. Re: Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 19:08:02 UTC
From: Mike
Topic: 9254 Message: 9266

In the late 90's Nuts and Volts had a project to build a lightning storm tracker displaying results on an Oscope. They used loop antennas fabricated from ribbon cable the best I can remember.

--- In loopantennas@yahoogroups.com, "Stacey yip" <kiponi@...> wrote:
>
> Hello, I'm from Singapore. My friend and I are doing a project on Lightning Observatory in our school campus and we are considering using Loop Antennas to obtain our results since they are both VLF. We are completely clueless about these stuff and could only help ourselves with the information on the internet (hence do bear with me with the terminologies...). We were wondering if you guys have any tips to give us to built the loop antennas and also if loop antennas can record up to 180º or 360º (signal wise). Thanks!
>
> If there is any other information you need to know, do ask :)
>

9267. Re: Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 19:09:40 UTC
From: Mike
Topic: 9254 Message: 9267

In the late 90's Nuts and Volts had a project to build a lightning storm tracker displaying results on an Oscope. They used loop antennas fabricated from ribbon cable the best I can remember.

--- In loopantennas@yahoogroups.com, "Stacey yip" <kiponi@...> wrote:
>
> Hello, I'm from Singapore. My friend and I are doing a project on Lightning Observatory in our school campus and we are considering using Loop Antennas to obtain our results since they are both VLF. We are completely clueless about these stuff and could only help ourselves with the information on the internet (hence do bear with me with the terminologies...). We were wondering if you guys have any tips to give us to built the loop antennas and also if loop antennas can record up to 180º or 360º (signal wise). Thanks!
>
> If there is any other information you need to know, do ask :)
>

9268. Re: Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 19:55:54 UTC
From: Juergen Brustat
Topic: 9254 Message: 9268

Hi Stacey,
one of the best website dealing with vlf is : "Radio Waves below 22kHz"

    http://www.vlf.it/

As far as I remember, there is a lot about lightning detection on the web.
Look also for sprites and elves ! Highly interesting, because still of unknown origin.

Regards from germany ! Juergen

9269. Re: Loop Antennas for Lightning Observatory

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 20:23:37 UTC
From: jurgen.brac
Topic: 9254 Message: 9269

Hi Stacey,
one of the best websites I have ever seen covering your subject, is : Radio Waves below 22 kHz, url :http://www.vlf.it/

Very, very good ! Look also for "sprites" and "elves", highly interesting, because of unknown origin.

There is a lot on the web about lightning, but first try the one above.
Regards from Germany ! Juergen

9270. Re: Car reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 20:48:11 UTC
From: Laurence Taylor
Topic: 9247 Message: 9270

"David" dcastor@... d_castor1976 wrote:

> You could replace your current antenna with something like this
> <http://www.carid.com/metra/item-1185428.html?CAWELAID=1498516837&> .

The problem with this typw of aerial is the short length; while it
is (probably) helical construction, a longer single whip would be
more efficient. While less common, they are available (My Honda
has one).

> It also looks like this one requires a hole drilled in your car...not
> sure you want to do that. There are mounts that could be found that
> would allow you to mount on a gap...like between your trunk and rear
> quarterpanel.

If the OP doesn't want to drill his car (perhaps there's a
blanking plug somewhere that would be used for a standard aerial
on other models), alternatives are a gutter mount (if he has
gutters) or at a pinch a magmount. All these need trailing cables
though.

My reccommendation would be to ask the local car service shop to
install a body-mounted aerial.

rgds
LAurence
<><
... It's easier to smash an atom than a prejudice - Einstein
~~~ Tag-O-Matic V.13F
~~~

9271. Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-04 22:38:39 UTC
From: claudio
Topic: 9249 Message: 9271

--- In loopantennas@yahoogroups.com, "AlienRelics" <alienrelics@...> wrote:
>
> Claudio, one of your files has no extension. Could you correct that please?
>
> And could you crop and reupload the JPG? It is rather large and takes up way more space in the Files than necessary. We only have 18% space left out of 100MB.
>
> Thanks,
> Steve Greenfield AE7HD
>
> --- In loopantennas@yahoogroups.com, "claudio" <aetna50@> wrote:
>
> > Hi Chris,
> > good news, I'll be brief now but I'll give a more detailed report later on. I added the augmenting circuit to my amp (you find it in the file section as "IT9JCB's...etc") using an ideal VCVS as tranformer to simplify the job. The ratio used is 5 (best one).
>

Hi Steve,
I've compressed the files and now they are all JPEG.
Note that these are simply spice simulation files, real circuits will appear different, moreover a balanced push-pull configuration will be used to reduce 3th order IMD. As said before to folk these are preliminary experiments to design an build a wideband no tune loop antenna for SW reception having extremely low noise, any attempt to use NIC to match and boooost the gain are failed up to now, but I'm continuing on work. Liked your interest on this topic.

73s
Claudio IT9JCB

9272. Re: [loopantennas] Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-05 00:48:30 UTC
From: Chris Trask
Topic: 9249 Message: 9272

```
>
> > I've experimented with numerous approaches to an NIC amplifier for
> > active loop antenna applications, but have had no success to date. I
> > have a couple of ideas that I have yet to try.
> >
> > In the meantime, I did design a wideband amplifier for loop
antennas
> > that outperforms the Wellbrook and Pixel commercial products:
> >
> > http://www.home.earthlink.net/~christrask/Paper009.html
> >
>
>
>
> Hi Chris,
> good news, I'll be brief now but I'll give a more detailed report later
on.
> I added the augmenting circuit to my amp (you find it in the file section
as
> "IT9JCB's...etc") using an ideal VCVS as tranformer to simplify the job.
The
> ratio used is 5 ( best one).
> These are the interesting results:
>
> W/O AUG:
> emitter imput impedance ~1.2 Ohm, freq. dependent
> Gain 30 dB in 1-15MHz
> noise voltage rti 0.47 nV/sqrt(Hz)
>
> W AUG
> (I'd to increase the input transformer ratio from 3:1 to 5:1 to better
match
> the new low impedance)
>
> emitter imput impedance ~0.3 Ohm, freq. flat
> Gain 42 dB in 1-18MHz
> noise voltage rti 0.25 nV/sqrt(Hz)
>
> In few words we gained about 6 dB in SNR, furthermore it seems that the
> impedance seen by the loop is now much resistive and flat on frequency.
>

Those are impressive results, and they attest to the improvement that
can be enjoyed by applying augmentation. Will you have more detailed
```

results later?

>
> Is this the Andy's secret ?
>

Don't think so. He can't use augmentation for commercial designs as I
hold the patents and nobody has asked for a license to use them.

>
> Anyway, could you provide me more info about your results with NIC and
> some schematic, if possible, thanks in advance.
>

Don't have anything to share in terms of NIC circuitry as all of mine
failed on the launch pad, which is typical of positive feedback circuitry.
I do have a couple of ideas still, but not the time to work on them.

Chris

9273. Re: Question About Homebrew Shortwave Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-05 00:12:01 UTC
From: Nick
Topic: 9257 Message: 9273

Hi Andy...
Thanks for taking the time to answer my question, and also for your input on the situation. I finally decided that the only way to really find out for sure was to try it out both ways (with and without the box). To make a long story short, I built it and tried it out both ways today, and saw virtually no difference at all. Whatever the case really is, It does work really well and I am happy with it, so I am going to leave it the way it is....for now. :)

Nick

--- In loopantennas@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> > If I bolt the capacitor to the metal box, would I not effectively be putting the
> > metal of the box in series with the rotor blades and frame of the capacitor?
>
> Maybe not really "in series" but maybe "in parallel".
>
> But the box isn't really a 2-terminal element. It's more of a big
> hunk of metal, bent into a shield.
>
> > Would this not affect the tuning range of the whole antenna?
>
> Could, depending mainly on its proximity to, and coupling to, the loop
> itself. And to some degree, if the box couples to the capacitor
> blades inside the box.
>
> You could always try using a plastic box instead of metal.
>
> Back when I used to fool around with old radios, some of those 365 uF
> capacitors were, I think, insulated from their mounting screws. (Or
> maybe I am just remembering this wrong.)
>
> I don't know if your loop (and the circuit it connects to) tries to
> maintain any sort of electrical balance, but a box connected to one
> end of the loop probably upsets the loop's balance.
>
> Andy
>

9274. Re: Car reception question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-05 00:55:23 UTC
From: jim_waris
Topic: 9247 Message: 9274

Craig, I forgive you, especially since you were so polite and knowledgeable! You make some good points, at the cost of some money up front. Streaming audio is inevitable, but I guess I am going to hold out for now, preferring to divide my car time between books/educational material on CD, tape (still), Ipod and so on, and some listening to the radio for variety.

--- In loopantennas@yahoogroups.com, Craig Smith <craig@...> wrote:
>
> I hope you and others on this list won't find this post offensive, but here is an approach that - depending on your priorities - you may want to consider.
>
> Let me begin by saying that I too am a lover of good AM repletion while in the car, to the extent that I've let it influence what car I bought. But, like it or not, times are changing. Some factors that make it more difficult than in the past are: As you point out, car radio antennas are no longer performance oriented. Cosmetics are more important. The same can be said for the in-car receiver itself. As more and more AM transmitters are loading up their sidebands with extra services, the adjacent channel interference wipes out many stations. The addition of more and more in-car electronics, including several processors and computers creates a much noisier RF environment. Modification of the antenna, possibly the head unit and addition of filtering are often required to obtain only mediocre reception.
>
> OK, time for the blasphemy - Use streaming audio from the hundreds (probably including the ones you want) of AM stations offering it. I stopped fighting with conventional reception a year or so ago and am happy I did. On long distance trips I just connect the audio from my iPad into the car's audio in jack. Free applications such as IHeartRadio, TuneinRadio, RadioBox and NPR easily provide one-touch selection of dozens of your favorite stations from all over the country (and beyond). Streaming audio isn't data intensive. I have the $20 a month Verizon 1 GB data plan on my iPad and only use a very small fraction of it for streaming radio stations.
>
> Of course this all depends on your motivation for wanting better AM reception. You might be looking for the satisfaction of solving an interesting engineering challenge. I can totally understand that - I've been there for many decades myself. On the other hand, if your main objective is obtaining the content of the AM stations with high listenability while in the car, the streaming audio solution is the way to go. Essentially hassle free compared with the other alternatives.
>
> By the way, this advice applies equally well to AM reception in many of today's homes. With the EMC environment of all the computers, smart appliances and close neighbors with the same, its a similar problem as in a car unless you have the space to install an outside antenna that is 50 ft or more away from any houses.
>
>
> 73 Craig AC0DS
>

9275. Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-05 04:17:23 UTC
From: claudio
Topic: 9249 Message: 9275

```
--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...>
wrote:
>
> >
> > > I've experimented with numerous approaches to an NIC
amplifier for
> > > active loop antenna applications, but have had no success to date.
I
> > > have a couple of ideas that I have yet to try.
> > >
> > > In the meantime, I did design a wideband amplifier for loop
> antennas
> > > that outperforms the Wellbrook and Pixel commercial products:
> > >
> > > http://www.home.earthlink.net/~christrask/Paper009.html
> > >
> >
> >
> >
> > Hi Chris,
> > good news, I'll be brief now but I'll give a more detailed report
later
> on.
> > I added the augmenting circuit to my amp (you find it in the file
section
> as
> > "IT9JCB's...etc") using an ideal VCVS as tranformer to simplify the
job.
> The
> > ratio used is 5 ( best one).
> > These are the interesting results:
> >
> > W/O AUG:
> > emitter imput impedance ~1.2 Ohm, freq. dependent
> > Gain 30 dB in 1-15MHz
> > noise voltage rti 0.47 nV/sqrt(Hz)
> >
> > W AUG
> > (I'd to increase the input transformer ratio from 3:1 to 5:1 to
better
> match
> > the new low impedance)
> >
> > emitter imput impedance ~0.3 Ohm, freq. flat
```

> > Gain 42 dB in 1-18MHz
> > noise voltage rti 0.25 nV/sqrt(Hz)
> >
> > In few words we gained about 6 dB in SNR, furthermore it seems that
the
> > impedance seen by the loop is now much resistive and flat on
frequency.
> >
>
> Those are impressive results, and they attest to the improvement
that
> can be enjoyed by applying augmentation. Will you have more detailed
> results later?
>
> >
> > Is this the Andy's secret ?
> >
>
> Don't think so. He can't use augmentation for commercial designs
as I
> hold the patents and nobody has asked for a license to use them.
>
> >
> > Anyway, could you provide me more info about your results with NIC
and
> > some schematic, if possible, thanks in advance.
> >
>
> Don't have anything to share in terms of NIC circuitry as all of
mine
> failed on the launch pad, which is typical of positive feedback
circuitry.
> I do have a couple of ideas still, but not the time to work on them.
>
> Chris
>

Yes, they are impressive, agree. I'll continue now by using a true transformer for augmenting, it is a 1:5 and a low out inductance is required to fed the TR base, so I will work about it and then add the buffer. Finally a balanced push-pull version is required to reduce the 3th order IMD issue but i leave this to end.In the while I realized that reducing the loop inductance can give further improvement (the NIC job would be this one), so I'm investigating to a new loop geometry (not a simple big conductor diameter) able to reduce this inductance in some practical and inexpensive way. The basic idea is to use a planar structure covered by a large copper foil. I'll keep you informed about the progress of my work, my spare time is limited too.Back to Andy, assuming not augmenting, he states in the brochure that some form of "impedance tracking" is used, automatically recall the NIC...Anyway you

can test online the performance of its loop connecting to the web site www.websdr.com and choosing a station in NL which uses its loop, open in a different window another station page (Maxwell etc) located very close to it, it uses a full-size dipole, and so you can compare the two antennas using the same station.I did it some time on 40m band....but i left you discover yourself, if interested.
Thanks for good help.
73sClaudio IT9JCB

9276. Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-05 07:29:04 UTC
From: claudio
Topic: 9249 Message: 9276

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > > I've experimented with numerous approaches to an NIC amplifier for
> > > active loop antenna applications, but have had no success to date. I
> > > have a couple of ideas that I have yet to try.
> > >
> > > In the meantime, I did design a wideband amplifier for loop
> antennas
> > > that outperforms the Wellbrook and Pixel commercial products:
> > >
> > > http://www.home.earthlink.net/~christrask/Paper009.html
> > >
> >
> >
> > Hi Chris,
> > good news, I'll be brief now but I'll give a more detailed report later
> on.
> > I added the augmenting circuit to my amp (you find it in the file section
> as
> > "IT9JCB's...etc") using an ideal VCVS as tranformer to simplify the job.
> The
> > ratio used is 5 (best one).
> > These are the interesting results:
> >
> > W/O AUG:
> > emitter imput impedance ~1.2 Ohm, freq. dependent
> > Gain 30 dB in 1-15MHz
> > noise voltage rti 0.47 nV/sqrt(Hz)
> >
> > W AUG
> > (I'd to increase the input transformer ratio from 3:1 to 5:1 to better
> match
> > the new low impedance)
> >
> > emitter imput impedance ~0.3 Ohm, freq. flat
> > Gain 42 dB in 1-18MHz
> > noise voltage rti 0.25 nV/sqrt(Hz)
> >
> > In few words we gained about 6 dB in SNR, furthermore it seems that the
> > impedance seen by the loop is now much resistive and flat on frequency.
> >
>

> Those are impressive results, and they attest to the improvement that
> can be enjoyed by applying augmentation. Will you have more detailed
> results later?
>
> >
> > Is this the Andy's secret ?
> >
>
> Don't think so. He can't use augmentation for commercial designs as I
> hold the patents and nobody has asked for a license to use them.
>
> >
> > Anyway, could you provide me more info about your results with NIC and
> > some schematic, if possible, thanks in advance.
> >
>
> Don't have anything to share in terms of NIC circuitry as all of mine
> failed on the launch pad, which is typical of positive feedback circuitry.
> I do have a couple of ideas still, but not the time to work on them.
>
> Chris
>

I've found this interesting document about AL-1530S+ Wellbrook:

http://www.nakatoyo.com/wellbrook/ALA1530S_PLUS/ALA1530S_c_4.pdf

The words "negative impedance" and "non-foster matching" are evident.
Strangely, this doc is not present in the wellbrook site, that means that or have been removed or it's not still a valid doc.

Claudio

9277. Ham Fest sponsored by my Ham Club in SNJ

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-10 17:45:57 UTC
From: billnopic
Topic: 9277 Message: 9277

Hope this is okay to post here.

Gloucester County Amateur RadioClub in South New Jersey is holding their annual HAMFEST.

gloucestercountyarc.weebly.com/gcarc-hamfest-2012.html

It is my first year at the club, but I am told it is one of the biggest in the area.

See you there:)

Bill
N2VIL

9278. Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-10 22:43:58 UTC
From: lz1aq
Topic: 9249 Message: 9278

Hello Claudio,
You can visit
http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.\
htm
<http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna\
.htm> . The paper treats similar problems and might be of some help to
you. I have some remarks about active wideband loop antenna:

1. It is better to use Norton equivalent circuit for the small loop in
the spice models. The current source becomes frequency independent and
this corresponds to the physical nature - small loop loaded with
resistance much smaller than its inductive impedance gives fixed current
(short circuit current) irrespective of the frequency.

2. The wideband loop amplifier is current to voltage converter. I will
suggest giving its gain as a ratio of output voltage to input current.
Gain= Uout/Iinp [ohms]. Dimension is ohms and I called this
trans-resistive gain. The amplifier presented in my paper has a gain of
approx. 650 ohms (1uA @ input will give 650uV @output). It is now easy
to compare different loop amplifiers gain irrespective of their input
resistance. It is straightforward to obtain the output noise voltage
and trans-resistive gain in spice models.

3. It is also convenient to compare their noise floor expressed in
uV/m. Dividing the Uout-noise/TR-Gain we will easily obtain the input
noise current and compare it to the loop current by applying the simple
and quite accurate equation for the loop short circuit current from the
field intensity. So we can easily obtain (or compute) the noise floor of
an amplifier with a specific loop expressed in uV/m. This is the most
important parameter of the wideband loop and it is pity that it is
usually not given in the loop specifications (except for some commercial
professional cases).

I am giving these suggestions since if we try to compare different
amplifiers and antennas we should have common terms. For example I can
not evaluate any active loop if its noise floor (in uV/m) is not given.
Evaluating and compareing different loops with on the air tests by
saitsfied customers is not very accepatble for me.

4. The noise figures which you obtain in spice models are of the same
order as in my models. I can say that in the flat frequency region the
experimental results are very close to the spice models. My experiments
with common base (CB) amplifiers show that usually the loop sensitivity
is limited by the internal noise (not by the atmospheric) for
frequencies above 10 MHz. In practice, 1 m diam. active wideband loop

with L<=3 uH, with simple CB amplifier,below 10MHz, at night times has an acceptable noise floor which is below the atmospheric noise level even in rural places. In order to obtain better reception during daytimes and higher frequencies we need some 3 - 10 dB lower active antenna noise floor. This sensitivity can be reached more easily with small active whip (electric) antenna (see Fig.1.6 in http://www.active-antenna.eu/tech-docs/1_ActiveAA_DandS_20.pdf). So the fight for every dB noise reduction in CB active loop amplifiers is very important.

5. I have not tested the augmented amplifiers (suggested by Chris Trask) and your noise floor results with them are quite interesting.

6. I am skeptic about the possibility to reduce substantially the active wideband loop noise floor. The reason for that lies in the very small current of the loop. Probaly there are physical limits ☐ I will give a very approximate example: In 1 m diam. loop with inductance of 2.4 uH,the induced short circuit current from 1uV/m external field in the flat frequency response region will be 1.1 nA. To simplify the case let's assumethat the loop is loaded with 3 ohms resistor which emulates the input resistance of the differential CB amplifier. The voltage drop across 3 ohmsload resistor will be 3.3 nV. From the other hand the thermal noise voltage at290 deg. K of 3 ohm resistor at BW of 1 KHz is 7 nV. In this case we have 2.1 uV/m equivalent noise floor @ 1KHz BW of the loop which is terminated with 3 ohms load resistor - from my point of view this is the main factor that limits the noise floor of a wideband loop terminated with low input impedance amplifier.

7. The most effective way to reduce the loop inductance (and noise floor) is with Crossed Parallel loops - see my paper.With large crossed loops the noise floor can be reduced substantially and it is possible to have antenna limited by the atmospheric noise.

8. I do not have experience with NIC - they are promising because they probably aviod the above mentioned limitations, but we should consider also the non-linear behavior of these circuits.

9. The balanced scheme improves IP2 not IP3 (probably you have made a lapsus).

Wish you a success in your project and I will be glad if you publish your results.

Chavdar, LZ1AQ lz1aq@... <mailto:lz1aq@abv.bg> , www.lz1aq.signacor.com <http://www.lz1aq.signacor.com/>

P.S. I will be on my holiday the next 7 days at a place where there are no telephones and Internet :-) so I will answer any possible messages when I am back.

9279. Re: Introduce myself and a short story about wideband loop matching (NIC based)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-11 19:12:54 UTC
From: claudio
Topic: 9249 Message: 9279

Hi Chavdar,
liked very much your extensive comments, will give you back mines as soon later on (very busy now). I would like to reply now just about one point that I think the most important.

--- In loopantennas@yahoogroups.com, "lz1aq" <lz1aq@...> wrote:
>
> Hello Claudio,
> You can visit
> http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna.\
> htm
> <http://www.lz1aq.signacor.com/docs/wsml/wideband-active-sm-loop-antenna\
> .htm> . The paper treats similar problems and might be of some help to
> you. I have some remarks about active wideband loop antenna:
>
> 1. It is better to use Norton equivalent circuit for the small loop in
> the spice models. The current source becomes frequency independent and
> this corresponds to the physical nature - small loop loaded with
> resistance much smaller than its inductive impedance gives fixed current
> (short circuit current) irrespective of the frequency.
>
> 2. The wideband loop amplifier is current to voltage converter. I will
> suggest giving its gain as a ratio of output voltage to input current.
> Gain= Uout/Iinp [ohms]. Dimension is ohms and I called this
> trans-resistive gain. The amplifier presented in my paper has a gain of
> approx. 650 ohms (1uA @ input will give 650uV @output). It is now easy
> to compare different loop amplifiers gain irrespective of their input
> resistance. It is straightforward to obtain the output noise voltage
> and trans-resistive gain in spice models.
>
> 3. It is also convenient to compare their noise floor expressed in
> uV/m. Dividing the Uout-noise/TR-Gain we will easily obtain the input
> noise current and compare it to the loop current by applying the simple
> and quite accurate equation for the loop short circuit current from the
> field intensity. So we can easily obtain (or compute) the noise floor of
> an amplifier with a specific loop expressed in uV/m. This is the most
> important parameter of the wideband loop and it is pity that it is
> usually not given in the loop specifications (except for some commercial
> professional cases).
>
> I am giving these suggestions since if we try to compare different
> amplifiers and antennas we should have common terms. For example I can
> not evaluate any active loop if its noise floor (in uV/m) is not given.
> Evaluating and compareing different loops with on the air tests by

> saitsfied customers is not very accepatble for me.
>
> 4. The noise figures which you obtain in spice models are of the same
> order as in my models. I can say that in the flat frequency region the
> experimental results are very close to the spice models. My experiments
> with common base (CB) amplifiers show that usually the loop sensitivity
> is limited by the internal noise (not by the atmospheric) for
> frequencies above 10 MHz. In practice, 1 m diam. active wideband loop
> with L<=3 uH, with simple CB amplifier,below 10MHz, at night times has
> an acceptable noise floor which is below the atmospheric noise level
> even in rural places. In order to obtain better reception during
> daytimes and higher frequencies we need some 3 - 10 dB lower active
> antenna noise floor. This sensitivity can be reached more easily with
> small active whip (electric) antenna (see Fig.1.6 in
> http://www.active-antenna.eu/tech-docs/1_ActiveAA_DandS_20.pdf). So
> the fight for every dB noise reduction in CB active loop amplifiers is
> very important.
>
> 5. I have not tested the augmented amplifiers (suggested by Chris
> Trask) and your noise floor results with them are quite interesting.
>
> 6. I am skeptic about the possibility to reduce substantially the
> active wideband loop noise floor. The reason for that lies in the very
> small current of the loop. Probaly there are physical limits ☐ I
> will give a very approximate example: In 1 m diam. loop with
> inductance of 2.4 uH,the induced short circuit current from 1uV/m
> external field in the flat frequency response region will be 1.1 nA. To
> simplify the case let's assumethat the loop is loaded with 3 ohms
> resistor which emulates the input resistance of the differential CB
> amplifier. The voltage drop across 3 ohmsload resistor will be 3.3 nV.
> From the other hand the thermal noise voltage at290 deg. K of 3 ohm
> resistor at BW of 1 KHz is 7 nV. In this case we have 2.1 uV/m
> equivalent noise floor @ 1KHz BW of the loop which is terminated with 3
> ohms load resistor - from my point of view this is the main factor that
> limits the noise floor of a wideband loop terminated with low input
> impedance amplifier.
>

here it is:

assume that in some way we are able to reduce the CB amp impedance to just...say 0.3 Ohms, the thermal noise voltage will reduce about 20 dB, but we must include in these simple analysis the noise current of the amp itself.
Anyway reducing the input impedance to sub-ohms values gives the advantage, now we have to understand how to do this without increase the noise (not simply increasing the TR Ic !!), one way is the Chris Trask's patented technique, but I found that it works as adviced only using ideal VCVS, a transformer gave little improvement, just yesterday I tried with an active solution and the initial results are encouraging.
The other two advantages of this augmented circuits are:

1. being Rin so low, it acts as short to ground, so even umbalanced loops can be used with lees sensitivity to electric fields.
2. the augmengting tecnique has some effect of linearization on the input impedance, being Rs linear the ratio RL/Rs is more linear too.
I observed about 7-10 dB of improvement in 3th order products.

> 7. The most effective way to reduce the loop inductance (and noise
> floor) is with Crossed Parallel loops - see my paper.With large crossed
> loops the noise floor can be reduced substantially and it is possible to
> have antenna limited by the atmospheric noise.
>
> 8. I do not have experience with NIC - they are promising because they
> probably aviod the above mentioned limitations, but we should consider
> also the non-linear behavior of these circuits.
>
> 9. The balanced scheme improves IP2 not IP3 (probably you have made a
> lapsus).
>
> Wish you a success in your project and I will be glad if you publish
> your results.
>
> Chavdar, LZ1AQ lz1aq@... <mailto:lz1aq@...> ,
> www.lz1aq.signacor.com <http://www.lz1aq.signacor.com/>
>
> P.S. I will be on my holiday the next 7 days at a place where there
> are no telephones and Internet :-) so I will answer any possible
> messages when I am back.
>

Continuing to work.

73s Claudio
IT9JCB

9288. Coaxial Relay

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-13 18:04:26 UTC
From: drewbhoy67
Topic: 9288 Message: 9288

Can anyone recommend a coaxial relay to use with my wellbrook 1530 as my transceiver doesn't have a receive only input.

Ta Drew

9289. Cheap AM loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-13 20:54:52 UTC
From: Rich
Topic: 9289 Message: 9289

I may have missed this one as I posted on a few sites.
Rat Shack has an AM loop ant. on clearance.
It's an Eton E200 for $14.97,tried mine and it works fine.

Rich in Michigan

9290. Low noise loop Amplifier: final report

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-15 06:30:32 UTC
From: claudio
Topic: 9290 Message: 9290

Hi all,
I've completed the design of my low noise loop amplifier and the results are available in the pdf document "loopamp ver1_1" located in my folder named IT9JCB, so anyone interested can give a look a send back comments.
The final results as remarkable, the input noise voltage rti is less than 500pV/sqrt(Hz), all details as well as the measurements plots are shown in the pdf.
The amplifier uses very common and inexpensive components as the well known 2N2222A transistor, the only critical component is the 3:1 input current balun, it can be built using a four wires winding in a suitable generous size toroid.
In the while a new NIC based version is in progress and the first results are promising, a related report is coming soon.

73s
Claudio
IT9JCB

9291. Re: [loopantennas] Low noise loop Amplifier: final report

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-15 13:32:16 UTC
From: Chris Trask
Topic: 9290 Message: 9291

>
>Hi all,
> I've completed the design of my low noise loop amplifier and the results
> are available in the pdf document "loopamp ver1_1" located in my folder
> named IT9JCB, so anyone interested can give a look a send back comments.
> The final results as remarkable, the input noise voltage rti is less
> than 500pV/sqrt(Hz), all details as well as the measurements plots are
> shown in the pdf.
> The amplifier uses very common and inexpensive components as the well
> known 2N2222A transistor, the only critical component is the 3:1 input
> current balun, it can be built using a four wires winding in a suitable
> generous size toroid.
>

I like the way you biased the output device Q2. Clever.

>
> In the while a new NIC based version is in progress and the first results
> are promising, a related report is coming soon.
>

I may have an NIC amplifier that can be used with Moebius Strip shielded loop antennas. The PSice modeling looks good.

Chris
>73s
>Claudio
>IT9JCB
>
>
>

9292. Re: [loopantennas] Low noise loop Amplifier: final report

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-15 14:28:13 UTC
From: John Popelish
Topic: 9290 Message: 9292

On 09/15/2012 02:30 AM, claudio wrote:
> Hi all, I've completed the design of my low noise loop
> amplifier and the results are available in the pdf
> document "loopamp ver1_1" located in my folder named
> IT9JCB, so anyone interested can give a look a send back
> comments. The final results as remarkable, the input
> noise voltage rti is less than 500pV/sqrt(Hz), all
> details as well as the measurements plots are shown in
> the pdf. The amplifier uses very common and inexpensive
> components as the well known 2N2222A transistor, the only
> critical component is the 3:1 input current balun, it can
> be built using a four wires winding in a suitable
> generous size toroid. In the while a new NIC based
> version is in progress and the first results are
> promising, a related report is coming soon.

I would like to play around with some variations of this
circuit. Would you be willing to zip everything together,
that I would need to run your simulation in LTspice and
place it in the same folder?

For instance, I want to see what difference (if any) it
would make to inject the input stage bias current into the
balun, instead of directly into the emitter. That would
take the stray capacitance of the large input coupling
capacitor out of the response and bypass the noise of the
bias resistor (and any bias supply noise, that will always
be worse than the the perfect voltage source in the simulation).

Thank you.

--
Regards,

John Popelish

9293. The "Beacon Audio Archive"

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-15 18:16:38 UTC
From: Phil
Topic: 9293 Message: 9293

Hi,
First, I hope that the moderators of this list doesn't find this post too far "off topic", but many loop antenna owners do use their loops for DXing NDBs (Longwave Non-directional beacons). Right now I'm primarily using an active whip for the purpose, but have a tuned loop in the process of being built especially for NDB's. My primary beacon receiver is an Icom R-75 with cascaded 250Hz narrow CW filters installed and is set up especially for this purpose.

A little over two weeks ago I started a new Blog site, I call it "KO6BB's Radio-Beacon Audio Archive". The premise is simple, to post recordings of as many NDB's (and eventually other beacons) as possible. This because every year many of them are being shut down as Airports no longer deem them necessary. I foresee the day when the NDB DXer will no longer be able to follow his chosen hobby. . .

It's also a place where one can compare what they may have heard against a recording of the actual beacon on the air, though it must be remembered that beacons sometimes change formats, OR have problems with their keyers that cause anomalies in their signal.

Some of the recordings on my site were recorded by other DXers, all of the pictures (what there are) were provided by others. ALL material provided by others are given due credit in the postings.

MOST of my own recordings are very narrow bandwidth, having been recorded using the Icom R-75 with 250 Hz CW filters AND very narrow audio filtering using the Timewave DSP-599zx. This because of the high noise levels encountered at LF. There ARE a few recordings of stronger (local) beacons using the AM mode and no audio filtering to show what these sound like in the AM mode (the beacons all use one form another of AM modulation). Where the AM mode is used, there is also a second recording in the narrower CW mode.

SOME of the recordings are very noisy, that goes with the hobby. But ALL of them do have the ID fully readable, I don't DON'T post recordings where one has to guess at the ID.

As of today there are recordings of 131 different beacons, EACH with it's own descriptive Blog page containing the recordings, pictures (where available), and other information such as frequency, location etc. New beacons are added almost daily.

To get there got to my home page at Ipernity
http://www.ipernity.com/home/ko6bb
then click on "blog" right next to the little HF radio symbol, or this will take you directly there if you wish to bypass my home page. . .

http://www.ipernity.com/blog/ko6bb

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff Active Whip up 24 feet AGL for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

9294. Re: Low noise loop Amplifier: final report

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-15 19:08:43 UTC
From: claudio
Topic: 9290 Message: 9294

--- In loopantennas@yahoogroups.com, John Popelish <jpopelish@...> wrote:
>
> On 09/15/2012 02:30 AM, claudio wrote:
> > Hi all, I've completed the design of my low noise loop
> > amplifier and the results are available in the pdf
> > document "loopamp ver1_1" located in my folder named
> > IT9JCB, so anyone interested can give a look a send back
> > comments. The final results as remarkable, the input
> > noise voltage rti is less than 500pV/sqrt(Hz), all
> > details as well as the measurements plots are shown in
> > the pdf. The amplifier uses very common and inexpensive
> > components as the well known 2N2222A transistor, the only
> > critical component is the 3:1 input current balun, it can
> > be built using a four wires winding in a suitable
> > generous size toroid. In the while a new NIC based
> > version is in progress and the first results are
> > promising, a related report is coming soon.
>
> I would like to play around with some variations of this
> circuit. Would you be willing to zip everything together,
> that I would need to run your simulation in LTspice and
> place it in the same folder?
>
> For instance, I want to see what difference (if any) it
> would make to inject the input stage bias current into the
> balun, instead of directly into the emitter. That would
> take the stray capacitance of the large input coupling
> capacitor out of the response and bypass the noise of the
> bias resistor (and any bias supply noise, that will always
> be worse than the the perfect voltage source in the simulation).
>
> Thank you.
>
> --
> Regards,
>
> John Popelish
>

Hi John,
thank you for interest in my work, yes I can do it if you wish, will zip all my docs into a single zip file.
Anyway I liked your idea to supply the TR via the bottom side of input transformer but a large bypass capacitor is also needed to short the bias resistor, so the big cap issue remains.

The 220 Ohm bias resistor in the emitter does noise but it is shorted by the TR input impedance which is in the order of 2 Ohms, anyway will try myself as well to see if it makes some difference.

73s
IT9JCB

9295. RE: [loopantennas] The "Beacon Audio Archive"

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-15 19:09:23 UTC
From: William Young
Topic: 9293 Message: 9295

Maybe if and when there no NDB's left on the air you could try the new 630 meter amateur band,
472 kHz - 479 kHz. Bill Young WD5HOH

To: loopantennas@yahoogroups.com
From: ko6bb1@...
Date: Sat, 15 Sep 2012 18:16:38 +0000
Subject: [loopantennas] The "Beacon Audio Archive"

Hi,
First, I hope that the moderators of this list doesn't find this post too far "off topic", but many loop antenna owners do use their loops for DXing NDBs (Longwave Non-directional beacons). Right now I'm primarily using an active whip for the purpose, but have a tuned loop in the process of being built especially for NDB's. My primary beacon receiver is an Icom R-75 with cascaded 250Hz narrow CW filters installed and is set up especially for this purpose.

A little over two weeks ago I started a new Blog site, I call it "KO6BB's Radio-Beacon Audio Archive". The premise is simple, to post recordings of as many NDB's (and eventually other beacons) as possible. This because every year many of them are being shut down as Airports no longer deem them necessary. I foresee the day when the NDB DXer will no longer be able to follow his chosen hobby. . .

It's also a place where one can compare what they may have heard against a recording of the actual beacon on the air, though it must be remembered that beacons sometimes change formats, OR have problems with their keyers that cause anomalies in their signal.

Some of the recordings on my site were recorded by other DXers, all of the pictures (what there are) were provided by others. ALL material provided by others are given due credit in the postings.

MOST of my own recordings are very narrow bandwidth, having been recorded using the Icom R-75 with 250 Hz CW filters AND very narrow audio filtering using the Timewave DSP-599zx. This because of the high noise levels encountered at LF. There ARE a few recordings of stronger (local) beacons using the AM mode and no audio filtering to show what these sound like in the AM mode (the beacons all use one form another of AM modulation). Where the AM mode is used, there is also a second recording in the narrower CW mode.

SOME of the recordings are very noisy, that goes with the hobby. But ALL of them do have the ID fully readable, I don't DON'T post recordings where one has to guess at the ID.

As of today there are recordings of 131 different beacons, EACH with it's own descriptive Blog page containing the recordings, pictures (where available), and other information such as frequency, location etc. New beacons are added almost daily.

To get there got to my home page at Ipernity
http://www.ipernity.com/home/ko6bb
then click on "blog" right next to the little HF radio symbol, or this will take you directly there if you wish to bypass my home page. . .
http://www.ipernity.com/blog/ko6bb

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff Active Whip up 24 feet AGL for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

9296. Re: [loopantennas] Re: Low noise loop Amplifier: final report

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-15 19:29:41 UTC
From: John Popelish
Topic: 9290 Message: 9296

On 09/15/2012 03:08 PM, claudio wrote:

> Hi John, thank you for interest in my work, yes I can do
> it if you wish, will zip all my docs into a single zip
> file. Anyway I liked your idea to supply the TR via the
> bottom side of input transformer but a large bypass
> capacitor is also needed to short the bias resistor, so
> the big cap issue remains. The 220 Ohm bias resistor in
> the emitter does noise but it is shorted by the TR input
> impedance which is in the order of 2 Ohms, anyway will
> try myself as well to see if it makes some difference.

In this version, both ends of the cap ride on the signal voltage (which is pretty low, because of the low impedances), but it is still a route for external capacitive currents to enter the emitter. When the capacitor is moved to the other side of the balun winding, as a bypass cap, one end is tied to ground, so almost all to the stray capacitive current would go directly to ground, not to the emitter.

You could simulate this difference by making the stray capacitance to each end of the capacitor explicit, and connect them to some AC voltage source representing an interfering signal. Admittedly, this external interference could be kept arbitrarily low, with shielding, but this stray capacitance also represents a sneak feedback path from all the nodes that have amplified copies of the input signal, that might distort the frequency response.

So, if it costs nothing to reduce this stray path (by reducing the total stray capacitance to the emitter node), it might be worth at least the cost to do it.

--
Regards,

John Popelish

9297. Re: Low noise loop Amplifier: final report

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-15 19:44:02 UTC
From: claudio
Topic: 9290 Message: 9297

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> >Hi all,
> > I've completed the design of my low noise loop amplifier and the results
> > are available in the pdf document "loopamp ver1_1" located in my folder
> > named IT9JCB, so anyone interested can give a look a send back comments.
> > The final results as remarkable, the input noise voltage rti is less
> > than 500pV/sqrt(Hz), all details as well as the measurements plots are
> > shown in the pdf.
> > The amplifier uses very common and inexpensive components as the well
> > known 2N2222A transistor, the only critical component is the 3:1 input
> > current balun, it can be built using a four wires winding in a suitable
> > generous size toroid.
> >
>
> I like the way you biased the output device Q2. Clever.
>
> >
> > In the while a new NIC based version is in progress and the first results
> > are promising, a related report is coming soon.
> >
>
> I may have an NIC amplifier that can be used with Moebius Strip shielded loop antennas. The PSice modeling looks good.
>
> Chris
> >73s
> >Claudio
> >IT9JCB
> >
> >
> >
>

Hi Chris,
thanks...being an old IC silicon designer I'm used with current generator biasing, you know. This is the best way to bias an high power linear amplifier.
I tried to add augmenting to this design, but honestly the only improvement I noticed is in the input impedance drop and few dB less of IMD3, tried to best match changing the input transformer ratio leads to same results, noise is the same or worst.
I'm very interested on your NIC work, I'm working on mine, it seems to work decently but the results are a little be worst in terms of noise, still working. I got the Linvill original papers and read it carefully.

73s
CLaudio
IT9JCB

9298. Re: [loopantennas] The "Beacon Audio Archive"

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-16 15:07:14 UTC
From: Phil
Topic: 9293 Message: 9298

Hi Bill,
Yes, I've been wanting to look around that area but haven't gotten
around to it yet.

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: Satellit 750 (2011), S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff Active Whip up 24 feet AGL for LF/MW
Merced, Central California, 37.3N 120.48W CM97sh

On 9/15/2012 7:09 PM, William Young wrote:
>
>
> Maybe if and when there no NDB's left on the air you could try the new
> 630 meter amateur band,
> 472 kHz - 479 kHz. Bill Young WD5HOH

9299. Re: Question About Homebrew Shortwave Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-17 10:52:31 UTC
From: Mvs
Topic: 9257 Message: 9299

while many have spoken of this , i would like state this way, tough sam matter.
if your loop i balanced , (no gnd connection anywhre,
you may try to mount your gang cap inside an insulated plastic box.
if any limb of the cap is to be grounded, it could still be done, i suppose !!!
--- In loopantennas@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> > If I bolt the capacitor to the metal box, would I not effectively be putting the
> > metal of the box in series with the rotor blades and frame of the capacitor?
>
> Maybe not really "in series" but maybe "in parallel".
>
> But the box isn't really a 2-terminal element. It's more of a big
> hunk of metal, bent into a shield.
>
> > Would this not affect the tuning range of the whole antenna?
>
> Could, depending mainly on its proximity to, and coupling to, the loop
> itself. And to some degree, if the box couples to the capacitor
> blades inside the box.
>
> You could always try using a plastic box instead of metal.
>
> Back when I used to fool around with old radios, some of those 365 uF
> capacitors were, I think, insulated from their mounting screws. (Or
> maybe I am just remembering this wrong.)
>
> I don't know if your loop (and the circuit it connects to) tries to
> maintain any sort of electrical balance, but a box connected to one
> end of the loop probably upsets the loop's balance.
>
> Andy
>

9300. Re: Question About Homebrew Shortwave Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-17 16:18:33 UTC
From: Nick
Topic: 9257 Message: 9300

Hi...
Thanks to everyone for the help and advice that you offered. it was much help. I went ahead and built it in the metal box, and it really works great. I also have a 220 foot inverted L longwire, running NE to SW about 45 feet high, and the loop will receive anything that the longwire will, and some that would be completely under the noise on the wire. I don't know what the Q of the loop is, but it must be huge....It is so sharp, that I had to add a 3.5:1 drive reduction unit to the capacitor to be able to tune it on the high end. The loop coverage starts, on the high end, at about 15 mHz. (with 1 gang capacitor), and tunes down to about 3.2 mHz. (with 2 gang capacitor). I do wish that it would go a little higher, and cover the 19 meter shortwave band, but I can live with it like it is.
So thanks again for the help, and good listening to everyone.

Nick
Kannapolis, N.C.

--- In loopantennas@yahoogroups.com, "Mvs" <mvs_sarma@...> wrote:
>
> while many have spoken of this , i would like state this way, tough sam matter.
> if your loop i balanced , (no gnd connection anywhre,
> you may try to mount your gang cap inside an insulated plastic box.
> if any limb of the cap is to be grounded, it could still be done, i suppose !!!
> --- In loopantennas@yahoogroups.com, Andy <ai.egrps@> wrote:
> >
> > > If I bolt the capacitor to the metal box, would I not effectively be putting the
> > > metal of the box in series with the rotor blades and frame of the capacitor?
> > >
> > Maybe not really "in series" but maybe "in parallel".
> > >
> > But the box isn't really a 2-terminal element. It's more of a big
> > hunk of metal, bent into a shield.
> > >
> > > Would this not affect the tuning range of the whole antenna?
> > >
> > Could, depending mainly on its proximity to, and coupling to, the loop
> > itself. And to some degree, if the box couples to the capacitor
> > blades inside the box.
> > >
> > You could always try using a plastic box instead of metal.
> > >
> > Back when I used to fool around with old radios, some of those 365 uF
> > capacitors were, I think, insulated from their mounting screws. (Or
> > maybe I am just remembering this wrong.)
> > >
> > I don't know if your loop (and the circuit it connects to) tries to
> > maintain any sort of electrical balance, but a box connected to one

> > end of the loop probably upsets the loop's balance.
> >
> > Andy
> >
>

9301. Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-19 04:41:40 UTC
From: chuckmfspd
Topic: 9301 Message: 9301

I have read of loops built by connecting the ends of the wire in series to make a large multi turn loop. My question is about the shield
all the multi wire cables I have seen all have a shield, would this type cable still be ok for LF 150-550khz ?

9302. Re: Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-19 11:32:24 UTC
From: David
Topic: 9301 Message: 9302

Chuck,

I've seen probably one of the tutorials you are talking about. You want to look for unshielded cable. It's okay if there is a plastic insulator on the outside, but what you don't want one that has a woven or film metal shielding layer.

Lowes or Home Depot carry unshielded multi-strand cable you can buy by the foot. You'd probably best to try to find some that isn't twisted. I think they offer unshielded thermostat wire that has multiple conductors and are unshielded.

Dave

--- In loopantennas@yahoogroups.com, "chuckmfspd" <chuckmfspd@...> wrote:
>
> I have read of loops built by connecting the ends of the wire in series to make a large multi turn loop. My question is about the shield
> all the multi wire cables I have seen all have a shield, would this type cable still be ok for LF 150-550khz ?
>

9303. Re: Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-19 15:34:34 UTC
From: kd8phx
Topic: 9301 Message: 9303

Another way is to buy ribbon cable. There are many sources including iPAY(Ebay). Decide how long the loop/big should be & how wide, then solder the two ends together, but offset the ribbon by one wire. This will create the "spiral" and leave 2 unconnected wires for installation of a variable cap and or connection to the radio. You can also tap off this loop at various points for various tuning flexibility. - 73 Bob V

--- In loopantennas@yahoogroups.com, "David" <dcastor@...> wrote:
>
> Chuck,
>
> I've seen probably one of the tutorials you are talking about. You want to look for unshielded cable. It's okay if there is a plastic insulator on the outside, but what you don't want one that has a woven or film metal shielding layer.
>
> Lowes or Home Depot carry unshielded multi-strand cable you can buy by the foot. You'd probably best to try to find some that isn't twisted. I think they offer unshielded thermostat wire that has multiple conductors and are unshielded.
>
> Dave
>
> --- In loopantennas@yahoogroups.com, "chuckmfspd" <chuckmfspd@> wrote:
> >
> > I have read of loops built by connecting the ends of the wire in series to make a large multi turn loop. My question is about the shield
> > all the multi wire cables I have seen all have a shield, would this type cable still be ok for LF 150-550khz ?
> > >
>

9304. Re: Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-19 20:44:47 UTC
From: jurgen.brac
Topic: 9301 Message: 9304

Hi Chuck,
ribbon cable will function satisfactorily, but remember the small diameter and the tinned surface of the wire, which result in relative low Q of the tuned antenna.
Juergen

9306. Re: Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-20 03:13:18 UTC
From: claudio
Topic: 9301 Message: 9306

Hi Chuck,
the cable MUST be unshielded, in case of shielded loops the shield must be broken in the mid of the loop, this cannot be done with multi turns loops.
Here in Europe there is a wide choice od unshielded cables, as in the US I guess. Don't use too thiny wires, at least 1mm2.
Here is an example of 18x1mm2 cable, 18 wires, it costs about 5$ per meter...not too cheap.

http://www.tme.eu/it/katalog/?art=CL110-18X1

73s
IT9JCB
Claudio

--- In loopantennas@yahoogroups.com, "chuckmfspd" <chuckmfspd@...> wrote:
>
> I have read of loops built by connecting the ends of the wire in series to make a large multi turn loop. My question is about the shield
> all the multi wire cables I have seen all have a shield, would this type cable still be ok for LF 150-550khz ?
>

9307. First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-20 03:21:10 UTC
From: claudio
Topic: 9307 Message: 9307

Hi all,
I've continued to work on NIC (negative impedance converter) based amplifiers for small loops antennas.
As well known a small loop has an impedance of the form : R +jXL, where R is a small resistance (say less than 1 Ohm) and XL is the inductive component, such a component can be of the order of many hundreds of Ohms at high frequencies and it's the main limiting factor of the loop's current value, a resonant loop maximizes the current cancelling XL with a capacitor XC, so at resonance I=Vi/R where Vi is the (small) voltage induced in the loop, but being R very small the current induced in a small resonant loop can be very high, if an high Q is provided.
So the main task of any aperiodic loop amplifier is to maximize the current being XL the limiting factor. Up to now the best way has been to close the loop into a very low impedance amplifier whit low noise (see my low noise amplifier in my IT9JCB folder), the natural -6dB/oct roll-off due to XL can be compensated (if needed) by using an inductive "tracking" load.
If an ideal NIC was available the natural way to follow would be to close the loop into a a "-L" NIC being the other side of the the NIC closed into proper load or better, a low impedance amp. This arrangement insures a flat response and max current, i.e. a perfect match to the loop.
Unfortunately an ideal NIC is well far away from real world, resulting in very high noise e low linearity.
I tried to partially solve these problems, my NIC works as expected with reasonable performances in terms of noise and IMD.
A complete description of the NIC based amplifier can be found in my IT9JCB folder, the amp has little bit worst noise performances of my non-NIC amp, but I think that this is a good starting point for anyone interested on this important topic.
Today many research institutes in the world are working on NIC, the new big wireless market, 4G an beyond, calls for extremely wideband and miniaturized antennas and the NIC is the natural solution.

73s
Claudio IT9JCB

9308. Re: Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-20 19:09:03 UTC
From: jurgen.brac
Topic: 9301 Message: 9308

The major disadvantage of all shielded multi-wire cables is the high capacity between the wires and between wires and shield, which results in decreased tuning range.
The better way is to use only a few turns unshielded and couple to the tuned circuit via a transformer winding on the coil.
Juergen

9309. Re: Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-20 19:19:37 UTC
From: jurgen.brac
Topic: 9301 Message: 9309

The major disadvantage of all shielded multi-wire cables is the high capacity between the wires and between wires and shield, which results in decreased tuning range.
The better way is to use only a few turns unshielded and couple to the tuned circuit via a transformer winding on the coil.
Juergen

P.S.:
The shield of a multi-wire shielded cable can easily be interrupted by carefully opening the insulation and cutting the shield foil.

Just try a few variations of construction and learn by experience.
Juergen

9310. Using ribbon cable for a loop.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-21 01:53:22 UTC
From: Rich
Topic: 9301 Message: 9310

This article reminded me of using a ribbon cable for a loop antenna:

http://earmark.net/gesr/loop/ribbonloop.htm
Google is your friend !
Rich
--- In loopantennas@yahoogroups.com, "chuckmfspd" <chuckmfspd@...> wrote:
>
> I have read of loops built by connecting the ends of the wire in series to make a large multi turn loop. My question is about the shield
> all the multi wire cables I have seen all have a shield, would this type cable still be ok for LF 150-550khz ?
>

9311. Re: Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-21 13:03:32 UTC
From: chuckmfspd
Topic: 9301 Message: 9311

--- In loopantennas@yahoogroups.com, "jurgen.brac" <jurgen.brac@...> wrote:
>
>
>
>
> The major disadvantage of all shielded multi-wire cables is the high capacity between the wires and between wires and shield, which results in decreased tuning range.
> The better way is to use only a few turns unshielded and couple to the tuned circuit via a transformer winding on the coil.
> Juergen
>
> P.S.:
> The shield of a multi-wire shielded cable can easily be interrupted by carefully opening the insulation and cutting the shield foil.
>
> Just try a few variations of construction and learn by experience.
> Juergen

Thanks, I found a 18' length of communication interconnect cable with about 16 small wires. I guess I will solder it up and try to pickup
some European AM broadcast on longwave tonight. Here on the east coast It sometimes drifts in during fall and winter.
>

9312. Re: [loopantennas] Re: Building a LF loop using multi conductor cable with shield

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-22 03:32:02 UTC
From: kevin asato
Topic: 9301 Message: 9312

I'd be careful of using that. Sounds like twisted pair cable. If used in the differential mode (twisted pair) it can help reduce the reception of electrical noise. Otherwise it is a straight piece of wire with about 29pF/foot (.3 meter) between twists and i can't recall some type of capacitance between other pairs of wires.

73,
kevin
kc6pob

From: chuckmfspd <chuckmfspd@...>
To: loopantennas@yahoogroups.com
Sent: Friday, September 21, 2012 6:03 AM
Subject: [loopantennas] Re: Building a LF loop using multi conductor cable with shield

--- In loopantennas@yahoogroups.com, "jurgen.brac" <jurgen.brac@...> wrote:
>
>
>
>
> The major disadvantage of all shielded multi-wire cables is the high capacity between the wires and between wires and shield, which results in decreased tuning range.
> The better way is to use only a few turns unshielded and couple to the tuned circuit via a transformer winding on the coil.
> Juergen
>
> P.S.:
> The shield of a multi-wire shielded cable can easily be interrupted by carefully opening the insulation and cutting the shield foil.
>
> Just try a few variations of construction and learn by experience.
> Juergen

Thanks, I found a 18' length of communication interconnect cable with about 16 small wires. I guess I will solder it up and try to pickup
some European AM broadcast on longwave tonight. Here on the east coast It sometimes drifts in during fall and winter.
>

9313. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-22 13:48:29 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9313

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Floating Negative Impedance Converters.pdf
Uploaded by : chris3trask <christrask@...>
Description : Floating Negative Impedance Converters

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Floating%20Negative%20Impedance%20Converters.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

chris3trask <christrask@...>

9314. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-22 13:57:21 UTC
From: Chris
Topic: 9307 Message: 9314

--- In loopantennas@yahoogroups.com, "claudio" <aetna50@...> wrote:
>
> Hi all,
> I've continued to work on NIC (negative impedance converter)
> based amplifiers for small loops antennas.
>

<<SNIP>>

> A complete description of the NIC based amplifier can be found
> in my IT9JCB folder, the amp has little bit worst noise
> performances of my non-NIC amp, but I think that this is a
> good starting point for anyone interested on this important
> topic.
> Today many research institutes in the world are working on NIC,
> the new big wireless market, 4G an beyond, calls for extremely
> wideband and miniaturized antennas and the NIC is the natural
> solution.
>

Your NIC gave me reason to reexamine the work I had done earlier, and I found that I had made a couple of conceptual errors. I just uploaded the result of that, showing a single-sided and balanced version of the NIC that I have devised.

Basically, the issue of noise is addressed by eliminating all resistors in the topology. I do this by using wideband transformers. One of the conceptual errors that I made in the past was combining the two transformers of the single-ended design into a single 1:1:1:1 transformer. Using a pair of 1:1 transformers seems to have taken care of the instability problem, according to PSpice.

Chris

9315. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-22 16:00:45 UTC
From: claudio
Topic: 9307 Message: 9315

--- In loopantennas@yahoogroups.com, "Chris" <christrask@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "claudio" <aetna50@> wrote:
> >
> > Hi all,
> > I've continued to work on NIC (negative impedance converter)
> > based amplifiers for small loops antennas.
> >
>
> <<SNIP>>
>
> > A complete description of the NIC based amplifier can be found
> > in my IT9JCB folder, the amp has little bit worst noise
> > performances of my non-NIC amp, but I think that this is a
> > good starting point for anyone interested on this important
> > topic.
> > Today many research institutes in the world are working on NIC,
> > the new big wireless market, 4G an beyond, calls for extremely
> > wideband and miniaturized antennas and the NIC is the natural
> > solution.
> >
>
> Your NIC gave me reason to reexamine the work I had done earlier, and I found that I had made a couple of conceptual errors. I just uploaded the result of that, showing a single-sided and balanced version of the NIC that I have devised.
>
> Basically, the issue of noise is addressed by eliminating all resistors in the topology. I do this by using wideband transformers. One of the conceptual errors that I made in the past was combining the two transformers of the single-ended design into a single 1:1:1:1 transformer. Using a pair of 1:1 transformers seems to have taken care of the instability problem, according to PSpice.
>
> Chris
>

Hi Chris,
thank you for giving a look to my work, it's a spare time job so don't expect great results..!
Yes, agree with resistors issues, if possible use chokes or transformers, or ...the lowest resistor you can use, especially for polarization, the TR's base is the most sensitive point.
I had'nt time to complete my doc, but i'll work on it this weekend, figures about noise and IMD are included, they are really not too bad at all.

I realized that it's not possible to fully compensate the inductive component on a low loss loop, the required current would be out the NIC range, so you have the leave a little L and add some R to make the circuit physically realizable according to the GBW of the available components, moreover the little R comp helps on linearizing the NIC and add some stability margin, I've used the floating version from the original work of Linvill and it's "conditionally stable" only, a full L compensation is not possible and be care with negative resistor as well.
I tried some microwave transistor to increase the GBW (the ones I'm used to work by), but noise performances are poor.
Will give a look to your work, would be great to join our efforts.
As soon as possible I would like to built my coax made indoor loop, I've big noise issues here on 40 and 80m in nightime.

73s
Claudio
IT9JCB

9316. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 03:53:40 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9316

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /IT9JCB/NIC 1.pdf
Uploaded by : marco0754 <aetna50@...>
Description : Final report on first test on my NIC based loop amplifier

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/IT9JCB/NIC%201.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

marco0754 <aetna50@...>

9317. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 04:07:00 UTC
From: claudio
Topic: 9307 Message: 9317

--- In loopantennas@yahoogroups.com, "Chris" <christrask@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "claudio" <aetna50@> wrote:
> >
> > Hi all,
> > I've continued to work on NIC (negative impedance converter)
> > based amplifiers for small loops antennas.
> >
>
> <<SNIP>>
>
> > A complete description of the NIC based amplifier can be found
> > in my IT9JCB folder, the amp has little bit worst noise
> > performances of my non-NIC amp, but I think that this is a
> > good starting point for anyone interested on this important
> > topic.
> > Today many research institutes in the world are working on NIC,
> > the new big wireless market, 4G an beyond, calls for extremely
> > wideband and miniaturized antennas and the NIC is the natural
> > solution.
> >
>
> Your NIC gave me reason to reexamine the work I had done earlier, and I found that I had made a couple of conceptual errors. I just uploaded the result of that, showing a single-sided and balanced version of the NIC that I have devised.
>
> Basically, the issue of noise is addressed by eliminating all resistors in the topology. I do this by using wideband transformers. One of the conceptual errors that I made in the past was combining the two transformers of the single-ended design into a single 1:1:1:1 transformer. Using a pair of 1:1 transformers seems to have taken care of the instability problem, according to PSpice.
>
> Chris
>

Chris,
do you have already some results of your NIC ?? I looked at the diagrams, it seems very interesting. I liked the way you used the transformers and the resistor-less implementation. I expect good noise performances, would like to do some simulations myself, but unfortunately you don't specified the transformers ratios.

Thanks
Claudio IT9JCB

9318. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 04:34:48 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9318

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /476 kHz coupled loop article.zip
Uploaded by : wjlpy@... <lpwjy@...>
Description : 3' X 5' loop narrative

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/476%20kHz%20coupled%20loop%20article.zip

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

wjlpy@... <lpwjy@...>

9319. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 04:36:10 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9319

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /big loop dwg.zip
Uploaded by : wjlpy@... <lpwjy@...>
Description : 3' X 5' loop drawing

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/big%20loop%20dwg.zip

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

wjlpy@... <lpwjy@...>

9320. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 04:37:27 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9320

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /remote tuned loop.zip
Uploaded by : wjlpy@... <lpwjy@...>
Description : 3' X 5' loop schematic

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/remote%20tuned%20loop.zip

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

wjlpy@... <lpwjy@...>

9321. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 13:27:38 UTC
From: Chris Trask
Topic: 9307 Message: 9321

>
> > Your NIC gave me reason to reexamine the work I had done
> > earlier, and I found that I had made a couple of conceptual
> > errors. I just uploaded the result of that, showing a
> > single-sided and balanced version of the NIC that I have devised.
> >
> > Basically, the issue of noise is addressed by eliminating
> > all resistors in the topology. I do this by using wideband
> > transformers. One of the conceptual errors that I made in the
> > past was combining the two transformers of the single-ended
> > design into a single 1:1:1:1 transformer. Using a pair of 1:1
> > transformers seems to have taken care of the instability problem,
> > according to PSpice.
> >
> > Chris
> >
>
> Chris,
> do you have already some results of your NIC ?? I looked at the
> diagrams, it seems very interesting. I liked the way you used the
> transformers and the resistor-less implementation. I expect good
> noise performances, would like to do some simulations myself, but
> unfortunately you don't specified the transformers ratios.
>

Both transformers are 1:1.

Chris

9322. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 14:44:49 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9322

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Linville Feedback Amplifier Rev 0.pdf
Uploaded by : chris3trask <christrask@...>
Description : Low Input Impedance Amplifier Using Linville Feedback

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Linville%20Feedback%20Amplifier%20Rev%200.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

chris3trask <christrask@...>

9323. homebrewing capacitors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 14:24:51 UTC
From: leo
Topic: 9323 Message: 9323

found this on k7hkL web page might help someone

http://qrp.webhop.net/Homemade_Capacitors/Homebrew%20Capacitors.html

9324. 80 Meter Loop(interference problem?)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 17:33:53 UTC
From: Memwl
Topic: 9324 Message: 9324

Sorry to sound so dumb on wire strength but this question concerns a little of both
I want to put up an 80 meter loop, using 18 GA speaker wire supported by pvc rope/cord
I have a rectangular shaped yard that is 50 wide x 100 length so I barley have the room (I will use a tuner),
however the back has electrical lines along the back side, this is only on the back,
how far would I have to be to keep the noise down is it 20 ft or more, I had planned on using metal poles with fiberglass extensions to hold the wire, another question is how long to make the fiberglass pole
from the metal support pole, I am only using low power 100 watts

My problem is I have a overload of information, and have had my fill of trial and error, I know thats part of ham radio
but I am getting old and cannot keep climbing those darn ladders

I need suggestions
73
ke7sbe
Michael

9325. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-23 20:29:08 UTC
From: claudio
Topic: 9307 Message: 9325

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > > Your NIC gave me reason to reexamine the work I had done
> > > earlier, and I found that I had made a couple of conceptual
> > > errors. I just uploaded the result of that, showing a
> > > single-sided and balanced version of the NIC that I have devised.
> > >
> > > Basically, the issue of noise is addressed by eliminating
> > > all resistors in the topology. I do this by using wideband
> > > transformers. One of the conceptual errors that I made in the
> > > past was combining the two transformers of the single-ended
> > > design into a single 1:1:1:1 transformer. Using a pair of 1:1
> > > transformers seems to have taken care of the instability problem,
> > > according to PSpice.
> > >
> > > Chris
> > >
> >
> > Chris,
> > do you have already some results of your NIC ?? I looked at the
> > diagrams, it seems very interesting. I liked the way you used the
> > transformers and the resistor-less implementation. I expect good
> > noise performances, would like to do some simulations myself, but
> > unfortunately you don't specified the transformers ratios.
> >
>
> Both transformers are 1:1.
>
> Chris
>

Thanks Chris....let see.

73s
Claudio

9326. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-24 09:30:23 UTC
From: Andrew Ikin
Topic: 9307 Message: 9326

Claudio,

Just a thought; if you are conserned about possible resistor noise in your NIC you could replace R1, R2, R3 and R4 with 2.2mH chokes, you may need to reduce the +ve potential too. Likewise you could use the same value chokes to decouple the emitters. Adittionally you could connect the -ve side of the chokes to a balance pot. One other thing; as it is not possible to acheve perfect negative inductor, the resultant Loop/NIC impedance will not be zero, so it make be worth trying out using a higher input impedance amplifier. This may or may not help with NIC stabilty.

Good luck

Andrew Ikin

9327. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-24 02:44:24 UTC
From: Alan
Topic: 9307 Message: 9327

What values did you use for RL ?????

thank you

alan

--- In loopantennas@yahoogroups.com, "Chris" <christrask@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "claudio" <aetna50@> wrote:
> >
> > Hi all,
> > I've continued to work on NIC (negative impedance converter)
> > based amplifiers for small loops antennas.
> >
>
> <<SNIP>>
>
> > A complete description of the NIC based amplifier can be found
> > in my IT9JCB folder, the amp has little bit worst noise
> > performances of my non-NIC amp, but I think that this is a
> > good starting point for anyone interested on this important
> > topic.
> > Today many research institutes in the world are working on NIC,
> > the new big wireless market, 4G an beyond, calls for extremely
> > wideband and miniaturized antennas and the NIC is the natural
> > solution.
> >
>
> Your NIC gave me reason to reexamine the work I had done earlier, and I found that I had made a couple of conceptual errors. I just uploaded the result of that, showing a single-sided and balanced version of the NIC that I have devised.
>
> Basically, the issue of noise is addressed by eliminating all resistors in the topology. I do this by using wideband transformers. One of the conceptual errors that I made in the past was combining the two transformers of the single-ended design into a single 1:1:1:1 transformer. Using a pair of 1:1 transformers seems to have taken care of the instability problem, according to PSpice.
>
> Chris
>

9328. removal from group

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-24 22:31:26 UTC
From: VIKING1623@AOL.COM
Topic: 9328 Message: 9328

hello, can I be removed from the group. thank you

9329. Re: [loopantennas] removal from group

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-24 22:44:52 UTC
From: Phil
Topic: 9328 Message: 9329

Simple, click on the "Unsubscribe" link at the bottom of the email. . .

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff Active Whip up 24 feet AGL for LF/MW

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 9/24/2012 10:31 PM, VIKING1623@... wrote:
>
>
> hello, can I be removed from the group. thank you
>
>
>

9330. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-24 23:27:52 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9330

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /IT9JCB/nic-noise1.od01g.jpg
Uploaded by : marco0754 <aetna50@...>
Description : Noise analysis of the resistor-less NIC amp

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/IT9JCB/nic-noise1.od01g.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

marco0754 <aetna50@...>

9331. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-24 23:47:33 UTC
From: marco0754
Topic: 9307 Message: 9331

--- In loopantennas@yahoogroups.com, Andrew Ikin <andrew.ikin@...> wrote:
>
>
> Claudio,
>
>
> Just a thought; if you are conserned about possible resistor noise in your NIC you could replace R1, R2, R3 and R4 with 2.2mH chokes, you may need to reduce the +ve potential too. Likewise you could use the same value chokes to decouple the emitters. Adittionally you could connect the -ve side of the chokes to a balance pot. One other thing; as it is not possible to acheve perfect negative inductor, the resultant Loop/NIC impedance will not be zero, so it make be worth trying out using a higher input impedance amplifier. This may or may not help with NIC stabilty.
>
> Good luck
>
> Andrew Ikin
>

Andy,
I've added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC to a resistor-less version with more realistic power supply. Simply...I've found no difference, noise and BW are the same, IMD improved just a little bit.
To better show where noise is generated I added a noise analysis where the contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters, others negligibles.
Unfortunately the two resistors in the emitters cannot be removed, if you do this you get a terrific IMD and lower BW, even if gain and loop current goes up.
We need some form of lossless feedback to replace the noises emitter's resitors, I'm working on it.
Note also that my first scheme is just a spice file, it will be rearranged with more realistic power supply and polarization.
Anyway the idea to use RF choke instead is good, but it's not strictly required.
Will try also to replace the CBA with an high impedance amp, I had in my mind the loop current maximization only so I placed a virtual short after the NIC.

Thanks and 73s
Claudio IT9JCB

9332. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-24 23:47:33 UTC
From: claudio
Topic: 9307 Message: 9332

--- In loopantennas@yahoogroups.com, Andrew Ikin <andrew.ikin@...> wrote:
>
>
> Claudio,
>
>
> Just a thought; if you are conserned about possible resistor noise in your NIC you could replace R1, R2, R3 and R4 with 2.2mH chokes, you may need to reduce the +ve potential too. Likewise you could use the same value chokes to decouple the emitters. Adittionally you could connect the -ve side of the chokes to a balance pot. One other thing; as it is not possible to acheve perfect negative inductor, the resultant Loop/NIC impedance will not be zero, so it make be worth trying out using a higher input impedance amplifier. This may or may not help with NIC stabilty.
>
> Good luck
>
> Andrew Ikin
>

Andy,
I've added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC to a resistor-less version with more realistic power supply. Simply...I've found no difference, noise and BW are the same, IMD improved just a little bit.
To better show where noise is generated I added a noise analysis where the contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters, others negligibles.
Unfortunately the two resistors in the emitters cannot be removed, if you do this you get a terrific IMD and lower BW, even if gain and loop current goes up.
We need some form of lossless feedback to replace the noises emitter's resitors, I'm working on it.
Note also that my first scheme is just a spice file, it will be rearranged with more realistic power supply and polarization.
Anyway the idea to use RF choke instead is good, but it's not strictly required.
Will try also to replace the CBA with an high impedance amp, I had in my mind the loop current maximization only so I placed a virtual short after the NIC.

Thanks and 73s
Claudio IT9JCB

9333. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-24 23:54:18 UTC
From: claudio
Topic: 9307 Message: 9333

--- In loopantennas@yahoogroups.com, "Alan" <usdprof2002@...> wrote:
>
> What values did you use for RL ?????
>
> thank you
>
> alan
>
>
> --- In loopantennas@yahoogroups.com, "Chris" <christrask@> wrote:
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "claudio" <aetna50@> wrote:
> > >
> > > Hi all,
> > > I've continued to work on NIC (negative impedance converter)
> > > based amplifiers for small loops antennas.
> > >
> >
> > <<SNIP>>
> >
> > > A complete description of the NIC based amplifier can be found
> > > in my IT9JCB folder, the amp has little bit worst noise
> > > performances of my non-NIC amp, but I think that this is a
> > > good starting point for anyone interested on this important
> > > topic.
> > > Today many research institutes in the world are working on NIC,
> > > the new big wireless market, 4G an beyond, calls for extremely
> > > wideband and miniaturized antennas and the NIC is the natural
> > > solution.
> > >
> >
> > Your NIC gave me reason to reexamine the work I had done earlier, and I found that I had made a couple of conceptual errors. I just uploaded the result of that, showing a single-sided and balanced version of the NIC that I have devised.
> >
> > Basically, the issue of noise is addressed by eliminating all resistors in the topology. I do this by using wideband transformers. One of the conceptual errors that I made in the past was combining the two transformers of the single-ended design into a single 1:1:1:1 transformer. Using a pair of 1:1 transformers seems to have taken care of the instability problem, according to PSpice.
> >
> > Chris
> >

>

Sorry Alan.. I didn't understand, what do you mean whith "RL" ?? May be the load ? The receiver input is 50 Ohms, I used this load.

Regards
Claudio

9334. RE: [loopantennas] removal from group

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-25 07:22:45 UTC
From: dx11
Topic: 9328 Message: 9334

You have to do that yourself, Look at the very bottom of each group message,
there it says "unsubscribe". Try it..

Van: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
Namens VIKING1623@...
Verzonden: dinsdag 25 september 2012 0:31
Aan: loopantennas@yahoogroups.com
Onderwerp: [loopantennas] removal from group

hello, can I be removed from the group. thank you

9335. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-25 15:10:50 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9335

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Active Negative Inductors Rev 0.pdf
Uploaded by : chris3trask <christrask@...>
Description : A review of some simple active negative inductors.

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Active%20Negative%20Inductors%20Rev%200.p
df

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

chris3trask <christrask@...>

9336. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-25 15:21:23 UTC
From: Chris Trask
Topic: 9307 Message: 9336

>
> > Just a thought; if you are conserned about possible resistor noise
> > in your NIC you could replace R1, R2, R3 and R4 with 2.2mH chokes, you
> > may need to reduce the +ve potential too. Likewise you could use the
> > same value chokes to decouple the emitters. Adittionally you could
> > connect the -ve side of the chokes to a balance pot. One other thing;
> > as it is not possible to acheve perfect negative inductor, the
> > resultant Loop/NIC impedance will not be zero, so it make be worth
> > trying out using a higher input impedance amplifier. This may or may
> > not help with NIC stabilty.
> >
> > Good luck
> >
> > Andrew Ikin
> >
>
> Andy,
> I've added two files to my IT9JCB folder, as Chris Trask suggested I
> modified the NIC to a resistor-less version with more realistic power
> supply. Simply...I've found no difference, noise and BW are the same,
> IMD improved just a little bit.
> To better show where noise is generated I added a noise analysis where
> the contributions of the different comps are shown, 1st the NIC TRs,
> 2nd The two 10 resistors in the emitters, others negligibles.
> Unfortunately the two resistors in the emitters cannot be removed, if
> you do this you get a terrific IMD and lower BW, even if gain and loop
> current goes up.
> We need some form of lossless feedback to replace the noises emitter's
> resitors, I'm working on it.
> Note also that my first scheme is just a spice file, it will be
> rearranged with more realistic power supply and polarization.
> Anyway the idea to use RF choke instead is good, but it's not strictly
> required.
> Will try also to replace the CBA with an high impedance amp, I had in
> my mind the loop current maximization only so I placed a virtual short
> after the NIC.
>

I dug deeply into my files on negative impedance converters and active negative reactances and came up with a few useful ones. Two show how to linearize the Linvill NIC, but it's only useful for generating negative resistances as nonlinear voltages are seen by the reference impedance.

Another paper on a CMOS NIC was much more interesting as it uses fewer parts and the reference impedance appears to see a linear voltage and current. I modeled a version of

this using bipolar devices and transformers with PSpice to see how well it would work, and it looks promising.

I uploaded a short paper into the files section a few minutes ago that describes these. Just a little more food for thought.

Chris

9337. Re: [loopantennas] removal from group

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-25 17:49:09 UTC
From: VIKING1623@AOL.COM
Topic: 9328 Message: 9337

LOL thank you

In a message dated 9/25/2012 3:22:53 A.M. Eastern Daylight Time,
dx11@... writes:

You have to do that yourself, Look at the very bottom of each group
message, there it says "unsubscribe". Try it..

_____
Van: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com]
Namens VIKING1623@...
Verzonden: dinsdag 25 september 2012 0:31
Aan: loopantennas@...m
Onderwerp: [loopantennas] removal from group

hello, can I be removed from the group. thank you

9338. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 12:40:24 UTC
From: Andrew Ikin
Topic: 9307 Message: 9338

Claudio wrote on Sept 25th.

"Andy,
I've added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC to a resistor-less version with more realistic power supply. Simply...I've found no difference, noise and BW are the same, IMD improved just a little bit.
To better show where noise is generated I added a noise analysis where the contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters, others negligibles.
Unfortunately the two resistors in the emitters cannot be removed, if you do this you get a terrific IMD and lower BW, even if gain and loop current goes up.
We need some form of lossless feedback to replace the noises emitter's resitors, I'm working on it.
Note also that my first scheme is just a spice file, it will be rearranged with more realistic power supply and polarization.
Anyway the idea to use RF choke instead is good, but it's not strictly required.
Will try also to replace the CBA with an high impedance amp, I had in my mind the loop current maximization only so I placed a virtual short after the NIC.

Thanks and 73s
Claudio IT9JCB"

Claudio,

You could try using 2 x parallel connected transistors each with 10 Ohm Emitter degeneration with then re-biased so each transistor draws the same current as with the 2 transistor design. This should lower the IMD.

Assuming that you get it working, I would suggest that you connect NIC to and Vector Impedance Analyser to make that you have a negative inductor over the antennas design bandwidth. This will also check if you have any phase shift issues due the coupling transformers i.e. to many or too few turns or the wrong core material!

73

Andrew

9339. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 13:00:06 UTC
From: Andrew Ikin
Topic: 9307 Message: 9339

Hello Chris,

Thanks for your two recent papers ref. NIC. Yestereve, I tried out FIG 5 "Realizable Form of the Bipolar Negative Impedance Converter" using 2 x 2N4401s in liue of 2N2222, T1 and T2 are 8 turns Bifilar on 2873000302 cores and R1 300 to 2k. L1 is a 4.7uH Siemems choke.

I just can't get it work. The first problem was that Q2 is robbing current from Q1 i.e. the transistors are not matched. To overcome this problem I connected the ground end of the T2 and L1 to a 100 Ohm pot. (wiper to ground and other sides decoupled with 0.1uFcaps). This allowed me to balance Q1 and Q2.

I have re-checked the circuit several times and varied R1. I am just not seeing a negative 4.7uH on my Array Solutions Impedance analyser.

Any ideas?

73

Andrew

9340. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 13:03:45 UTC
From: Paul V Birke PEng
Topic: 9307 Message: 9340

if you can get 4 transistors in there instead of Andy's two (do same as Andy on biasing and equalization) you should theoretically have a chance to lower noise (produced by single bipolar) by a factor of 2

best wishes Claudio
Paul

From: Andrew Ikin <andrew.ikin@btconnect.com>
To: loopantennas@yahoogroups.com
Sent: Wednesday, September 26, 2012 8:40:24 AM
Subject: Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Claudio wrote on Sept 25th.

"Andy,
I've
added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC
to a resistor-less version with more realistic power supply. Simply...I've found
no difference, noise and BW are the same, IMD improved just a little bit.
To
better show where noise is generated I added a noise analysis where the
contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10
resistors in the emitters, others negligibles.
Unfortunately the two
resistors in the emitters cannot be removed, if you do this you get a terrific
IMD and lower BW, even if gain and loop current goes up.
We need some form of
lossless feedback to replace the noises emitter's resitors, I'm working on
it.
Note also that my first scheme is just a spice file, it will be
rearranged with more realistic power supply and polarization.
Anyway the idea
to use RF choke instead is good, but it's not strictly required.
Will try
also to replace the CBA with an high impedance amp, I had in my mind the loop
current maximization only so I placed a virtual short after the
NIC.

Thanks and 73s
Claudio IT9JCB"

Claudio,

You could try
using 2 x parallel connected transistors each with 10 Ohm Emitter degeneration
with then re-biased so each transistor draws the same current as with the 2

transistor design. This should lower the IMD.

Assuming that
you get it working, I would suggest that you connect NIC to and Vector Impedance Analyser to make that you
have a negative inductor over the antennas design bandwidth. This will also
check if you have any phase shift issues due the coupling transformers i.e.
to many or too few turns or the wrong core material!

73

Andrew

9341. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 13:17:43 UTC
From: pvbirke
Topic: 9307 Message: 9341

Dear Claudio, Chris and Andy

should not Full Wilson Current Mirrors be thrown into this mix

Chris and I have used these in the past and I would let Chris comment further on this as he is my Sensei !

http://en.wikipedia.org/wiki/Wilson_current_mirror

best wishes
Paul

9342. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 13:24:02 UTC
From: Chris Trask
Topic: 9307 Message: 9342

>
> Thanks for your two recent papers ref. NIC. Yestereve, I tried out
> FIG 5 "Realizable Form of the Bipolar Negative Impedance Converter"
> using 2 x 2N4401s in liue of 2N2222, T1 and T2 are 8 turns Bifilar
> on 2873000302 cores and R1 300 to 2k. L1 is a 4.7uH Siemems choke.
>
> I just can't get it work. The first problem was that Q2 is robbing
> current from Q1 i.e. the transistors are not matched. To overcome
> this problem I connected the ground end of the T2 and L1 to a 100
> Ohm pot. (wiper to ground and other sides decoupled with 0.1uFcaps).
> This allowed me to balance Q1 and Q2.
>
> I have re-checked the circuit several times and varied R1. I am just
> not seeing a negative 4.7uH on my Array Solutions Impedance analyser.
>

Check the phase connections of T1. If you have it backwards, then you won't see a negative inductor.

Chris

9343. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 13:30:06 UTC
From: claudio
Topic: 9307 Message: 9343

--- In loopantennas@yahoogroups.com, Andrew Ikin <andrew.ikin@...> wrote:
>
> Hello Chris,
>
> Thanks for your two recent papers ref. NIC. Yestereve, I tried out FIG 5 "Realizable Form of the Bipolar Negative Impedance Converter" using 2 x 2N4401s in liue of 2N2222, T1 and T2 are 8 turns Bifilar on 2873000302 cores and R1 300 to 2k. L1 is a 4.7uH Siemems choke.
>
> I just can't get it work. The first problem was that Q2 is robbing current from Q1 i.e. the transistors are not matched. To overcome this problem I connected the ground end of the T2 and L1 to a 100 Ohm pot. (wiper to ground and other sides decoupled with 0.1uFcaps). This allowed me to balance Q1 and Q2.
>
> I have re-checked the circuit several times and varied R1. I am just not seeing a negative 4.7uH on my Array Solutions Impedance analyser.
>
> Any ideas?
>
> 73
>
> Andrew
>

Andy,
nice to see you at work ! In my spare time I would try to simulate that scheme (Realizable Form of the Bipolar Negative Impedance Converter), but i'll do it tonight, may be....(I work all day long).
In the while I tried to follow your suggestion about the load of my NIC amplifier. I loaded it with a fet based amp changing the resistance between the Gate and GND. Above about 30 Ohm the circuit begins to oscillate (I suspected it), so it seems that this kind of NIC requires a low impedance load.
I've fixed Zin to 25 Ohm to see if something was improved, but i got worst results of noise.
So, the natural way to close my NIC is as: loop-NIC and SHORT, as in the case of resonant loop, I think that the resonant loop must be our reference model, i.e. maximize the loop current and probe just a bit of it to rig..
Will check the Chris's scheme as well, and advice you in case of news.

73s
Claudio

9344. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 13:47:53 UTC
From: claudio
Topic: 9307 Message: 9344

--- In loopantennas@yahoogroups.com, Paul V Birke PEng <nonlinear@...> wrote:
>
> if you can get 4 transistors in there instead of Andy's two (do same as Andy on biasing and equalization) you should theoretically have a chance to lower noise (produced by single bipolar) by a factor of 2
>
> best wishes Claudio
> Paul
>
>
>
> _____
> From: Andrew Ikin <andrew.ikin@...>
> To: loopantennas@yahoogroups.com
> Sent: Wednesday, September 26, 2012 8:40:24 AM
> Subject: Re: [loopantennas] Re: First NIC based loop amplifier that seems to work
>
>
>
> Claudio wrote on Sept 25th.
>
>
>
> "Andy,
> I've
> added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC
> to a resistor-less version with more realistic power supply. Simply...I've found
> no difference, noise and BW are the same, IMD improved just a little bit.
> To
> better show where noise is generated I added a noise analysis where the
> contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10
> resistors in the emitters, others negligibles.
> Unfortunately the two
> resistors in the emitters cannot be removed, if you do this you get a terrific
> IMD and lower BW, even if gain and loop current goes up.
> We need some form of
> lossless feedback to replace the noises emitter's resitors, I'm working on
> it.
> Note also that my first scheme is just a spice file, it will be
> rearranged with more realistic power supply and polarization.
> Anyway the idea
> to use RF choke instead is good, but it's not strictly required.
> Will try
> also to replace the CBA with an high impedance amp, I had in my mind the loop
> current maximization only so I placed a virtual short after the

> NIC.
>
> Thanks and 73s
> Claudio IT9JCB"
>
>
> Claudio,
>
> You could try
> using 2 x parallel connected transistors each with 10 Ohm Emitter degeneration
> with then re-biased so each transistor draws the same current as with the 2
> transistor design. This should lower the IMD.
>
> Assuming that
> you get it working, I would suggest that you connect NIC to and Vector Impedance Analyser to make that you
> have a negative inductor over the antennas design bandwidth. This will also
> check if you have any phase shift issues due the coupling transformers i.e.
> to many or too few turns or the wrong core material!
>
>
> 73
>
> Andrew
>

Andy,
you say like this: two TRs in parallel (but they could be 3,4 etc etc..) is like to have a single one with N times transconductance (gm) and N times lower Re degeneration ?
Interesting, for sure gm is N times larger (I've used it with FETs), let see if the total noise and IMD is better or worst.
About transformers I'm really a bit afraid about phase shift (I generally don't like transformers ..), but as I said you I did'nt see any improvement with Chris's scheme, so I think will left the resistors as in my original scheme and use only a single 1:1 current balun for balancing.

73s
Claudio

73s
Claudio

9345. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 14:08:36 UTC
From: claudio
Topic: 9307 Message: 9345

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > Thanks for your two recent papers ref. NIC. Yestereve, I tried out
> > FIG 5 "Realizable Form of the Bipolar Negative Impedance Converter"
> > using 2 x 2N4401s in liue of 2N2222, T1 and T2 are 8 turns Bifilar
> > on 2873000302 cores and R1 300 to 2k. L1 is a 4.7uH Siemems choke.
> > >
> > I just can't get it work. The first problem was that Q2 is robbing
> > current from Q1 i.e. the transistors are not matched. To overcome
> > this problem I connected the ground end of the T2 and L1 to a 100
> > Ohm pot. (wiper to ground and other sides decoupled with 0.1uFcaps).
> > This allowed me to balance Q1 and Q2.
> > >
> > I have re-checked the circuit several times and varied R1. I am just
> > not seeing a negative 4.7uH on my Array Solutions Impedance analyser.
> > >
>
> Check the phase connections of T1. If you have it backwards, then you won't see a
negative inductor.
>
> Chris
>

Yes,
I guess so too ...check Andy.

9346. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 17:32:57 UTC
From: Andrew Ikin
Topic: 9307 Message: 9346

Hello Paul,

In my last post I meant using 4 transistors (2 x parallel). My appologies if this wasn't clear enough.

73

Andrew

----- Original Message -----
From: Paul V Birke PEng
To: loopantennas@...m
Sent: Wednesday, September 26, 2012 2:03 PM
Subject: Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

if you can get 4 transistors in there instead of Andy's two (do same as Andy on biasing and equalization) you should theoretically have a chance to lower noise (produced by single bipolar) by a factor of 2

best wishes Claudio
Paul

From: Andrew Ikin <andrew.ikin@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, September 26, 2012 8:40:24 AM
Subject: Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Claudio wrote on Sept 25th.

"Andy,
I've added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC to a resistor-less version with more realistic power supply. Simply...I've found no difference, noise and BW are the same, IMD improved just a little bit.
To better show where noise is generated I added a noise analysis where the contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters, others negligibles.
Unfortunately the two resistors in the emitters cannot be removed, if you do this you get a terrific IMD and lower BW, even if gain and loop current goes up.
We need some form of lossless feedback to replace the noises emitter's resitors, I'm working on it.
Note also that my first scheme is just a spice file, it will be rearranged with more realistic power supply and polarization.
Anyway the idea to use RF choke instead is good, but it's not strictly required.
Will try also to replace the CBA with an high impedance amp, I had in my mind the loop current maximization only so I placed a virtual short after the NIC.

Thanks and 73s
Claudio IT9JCB"

Claudio,

You could try using 2 x parallel connected transistors each with 10 Ohm Emitter degeneration with then re-biased so each transistor draws the same current as with the 2 transistor design. This should lower the IMD.

Assuming that you get it working, I would suggest that you connect NIC to and Vector Impedance Analyser to make that you have a negative inductor over the antennas design bandwidth. This will also check if you have any phase shift issues due the coupling transformers i.e. to many or too few turns or the wrong core material!

73

Andrew

9347. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 17:51:40 UTC
From: Chris Trask
Topic: 9307 Message: 9347

>
> Dear Claudio, Chris and Andy
>
> should not Full Wilson Current Mirrors be thrown into this mix
>
> Chris and I have used these in the past and I would let Chris comment
further
> on this as he is my Sensei !
>

I looked at this on PSpice earlier. Using a Wilson current mirror decreases the usable bandwidth slightly. The third transistor will also add noise to the circuit.

Chris

9348. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 18:53:32 UTC
From: Andrew Ikin
Topic: 9307 Message: 9348

Claudio wrote on the Sept. 26.

"Andy,
nice to see you at work ! In my spare time I would try to simulate that scheme (Realizable Form of the Bipolar Negative Impedance Converter), but i'll do it tonight, may be....(I work all day long).
In the while I tried to follow your suggestion about the load of my NIC amplifier. I loaded it with a fet based amp changing the resistance between the Gate and GND. Above about 30 Ohm the circuit begins to oscillate (I suspected it), so it seems that this kind of NIC requires a low impedance load.
I've fixed Zin to 25 Ohm to see if something was improved, but i got worst results of noise.
So, the natural way to close my NIC is as: loop-NIC and SHORT, as in the case of resonant loop, I think that the resonant loop must be our reference model, i.e. maximize the loop current and probe just a bit of it to rig..
Will check the Chris's scheme as well, and advice you in case of news.

73s
Claudio"

Claudio to be quite frank I did some experiments with the a transformer in/out version Linvill NIC a couple of years ago. I put the project on the "back burner" because of instability issues and pursued work on lower noise Fet amps for my loops.

Notwithstanding the above; time permitting I still prepared to experiment with NICs. Its a very interesting subject.

73

Andrew

9349. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 18:41:27 UTC
From: Andrew Ikin
Topic: 9307 Message: 9349

Chris,

Thanks for your two recent papers ref. NIC. Yestereve, I tried out
> FIG 5 "Realizable Form of the Bipolar Negative Impedance Converter"
> using 2 x 2N4401s in liue of 2N2222, T1 and T2 are 8 turns Bifilar
> on 2873000302 cores and R1 300 to 2k. L1 is a 4.7uH Siemems choke.
>
> I just can't get it work. The first problem was that Q2 is robbing
> current from Q1 i.e. the transistors are not matched. To overcome
> this problem I connected the ground end of the T2 and L1 to a 100
> Ohm pot. (wiper to ground and other sides decoupled with 0.1uFcaps).
> This allowed me to balance Q1 and Q2.
>
> I have re-checked the circuit several times and varied R1. I am just
> not seeing a negative 4.7uH on my Array Solutions Impedance analyser.
>

"Check the phase connections of T1. If you have it backwards, then you won't see a negative inductor.

Chris"

Chris, T1 is bifilar wound with red and orange coloured wire.

The windings into the core are orange to Q2 Collector/Base with the coresponding red wire to Vcc.
Out of the core, orange connects to R1/C2. The red wire goes to Q1 Collector.

This is correct to achieve the phase reversal.

However, I did reverse the red wires as a sanity check. It still doesn't work.

73

Andrew

9350. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 20:00:19 UTC
From: Paul V Birke PEng
Topic: 9307 Message: 9350

dear andy

I did mean 8 transistors total

best Paul

_____
From: Andrew Ikin <andrew.ikin@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, September 26, 2012 1:32:57 PM
Subject: Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Hello Paul,

In my last post I meant using 4
transistors (2 x parallel). My appologies
if this wasn't clear enough.

73

Andrew

----- Original Message -----
>From: Paul V Birke PEng
>To: loopantennas@yahoogroups.com
>Sent: Wednesday, September 26, 2012 2:03 PM
>Subject: Re: [loopantennas] Re: First NIC based loop amplifier that seems to work
>
>
>if you can get 4 transistors in there instead of Andy's two (do same as Andy on biasing and equalization) you should theoretically have a chance to lower noise (produced by single bipolar) by a factor of 2
>
>
>best wishes Claudio
>Paul
>
>
>
>
>_____
> From: Andrew Ikin <andrew.ikin@btconnect.com>
>To: loopantennas@yahoogroups.com
>Sent: Wednesday, September 26, 2012 8:40:24 AM
>Subject: Re: [loopantennas] Re: First NIC based loop amplifier that seems to work
>
>

>
>Claudio wrote on Sept 25th.
>
>
>
>"Andy,
>I've added two files to my IT9JCB folder, as
Chris Trask suggested I modified the NIC to a resistor-less version with more
realistic power supply. Simply...I've found no difference, noise and BW are
the same, IMD improved just a little bit.
>To better show where noise is
generated I added a noise analysis where the contributions of the different
comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters,
others negligibles.
>Unfortunately the two resistors in the emitters cannot
be removed, if you do this you get a terrific IMD and lower BW, even if gain
and loop current goes up.
>We need some form of lossless feedback to replace
the noises emitter's resitors, I'm working on it.
>Note also that my first
scheme is just a spice file, it will be rearranged with more realistic power
supply and polarization.
>Anyway the idea to use RF choke instead is good,
but it's not strictly required.
>Will try also to replace the CBA with an
high impedance amp, I had in my mind the loop current maximization only so I
placed a virtual short after the NIC.
>
>Thanks and 73s
>Claudio
IT9JCB"
>
>
>Claudio,
>
>You could try using 2 x parallel connected transistors each with 10 Ohm Emitter
degeneration with then re-biased so each transistor draws the same current as with the 2
transistor design. This should lower the IMD.
>
>Assuming that you get it working, I would suggest that you connect NIC to and Vector
Impedance Analyser to make that you have a negative inductor over the antennas design
bandwidth. This will also check if you have any phase shift issues due the
coupling transformers i.e. to many or too few turns or the wrong core material!
>
>
>73
>
>Andrew
>
>

>
>
>
>
>

9351. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-26 20:01:17 UTC
From: Paul V Birke PEng
Topic: 9307 Message: 9351

ok very good Chris

best Paul

From: Chris Trask <christrask@...>
To: loopantennas@yahoogroups.com
Sent: Wednesday, September 26, 2012 1:51:40 PM
Subject: Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

>
> Dear Claudio, Chris and Andy
>
> should not Full Wilson Current Mirrors be thrown into this mix
>
> Chris and I have used these in the past and I would let Chris comment
further
> on this as he is my Sensei !
>

I looked at this on PSpice earlier. Using a Wilson current mirror
decreases the usable bandwidth slightly. The third transistor will also add
noise to the circuit.

Chris

9352. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-27 03:02:11 UTC
From: longjohn119
Topic: 9307 Message: 9352

--- In loopantennas@yahoogroups.com, "marco0754" <aetna50@...> wrote:
>
>
> Andy,
> I've added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC to a resistor-less version with more realistic power supply. Simply...I've found no difference, noise and BW are the same, IMD improved just a little bit.
> To better show where noise is generated I added a noise analysis where the contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters, others negligibles.
> Unfortunately the two resistors in the emitters cannot be removed, if you do this you get a terrific IMD and lower BW, even if gain and loop current goes up.
> We need some form of lossless feedback to replace the noises emitter's resitors, I'm working on it.
> Note also that my first scheme is just a spice file, it will be rearranged with more realistic power supply and polarization.
> Anyway the idea to use RF choke instead is good, but it's not strictly required.
> Will try also to replace the CBA with an high impedance amp, I had in my mind the loop current maximization only so I placed a virtual short after the NIC.
>
> Thanks and 73s
> Claudio IT9JCB
>

An old audio trick for low level, low impedance sources is to lead off with a PNP transistor, the PNP complement of the one you are using would probably be a good starting point .... If you look at the NF of complementary transistors you'll find the PNP will almost always have the better NF, sometimes by as much as a half. If you look at schematics of 'transformerless' balanced microphone preamps you'll almost always see a pair of PNP's up front for this very reason

For instance (and if memory serves me) a 2n4401 has a NF of 1db while it's PNP complement the 2n4403, has an NF of 0.5db .... Maybe you'll get lucky and can lower the resistor values too (Then again maybe the opposite will happen)

Just something to think about

JR

9353. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-27 12:05:53 UTC
From: circlotron
Topic: 9307 Message: 9353

You should look at the 2N5087 (PNP) and 2N5089 (NPN). I have used these parts in low noise audio applications and they work very well. They have better noise figures than the BC550. ft is 300-400MHz at 10mA collector current.

--- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "marco0754" <aetna50@> wrote:
> >
> >
> > Andy,
> > I've added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC to a resistor-less version with more realistic power supply. Simply...I've found no difference, noise and BW are the same, IMD improved just a little bit.
> > To better show where noise is generated I added a noise analysis where the contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters, others negligibles.
> > Unfortunately the two resistors in the emitters cannot be removed, if you do this you get a terrific IMD and lower BW, even if gain and loop current goes up.
> > We need some form of lossless feedback to replace the noises emitter's resitors, I'm working on it.
> > Note also that my first scheme is just a spice file, it will be rearranged with more realistic power supply and polarization.
> > Anyway the idea to use RF choke instead is good, but it's not strictly required.
> > Will try also to replace the CBA with an high impedance amp, I had in my mind the loop current maximization only so I placed a virtual short after the NIC.
> >
> > Thanks and 73s
> > Claudio IT9JCB
> >
>
> An old audio trick for low level, low impedance sources is to lead off with a PNP transistor, the PNP complement of the one you are using would probably be a good starting point .... If you look at the NF of complementary transistors you'll find the PNP will almost always have the better NF, sometimes by as much as a half. If you look at schematics of 'transformerless' balanced microphone preamps you'll almost always see a pair of PNP's up front for this very reason
>
> For instance (and if memory serves me) a 2n4401 has a NF of 1db while it's PNP complement the 2n4403, has an NF of 0.5db .... Maybe you'll get lucky and can lower the resistor values too (Then again maybe the opposite will happen)
>
> Just something to think about

>
> JR
>

9354. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-27 13:43:41 UTC
From: claudio
Topic: 9307 Message: 9354

--- In loopantennas@yahoogroups.com, Andrew Ikin <andrew.ikin@...> wrote:
>
> Claudio wrote on the Sept. 26.
>
>
>
> "Andy,
> nice to see you at work ! In my spare time I would try to simulate that scheme (Realizable Form of the Bipolar Negative Impedance Converter), but i'll do it tonight, may be....(I work all day long).
> In the while I tried to follow your suggestion about the load of my NIC amplifier. I loaded it with a fet based amp changing the resistance between the Gate and GND. Above about 30 Ohm the circuit begins to oscillate (I suspected it), so it seems that this kind of NIC requires a low impedance load.
> I've fixed Zin to 25 Ohm to see if something was improved, but i got worst results of noise.
> So, the natural way to close my NIC is as: loop-NIC and SHORT, as in the case of resonant loop, I think that the resonant loop must be our reference model, i.e. maximize the loop current and probe just a bit of it to rig..
> Will check the Chris's scheme as well, and advice you in case of news.
>
> 73s
> Claudio"
>
>
> Claudio to be quite frank I did some experiments with the a transformer in/out version Linvill NIC a couple of years ago. I put the project on the "back burner" because of instability issues and pursued work on lower noise Fet amps for my loops.
>
> Notwithstanding the above; time permitting I still prepared to experiment with NICs. Its a very interesting subject.
>
> 73
>
> Andrew
>

Andy,
you are right: up to now the "classic" way seems to be the better one, may be I cannot agree about stability, if you use extensive simulations (but you've to be skilled on this), you will discover unstability before to mount your circuit, my NIC as shown in the scheme is conditionally stable for sure, simply because it is a partially compensating NIC, closed to controlled impedances.
We have to go on, as you said the subject is very interesting.

73s Claudio
IT9JCB

9355. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-27 13:49:29 UTC
From: claudio
Topic: 9307 Message: 9355

--- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@...> wrote:
>
>
>
> --- In loopantennas@yahoogroups.com, "marco0754" <aetna50@> wrote:
> >
> >
> > Andy,
> > I've added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC to a resistor-less version with more realistic power supply. Simply...I've found no difference, noise and BW are the same, IMD improved just a little bit.
> > To better show where noise is generated I added a noise analysis where the contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters, others negligibles.
> > Unfortunately the two resistors in the emitters cannot be removed, if you do this you get a terrific IMD and lower BW, even if gain and loop current goes up.
> > We need some form of lossless feedback to replace the noises emitter's resitors, I'm working on it.
> > Note also that my first scheme is just a spice file, it will be rearranged with more realistic power supply and polarization.
> > Anyway the idea to use RF choke instead is good, but it's not strictly required.
> > Will try also to replace the CBA with an high impedance amp, I had in my mind the loop current maximization only so I placed a virtual short after the NIC.
> >
> > Thanks and 73s
> > Claudio IT9JCB
> >
>
> An old audio trick for low level, low impedance sources is to lead off with a PNP transistor, the PNP complement of the one you are using would probably be a good starting point .... If you look at the NF of complementary transistors you'll find the PNP will almost always have the better NF, sometimes by as much as a half. If you look at schematics of 'transformerless' balanced microphone preamps you'll almost always see a pair of PNP's up front for this very reason
>
> For instance (and if memory serves me) a 2n4401 has a NF of 1db while it's PNP complement the 2n4403, has an NF of 0.5db .... Maybe you'll get lucky and can lower the resistor values too (Then again maybe the opposite will happen)
>
> Just something to think about
>
> JR
>

Thanks JR,
I knew this but NPN it a natural choise (I don't know why..to be honest). I will try with the parts you suggested.

73s
IT9JCB

9356. Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-27 13:52:23 UTC
From: claudio
Topic: 9307 Message: 9356

--- In loopantennas@yahoogroups.com, "circlotron" <circlotron@...> wrote:
>
>
>
> You should look at the 2N5087 (PNP) and 2N5089 (NPN). I have used these parts in low noise audio applications and they work very well. They have better noise figures than the BC550. ft is 300-400MHz at 10mA collector current.
>
> --- In loopantennas@yahoogroups.com, "longjohn119" <some_oil_with_your_teaparty@> wrote:
> >
> >
> >
> > --- In loopantennas@yahoogroups.com, "marco0754" <aetna50@> wrote:
> > >
> > >
> > > Andy,
> > > I've added two files to my IT9JCB folder, as Chris Trask suggested I modified the NIC to a resistor-less version with more realistic power supply. Simply...I've found no difference, noise and BW are the same, IMD improved just a little bit.
> > > To better show where noise is generated I added a noise analysis where the contributions of the different comps are shown, 1st the NIC TRs, 2nd The two 10 resistors in the emitters, others negligibles.
> > > Unfortunately the two resistors in the emitters cannot be removed, if you do this you get a terrific IMD and lower BW, even if gain and loop current goes up.
> > > We need some form of lossless feedback to replace the noises emitter's resitors, I'm working on it.
> > > Note also that my first scheme is just a spice file, it will be rearranged with more realistic power supply and polarization.
> > > Anyway the idea to use RF choke instead is good, but it's not strictly required.
> > > Will try also to replace the CBA with an high impedance amp, I had in my mind the loop current maximization only so I placed a virtual short after the NIC.
> > >
> > > Thanks and 73s
> > > Claudio IT9JCB
> > >
> >
> > An old audio trick for low level, low impedance sources is to lead off with a PNP transistor, the PNP complement of the one you are using would probably be a good starting point .... If you look at the NF of complementary transistors you'll find the PNP will almost always have the better NF, sometimes by as much as a half. If you look at schematics of 'transformerless' balanced microphone preamps you'll almost always see a pair of PNP's up front for this very reason
> >
> > For instance (and if memory serves me) a 2n4401 has a NF of 1db while it's PNP complement the 2n4403, has an NF of 0.5db .... Maybe you'll get lucky and can lower the

resistor values too (Then again maybe the opposite will happen)
> >
> > Just something to think about
> >
> > JR
> >
>

Another good suggestion, thanks. I will keep you informed.

73s
IT9JCB

9357. Re: [loopantennas] Re: First NIC based loop amplifier that seems to work

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-27 19:55:23 UTC
From: Chris Trask
Topic: 9307 Message: 9357

>
> you are right: up to now the "classic" way seems to be the better one, may be
> I cannot agree about stability, if you use extensive simulations (but you've
> to be skilled on this), you will discover unstability before to mount your
> circuit, my NIC as shown in the scheme is conditionally stable for sure, simply
> because it is a partially compensating NIC, closed to controlled impedances.
> We have to go on, as you said the subject is very interesting.
>

That was an aspect of the circuit I found that caught my attention. The open loop gain is (hfe-2)/hfe), so it is unconditionally stable. You can make it unstable by changing the turns ratio of T1 to 2:1.

Chris

9358. Flag antennas !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-29 09:52:16 UTC
From: brian nsl
Topic: 9358 Message: 9358

Hi All,
I am contemplating erecting a rotateble Flag type antenna but
some of the Internet sized versions assume you have a huge plot
of land not a suburban UK garden !!!!
Anyone have ideas from experience of more practical sizes to
make rotateable ??????
Many thanks,
72, Brian, GØNSL.

9359. RE: [loopantennas] Flag antennas !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-29 11:56:41 UTC
From: dx11
Topic: 9358 Message: 9359

<http://www.ok1rr.com/index.php/antennas/37-the-mini-k9ay> How about:

http://www.ok1rr.com/index.php/antennas/37-the-mini-k9ay

and:

http://www.ok1rr.com/index.php/antennas/9-the-w2pm-mini-diamond-receiving-fl
ag

Cor Beijersbergen

Hi All,
I am contemplating erecting a rotateble Flag type antenna but
some of the Internet sized versions assume you have a huge plot
of land not a suburban UK garden !!!!
Anyone have ideas from experience of more practical sizes to
make rotateable ??????
Many thanks,
72, Brian, GØNSL.

9360. Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-29 19:58:48 UTC
From: Chris Trask
Topic: 9360 Message: 9360

I removed both of the files related to active negative inductors from the group files section. A revised version of the one active file can now be found on my web page at:

http://www.home.earthlink.net/~christrask/Paper028.html

I corrected some spelling errors, and added a short discussion of a stable active negative inductor that uses a single transistor and a transformer. The realization adds a second transistor for biasing. I also added a short discussion about selecting transistors for the two realizable circuits.

Chris

9361. HF Antenna coil characterizing ???

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-30 03:23:45 UTC
From: Kuby
Topic: 9361 Message: 9361

I have few naked coils for half wave dipoles. I'd like to measure the coil characteristics to insure I use them properly and duplicate home-made replacement coils.

How do you measure:
1. resonant (center frequency)
2. Q 3db points (band width)
3. Inductance L

I have a GDO, MFJ-269, Spectrum Analyzer, and more.

9362. Re: [loopantennas] Flag antennas !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-30 06:23:03 UTC
From: brian nsl
Topic: 9358 Message: 9362

Cor,
Many thanks for the loop antenna links provided, much appreciated indeed.
The mini - diamond is particularly attractive and has a good write up.
Off to the workshop hi!
72, Brian, GØNSL.
----- Original Message -----
From: dx11
To: loopantennas@yahoogroups.com
Sent: Saturday, September 29, 2012 12:56 PM
Subject: RE: [loopantennas] Flag antennas !!!!

9363. Re: Flag antennas !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-30 18:16:24 UTC
From: Alex P
Topic: 9358 Message: 9363

Brian,

I've built several versions of the basic triangular version. The smaller one had a 10 ft horizontal baseline and 5 ft vertical support with a terminating resistor at one corner and the feedline connected at the opposite corner. This one was located on a rotor on the roof of the house. Another version had a 16 ft baseline and 25 ft vertical support atop a rotatable 50 ft tower. With the 'termination' resistance adjusted for maximum front-to-back, realistic values of 20 to about 30 dB F/B ratios were measured. These values were consistent with NEC modeling done prior to build-out.

Hope this helps.

Alex

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Cor,
> Many thanks for the loop antenna links provided, much appreciated indeed.
> The mini - diamond is particularly attractive and has a good write up.
> Off to the workshop hi!
> 72, Brian, GØNSL.
> ----- Original Message -----
> From: dx11
> To: loopantennas@yahoogroups.com
> Sent: Saturday, September 29, 2012 12:56 PM
> Subject: RE: [loopantennas] Flag antennas !!!!
>

9364. Re: [loopantennas] Re: Flag antennas !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-30 21:18:49 UTC
From: brian nsl
Topic: 9358 Message: 9364

Alex,
Thanks for the antenna comments, if my maths of 80 years ago is still ok
I make your loop perimeters 68ft for the 16ft base an 22 fft for the 10ft base,
is this in the right ballpark ?????
Regards,
72, Brian, GØNSL.
----- Original Message -----
From: Alex P
To: loopantennas@yahoogroups.com
Sent: Sunday, September 30, 2012 7:16 PM
Subject: [loopantennas] Re: Flag antennas !!!!

9365. Re: Flag antennas !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-09-30 21:30:49 UTC
From: Alex P
Topic: 9358 Message: 9365

Brian,

Yes, that's close enough to the values I used. Solid 12 guage insulated house wiring from home depot.

--- In loopantennas@yahoogroups.com, "brian nsl" <brian.nsl@...> wrote:
>
> Alex,
> Thanks for the antenna comments, if my maths of 80 years ago is still ok
> I make your loop perimeters 68ft for the 16ft base an 22 fft for the 10ft base,
> is this in the right ballpark ?????
> Regards,
> 72, Brian, GØNSL.
> ----- Original Message -----
> From: Alex P
> To: loopantennas@yahoogroups.com
> Sent: Sunday, September 30, 2012 7:16 PM
> Subject: [loopantennas] Re: Flag antennas !!!!
>

9366. Re: [loopantennas] Re: Flag antennas !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-01 06:05:59 UTC
From: brian nsl
Topic: 9358 Message: 9366

Alex,
Thank you for confirming the antenna maths, just need the rain to cease here now hi!
Regards,
72, Brian, GØNSL.
----- Original Message -----
From: Alex P
To: loopantennas@yahoogroups.com
Sent: Sunday, September 30, 2012 10:30 PM
Subject: [loopantennas] Re: Flag antennas !!!!

9367. Flag version !!!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-02 07:36:37 UTC
From: brian nsl
Topic: 9367 Message: 9367

Alex,
Thanks again for the comments on your antenna sizes,
erected the 10ft base version yesterday, 360° rotation with
base 3ft agl, excellent results, many new beacons heard last evening.
72, Brian, GØNSL.

9368. A somewhat asymmetrical loop. . .

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-02 21:15:43 UTC
From: Phil
Topic: 9368 Message: 9368

Well, today I bought the PVC pipe for the tuned loop antenna. The plans were to make it an "X" (Actually a "+") with four 3 foot cross-arms, all joined in the middle with a "PVC 4 way cross section". As mounted it would be a "Diamond" shape. I needed to use 1 1/2 inch Sched 40 PVC pipe to allow a standard TV mast to be run perhaps halfway up the center so that could be inserted into the rotator.

Well, NONE of the hardware stores in this town has the four way cross section in a size to accept 1 1/2 inch PVC pipe, just in smaller sizes. So, my ONLY alternative was to use two "Tee sections", mounted one above the other for the two horizontal cross arms. Of course, right off the bat that means that it won't be exactly "square" as one horizontal arm is 5 inches higher than the other.

THEN, when I was putting it together and cut all the sections, the top three arms were all cut to the proper 32 inches (allowing for the additional space occupied by the Tees and Elbows etc). Then I 'somehow' cut the lower section to 36 inches and had it glued in place along with the bottom Tee section BEFORE I noticed it (sweat was pouring into my eyes and my vision was a bit blurred anyway).

Well, if it were ONLY the one tee section I needed to replace I'd have just cut it out and bought another one. BUT that Tee section was "pre-assembled" (read glued) with the pre-amp section and housing all assembled. I used a PVC Tee, caps etc to house the pre-amp as I figured it would be more weather-tight and sun-proof than a cheap project box from Radio Shack.

It'd cost too much to buy all the fittings just to shorten the bottom section some 4 inches (All the PVC pipe, fittings etc cost me nearly $60 as it was, but I bought more pipe than I needed as it was cheaper to buy the "pre-cut" lengths than to have them cut it to length).

YES, I could have built it in a cheaper manner, just the cross-arms with no cross bracing etc, but we get a lot of gusty wind here, and that along with high temperatures quickly takes it's toll on unsupported PVC structures.

ASK ME HOW I KNOW THIS :(

Oh well, the asymmetry (elongated diamond with longer lower section) shouldn't have any effect on it's electrical characteristics or performance as a loop antenna. If anyone sees it and asks I'll just tell them that it was designed that way to "Suck the waves in better" ;-)

--
73 de Phil, KO6BB

http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

9369. Re: [loopantennas] A somewhat asymmetrical loop. . .

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-02 21:45:33 UTC
From: Bob
Topic: 9368 Message: 9369

Hi Phil

Just cut a piece out of the long section and insert a joiner.

Bob VK7ZL

On 3/10/2012 07:15, Phil wrote:
> THEN, when I was putting it together and cut all the sections, the top
> three arms were all cut to the proper 32 inches (allowing for the
> additional space occupied by the Tees and Elbows etc). Then I 'somehow'
> cut the lower section to 36 inches and had it glued in place along with
> the bottom Tee section BEFORE I noticed it (sweat was pouring into my
> eyes and my vision was a bit blurred anyway).

--
LF/HF QRSS Grabber: http://tinyurl.com/26callh

NDB & Navtex Logging: http://tinyurl.com/255zfm2

9370. Exotic PVC fittings; was Re: [loopantennas] A somewhat asymmetrical loop. . .

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-02 22:23:30 UTC
From: Richard (Rick) Karlquist
Topic: 9368 Message: 9370

On 10/2/2012 2:15 PM, Phil wrote:

> Well, NONE of the hardware stores in this town has the four way cross
> section in a size to accept 1 1/2 inch PVC pipe, just in smaller sizes.
> So, my ONLY alternative was to use two "Tee sections", mounted one above
> the other for the two horizontal cross arms. Of course, right off the
> bat that means that it won't be exactly "square" as one horizontal arm
> is 5 inches higher than the other

Coincidentally, I was just on line today looking for exotic PVC fittings
to build antennas with. The 4 way cross you were looking for is
available in some retail stores, but going on line you can get
a 5 way side outlet cross, or even a 6 way junction. They sell these
fittings for construction/furniture as opposed to plumbing. Google
"5 way side outlet cross" and you should get several vendors, such as
formufit, flexpvc, pvcfittings direct, and US plastics. Lots of
interesting parts for making loops. In a 4 way cross, you can get
up to at least 4 inch fittings on line.

Rick N6RK

9371. Re: [loopantennas] A somewhat asymmetrical loop. . .

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-04 03:32:40 UTC
From: Phil
Topic: 9368 Message: 9371

Thank you, I DON'T know why I didn't think of that (too simple I guess :) Anyway, I did it and it's more symmetrical now with just the offset horizontal arms making it a slightly "squashed X".

I also got the 1 inch cross braces in place now so that it's much more rigid. I didn't want it swaying in the wind as I figure that would put more stress on the rotator and support mast. Since it'll be above the roofline of the mobile home it'll see some pretty vicious wind gusts.

The frame is completed and now all I need to do on that part of the job is to insert and secure the TV pole, then wind the 22 turns of 18awg enameled wire and wire it to the varactor tuned pre-amp module.

I'm not as young as I once was and so rarely work on it more than an hour or so at a time (and my work is slower). There was a time the entire job would have been completed in a day, maybe two at the most.

Then the fun job of mounting the rotator to the mast and getting the whole assembly up in the air begins. . .

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 10/2/2012 9:45 PM, Bob wrote:
>
>
> Hi Phil
>
> Just cut a piece out of the long section and insert a joiner.
>
> Bob VK7ZL

>
>
> On 3/10/2012 07:15, Phil wrote:
>> THEN, when I was putting it together and cut all the sections, the top
>> three arms were all cut to the proper 32 inches (allowing for the
>> additional space occupied by the Tees and Elbows etc). Then I 'somehow'
>> cut the lower section to 36 inches and had it glued in place along with
>> the bottom Tee section BEFORE I noticed it (sweat was pouring into my
>> eyes and my vision was a bit blurred anyway).
>
> --
> LF/HF QRSS Grabber:http://tinyurl.com/26callh
>
> NDB & Navtex Logging:http://tinyurl.com/255zfm2
>
>
>
>
>
>
>
>

9372. My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 00:39:07 UTC
From: Phil
Topic: 9372 Message: 9372

OK,
Today I wound the coil on the loop frame, installed the rotator and then had the neighbor help me get the entire thing up on the roof and installed on the Push-up TV mast. That part was a bit of a pain because the top section of the mast is jammed in place and won't go up or down any. That meant that we had to lift the entire loop antenna up high enough to get the rotator to slide over the mast. Luckily I had the foresight to install the rotator on the loop mast BEFORE trying to get it into place or we never would have got it up. A LOT of really hard work for two old pharts (neighbor is 62 and I'm 69)! I just soaked under a hot shower and took two extra strength Tylenol capsules, but I bet I'll still feel it later.

It is wound with 22 turns of 18AWG Enamel Insulated solid wire, it's 4 feet on a side (six feet across corner to corner). I used Beautician Wide Toothed "Styling Combs" as wire spacers, then used a short section of skinny PVC pipe halfway down each leg to space the turns further apart (sort of a "basket weave").

That installation on the mast was the only really hard part, the rest, including winding the coil was a piece of cake in comparison.

BEFORE winding the coil on the frame I had the forethought to test the loop amplifier and varactor tuning unit. I did that by connecting a small ferrite loopstick where the main loop would connect, then tuning the Icom R-75 to the MW band to see if the electronics worked OK. They did.

Testing the loop everything works well. It tunes about 175kHz to 450kHz. The signal it puts out on the stronger 24/7 beacons runs between 20-30 dB stronger than the three foot Ratzlaff which is up at 35 feet AGL, but the Ratzlaff whip has a MUCH better signal/noise ratio. That's NO SURPRISE as it's noise floor dropped dramatically when it was relocated from the spot where the loop now resides to it's new location. I could probably lower the noise a bit by raising the loop, but I DARE NOT put it up any higher than it now is.

Also, the loop amp has more gain than needed, I could have probably just used a FET Follower buffer only and didn't need the following Bipolar Emitter follower. It doesn't hurt anything as it doesn't overload, just has a lot more gain than is needed on this size of a loop.

ONE GLITCH: It works quite well, but it DOES NOT have a deep null like I've experienced with other loops. In fact, it only has about a 1 "S" unit change when turning from end on (where the peak should be) to flat side facing the beacon (where the null should be). At least that is how

it works with the 24/7 (groundwave) beacons. We'll see what happens at night time.

I suspect that must mean it has poor rejection of the "E" field and is sort of acting like a "Tuned Voltage Probe", not just responding to the magnetic field. I don't believe that there is anything I can do about it now as I'm NOT about to take it down again for modification. . .

OK, I took a LOT of pictures of the loop, both while it was still on the ground as well as up in it's operating position. You may see the picture at my NDB Audio Archive (I made an album just for them).
See the pics here
http://www.ipernity.com/doc/ko6bb/album/288231

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

9373. RE: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 02:21:58 UTC
From: Gary Saltz
Topic: 9372 Message: 9373

Phil.How does the rotator work that I sold you? Hope well.

Gary

WA9IQW

From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Phil
Sent: Monday, October 08, 2012 5:39 PM
To: loopantennas@yahoogroups.com
Subject: [loopantennas] My new Loop antenna is completed and installed

OK,
Today I wound the coil on the loop frame, installed the rotator and then had the neighbor help me get the entire thing up on the roof and installed on the Push-up TV mast. That part was a bit of a pain because the top section of the mast is jammed in place and won't go up or down any. That meant that we had to lift the entire loop antenna up high enough to get the rotator to slide over the mast. Luckily I had the foresight to install the rotator on the loop mast BEFORE trying to get it into place or we never would have got it up. A LOT of really hard work for two old pharts (neighbor is 62 and I'm 69)! I just soaked under a hot shower and took two extra strength Tylenol capsules, but I bet I'll still feel it later.

It is wound with 22 turns of 18AWG Enamel Insulated solid wire, it's 4 feet on a side (six feet across corner to corner). I used Beautician Wide Toothed "Styling Combs" as wire spacers, then used a short section of skinny PVC pipe halfway down each leg to space the turns further apart (sort of a "basket weave").

That installation on the mast was the only really hard part, the rest, including winding the coil was a piece of cake in comparison.

BEFORE winding the coil on the frame I had the forethought to test the loop amplifier and varactor tuning unit. I did that by connecting a small ferrite loopstick where the main loop would connect, then tuning the Icom R-75 to the MW band to see if the electronics worked OK. They did.

Testing the loop everything works well. It tunes about 175kHz to 450kHz. The signal it puts out on the stronger 24/7 beacons runs between 20-30 dB stronger than the three foot Ratzlaff which is up at 35 feet AGL, but the Ratzlaff whip has a MUCH better signal/noise ratio. That's NO SURPRISE as it's noise floor dropped dramatically when it was relocated from the spot where the loop now resides to it's new location. I could probably lower the noise a bit by raising the loop,

but I DARE NOT put it up any higher than it now is.

Also, the loop amp has more gain than needed, I could have probably just used a FET Follower buffer only and didn't need the following Bipolar Emitter follower. It doesn't hurt anything as it doesn't overload, just has a lot more gain than is needed on this size of a loop.

ONE GLITCH: It works quite well, but it DOES NOT have a deep null like I've experienced with other loops. In fact, it only has about a 1 "S" unit change when turning from end on (where the peak should be) to flat side facing the beacon (where the null should be). At least that is how it works with the 24/7 (groundwave) beacons. We'll see what happens at night time.

I suspect that must mean it has poor rejection of the "E" field and is sort of acting like a "Tuned Voltage Probe", not just responding to the magnetic field. I don't believe that there is anything I can do about it now as I'm NOT about to take it down again for modification. . .

OK, I took a LOT of pictures of the loop, both while it was still on the ground as well as up in it's operating position. You may see the picture at my NDB Audio Archive (I made an album just for them).
See the pics here
http://www.ipernity.com/doc/ko6bb/album/288231

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.2677 / Virus Database: 2591/5817 - Release Date: 10/08/12

9374. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 02:28:39 UTC
From: Phil
Topic: 9372 Message: 9374

Hi Gary,
It's working well, just like it should :) I haven't put the homemade
lower torque bearing on the mast yet, I'm just too pooped to pop.

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 10/9/2012 2:21 AM, Gary Saltz wrote:
>
>
> Phil?How does the rotator work that I sold you? Hope well.
>
> Gary
>
> WA9IQW
>
> *From:*loopantennas@yahoogroups.com
> [mailto:loopantennas@yahoogroups.com] *On Behalf Of *Phil
> *Sent:* Monday, October 08, 2012 5:39 PM
> *To:* loopantennas@yahoogroups.com
> *Subject:* [loopantennas] My new Loop antenna is completed and installed
>
> OK,
> Today I wound the coil on the loop frame, installed the rotator and then
> had the neighbor help me get the entire thing up on the roof and
> installed on the Push-up TV mast. That part was a bit of a pain because
> the top section of the mast is jammed in place and won't go up or down
> any. That meant that we had to lift the entire loop antenna up high
> enough to get the rotator to slide over the mast. Luckily I had the
> foresight to install the rotator on the loop mast BEFORE trying to get

> it into place or we never would have got it up. A LOT of really hard
> work for two old pharts (neighbor is 62 and I'm 69)! I just soaked
> under a hot shower and took two extra strength Tylenol capsules, but I
> bet I'll still feel it later.
>
> It is wound with 22 turns of 18AWG Enamel Insulated solid wire, it's 4
> feet on a side (six feet across corner to corner). I used Beautician
> Wide Toothed "Styling Combs" as wire spacers, then used a short section
> of skinny PVC pipe halfway down each leg to space the turns further
> apart (sort of a "basket weave").
>
> That installation on the mast was the only really hard part, the rest,
> including winding the coil was a piece of cake in comparison.
>
> BEFORE winding the coil on the frame I had the forethought to test the
> loop amplifier and varactor tuning unit. I did that by connecting a
> small ferrite loopstick where the main loop would connect, then tuning
> the Icom R-75 to the MW band to see if the electronics worked OK. They
> did.
>
> Testing the loop everything works well. It tunes about 175kHz to
> 450kHz. The signal it puts out on the stronger 24/7 beacons runs between
> 20-30 dB stronger than the three foot Ratzlaff which is up at 35 feet
> AGL, but the Ratzlaff whip has a MUCH better signal/noise ratio. That's
> NO SURPRISE as it's noise floor dropped dramatically when it was
> relocated from the spot where the loop now resides to it's new
> location. I could probably lower the noise a bit by raising the loop,
> but I DARE NOT put it up any higher than it now is.
>
> Also, the loop amp has more gain than needed, I could have probably just
> used a FET Follower buffer only and didn't need the following Bipolar
> Emitter follower. It doesn't hurt anything as it doesn't overload, just
> has a lot more gain than is needed on this size of a loop.
>
> ONE GLITCH: It works quite well, but it DOES NOT have a deep null like
> I've experienced with other loops. In fact, it only has about a 1 "S"
> unit change when turning from end on (where the peak should be) to flat
> side facing the beacon (where the null should be). At least that is how
> it works with the 24/7 (groundwave) beacons. We'll see what happens at
> night time.
>
> I suspect that must mean it has poor rejection of the "E" field and is
> sort of acting like a "Tuned Voltage Probe", not just responding to the
> magnetic field. I don't believe that there is anything I can do about it
> now as I'm NOT about to take it down again for modification. . .
>
> OK, I took a LOT of pictures of the loop, both while it was still on the
> ground as well as up in it's operating position. You may see the
> picture at my NDB Audio Archive (I made an album just for them).
> See the pics here

> http://www.ipernity.com/doc/ko6bb/album/288231
>

9375. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 02:38:21 UTC
From: Myamiphil
Topic: 9372 Message: 9375

Hi Phil

The antenna looks great!... Got a few questions....

You probably bought the pipes from a big box store. I recall when making PVC chairs, I saw nice cross tee with 4 connections. It would have been perfect for this project. One of my questions... Why the screws on the joints.... Wouldn't the PVC glue hold the joints? Or were you concerned that strong wind would blow it apart? IS that why you used a double frame? Would a single pipe and a tee end suffice?.. (4 ft sides on your antenna?)

You've answered the obvious, that a loop up on a pole mount or outside when your inside, will definitely need a rotor...($$$). For a small loop I was thinking of using a servo and a chain gear, run by an Arduino maybe.

Best Regards

Phil
Lat: 40.8367633
Long: -74.1768412

http://del.icio.us/myamiphil

From: Phil <ko6bb1@...>
To: loopantennas@yahoogroups.com
Sent: Monday, October 8, 2012 8:39 PM
Subject: [loopantennas] My new Loop antenna is completed and installed

OK,
Today I wound the coil on the loop frame, installed the rotator and then had the neighbor help me get the entire thing up on the roof and installed on the Push-up TV mast. That part was a bit of a pain because the top section of the mast is jammed in place and won't go up or down any. That meant that we had to lift the entire loop antenna up high enough to get the rotator to slide over the mast. Luckily I had the foresight to install the rotator on the loop mast BEFORE trying to get it into place or we never would have got it up. A LOT of really hard work for two old pharts (neighbor is 62 and I'm 69)! I just soaked under a hot shower and took two extra strength Tylenol capsules, but I bet I'll still feel it later.

It is wound with 22 turns of 18AWG Enamel Insulated solid wire, it's 4 feet on a side (six feet across corner to corner). I used Beautician Wide Toothed "Styling Combs" as wire spacers, then used a short section of skinny PVC pipe halfway down each leg to space the turns further apart (sort of a "basket weave").

That installation on the mast was the only really hard part, the rest, including winding the coil was a piece of cake in comparison.

BEFORE winding the coil on the frame I had the forethought to test the loop amplifier and varactor tuning unit. I did that by connecting a small ferrite loopstick where the main loop would connect, then tuning the Icom R-75 to the MW band to see if the electronics worked OK. They did.

Testing the loop everything works well. It tunes about 175kHz to 450kHz. The signal it puts out on the stronger 24/7 beacons runs between 20-30 dB stronger than the three foot Ratzlaff which is up at 35 feet AGL, but the Ratzlaff whip has a MUCH better signal/noise ratio. That's NO SURPRISE as it's noise floor dropped dramatically when it was relocated from the spot where the loop now resides to it's new location. I could probably lower the noise a bit by raising the loop, but I DARE NOT put it up any higher than it now is.

Also, the loop amp has more gain than needed, I could have probably just used a FET Follower buffer only and didn't need the following Bipolar Emitter follower. It doesn't hurt anything as it doesn't overload, just has a lot more gain than is needed on this size of a loop.

ONE GLITCH: It works quite well, but it DOES NOT have a deep null like I've experienced with other loops. In fact, it only has about a 1 "S" unit change when turning from end on (where the peak should be) to flat side facing the beacon (where the null should be). At least that is how it works with the 24/7 (groundwave) beacons. We'll see what happens at night time.

I suspect that must mean it has poor rejection of the "E" field and is sort of acting like a "Tuned Voltage Probe", not just responding to the magnetic field. I don't believe that there is anything I can do about it now as I'm NOT about to take it down again for modification. . .

OK, I took a LOT of pictures of the loop, both while it was still on the ground as well as up in it's operating position. You may see the picture at my NDB Audio Archive (I made an album just for them).
See the pics here
http://www.ipernity.com/doc/ko6bb/album/288231

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

9376. RE: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 02:39:20 UTC
From: William Young
Topic: 9372 Message: 9376

Just for comparison you might look at my 3 foot X 5 foot rectangular loop also for 200 kHz to 520 kHz approximately. There are two windings of AWG #20 magnet wire "bunch" wound, not spaced. It's on the floor of my house behind a bookcase; it does not rotate. I can receive an NDB in Puerto Rico and one on Grand Cayman with it plus several other NDB's. See it at http://groups.yahoo.com/group/loopantennas/files/3%27%20X%205%27%20loop/ . I modelled it in LTSPICE before building it. Bill Young WD5HOH

> To: loopantennas@yahoogroups.com
> From: ko6bb1@...
> Date: Tue, 9 Oct 2012 02:28:39 +0000
> Subject: Re: [loopantennas] My new Loop antenna is completed and installed
>
> Hi Gary,
> It's working well, just like it should :) I haven't put the homemade
> lower torque bearing on the mast yet, I'm just too pooped to pop.
>
> 73 de Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
> http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)
>
> RADIOS:
> Grundigs: S-350 (2006) & G6 (2011).
> Icom: R-75 with Cascaded 250Hz CW Filters.
> Kenwood: TS130S HF Transceiver (circa 1980).
> Radio Shack: DX-380 digital portable (circa 1990).
> Zenith: Royal-7000 Transoceanic (circa 1969).
>
> ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
> Timewave DSP-599zx and Homebrew 6 Hz Filter.
>
> ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
> Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 10/9/2012 2:21 AM, Gary Saltz wrote:
> >
> >
> > Phil…How does the rotator work that I sold you? Hope well.
> >
> > Gary
> >
> > WA9IQW
> >
> > *From:*loopantennas@yahoogroups.com

> > [mailto:loopantennas@yahoogroups.com] *On Behalf Of *Phil
> > *Sent:* Monday, October 08, 2012 5:39 PM
> > *To:* loopantennas@yahoogroups.com
> > *Subject:* [loopantennas] My new Loop antenna is completed and installed
> >
> > OK,
> > Today I wound the coil on the loop frame, installed the rotator and then
> > had the neighbor help me get the entire thing up on the roof and
> > installed on the Push-up TV mast. That part was a bit of a pain because
> > the top section of the mast is jammed in place and won't go up or down
> > any. That meant that we had to lift the entire loop antenna up high
> > enough to get the rotator to slide over the mast. Luckily I had the
> > foresight to install the rotator on the loop mast BEFORE trying to get
> > it into place or we never would have got it up. A LOT of really hard
> > work for two old pharts (neighbor is 62 and I'm 69)! I just soaked
> > under a hot shower and took two extra strength Tylenol capsules, but I
> > bet I'll still feel it later.
> >
> > It is wound with 22 turns of 18AWG Enamel Insulated solid wire, it's 4
> > feet on a side (six feet across corner to corner). I used Beautician
> > Wide Toothed "Styling Combs" as wire spacers, then used a short section
> > of skinny PVC pipe halfway down each leg to space the turns further
> > apart (sort of a "basket weave").
> >
> > That installation on the mast was the only really hard part, the rest,
> > including winding the coil was a piece of cake in comparison.
> >
> > BEFORE winding the coil on the frame I had the forethought to test the
> > loop amplifier and varactor tuning unit. I did that by connecting a
> > small ferrite loopstick where the main loop would connect, then tuning
> > the Icom R-75 to the MW band to see if the electronics worked OK. They
> > did.
> >
> > Testing the loop everything works well. It tunes about 175kHz to
> > 450kHz. The signal it puts out on the stronger 24/7 beacons runs between
> > 20-30 dB stronger than the three foot Ratzlaff which is up at 35 feet
> > AGL, but the Ratzlaff whip has a MUCH better signal/noise ratio. That's
> > NO SURPRISE as it's noise floor dropped dramatically when it was
> > relocated from the spot where the loop now resides to it's new
> > location. I could probably lower the noise a bit by raising the loop,
> > but I DARE NOT put it up any higher than it now is.
> >
> > Also, the loop amp has more gain than needed, I could have probably just
> > used a FET Follower buffer only and didn't need the following Bipolar
> > Emitter follower. It doesn't hurt anything as it doesn't overload, just
> > has a lot more gain than is needed on this size of a loop.
> >
> > ONE GLITCH: It works quite well, but it DOES NOT have a deep null like
> > I've experienced with other loops. In fact, it only has about a 1 "S"
> > unit change when turning from end on (where the peak should be) to flat

> > side facing the beacon (where the null should be). At least that is how
> > it works with the 24/7 (groundwave) beacons. We'll see what happens at
> > night time.
> >
> > I suspect that must mean it has poor rejection of the "E" field and is
> > sort of acting like a "Tuned Voltage Probe", not just responding to the
> > magnetic field. I don't believe that there is anything I can do about it
> > now as I'm NOT about to take it down again for modification. . .
> >
> > OK, I took a LOT of pictures of the loop, both while it was still on the
> > ground as well as up in it's operating position. You may see the
> > picture at my NDB Audio Archive (I made an album just for them).
> > See the pics here
> > http://www.ipernity.com/doc/ko6bb/album/288231
> >
>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>

9377. RE: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 03:02:53 UTC
From: Gary Saltz
Topic: 9372 Message: 9377

Ya us old pharts gota rest more

G

-----Original Message-----
From: loopantennas@yahoogroups.com [mailto:loopantennas@yahoogroups.com] On Behalf Of Phil
Sent: Monday, October 08, 2012 7:29 PM
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] My new Loop antenna is completed and installed

Hi Gary,
It's working well, just like it should :) I haven't put the homemade lower torque bearing on the mast yet, I'm just too pooped to pop.

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 10/9/2012 2:21 AM, Gary Saltz wrote:
>
>
> Phil.How does the rotator work that I sold you? Hope well.
>
> Gary
>
> WA9IQW
>
> *From:*loopantennas@yahoogroups.com
> [mailto:loopantennas@yahoogroups.com] *On Behalf Of *Phil
> *Sent:* Monday, October 08, 2012 5:39 PM
> *To:* loopantennas@yahoogroups.com

> *Subject:* [loopantennas] My new Loop antenna is completed and
> installed
>
> OK,
> Today I wound the coil on the loop frame, installed the rotator and
> then had the neighbor help me get the entire thing up on the roof and
> installed on the Push-up TV mast. That part was a bit of a pain
> because the top section of the mast is jammed in place and won't go up
> or down any. That meant that we had to lift the entire loop antenna up
> high enough to get the rotator to slide over the mast. Luckily I had
> the foresight to install the rotator on the loop mast BEFORE trying to
> get it into place or we never would have got it up. A LOT of really
> hard work for two old pharts (neighbor is 62 and I'm 69)! I just
> soaked under a hot shower and took two extra strength Tylenol
> capsules, but I bet I'll still feel it later.
>
> It is wound with 22 turns of 18AWG Enamel Insulated solid wire, it's 4
> feet on a side (six feet across corner to corner). I used Beautician
> Wide Toothed "Styling Combs" as wire spacers, then used a short
> section of skinny PVC pipe halfway down each leg to space the turns
> further apart (sort of a "basket weave").
>
> That installation on the mast was the only really hard part, the rest,
> including winding the coil was a piece of cake in comparison.
>
> BEFORE winding the coil on the frame I had the forethought to test the
> loop amplifier and varactor tuning unit. I did that by connecting a
> small ferrite loopstick where the main loop would connect, then tuning
> the Icom R-75 to the MW band to see if the electronics worked OK. They
> did.
>
> Testing the loop everything works well. It tunes about 175kHz to
> 450kHz. The signal it puts out on the stronger 24/7 beacons runs
> between
> 20-30 dB stronger than the three foot Ratzlaff which is up at 35 feet
> AGL, but the Ratzlaff whip has a MUCH better signal/noise ratio.
> That's NO SURPRISE as it's noise floor dropped dramatically when it
> was relocated from the spot where the loop now resides to it's new
> location. I could probably lower the noise a bit by raising the loop,
> but I DARE NOT put it up any higher than it now is.
>
> Also, the loop amp has more gain than needed, I could have probably
> just used a FET Follower buffer only and didn't need the following
> Bipolar Emitter follower. It doesn't hurt anything as it doesn't
> overload, just has a lot more gain than is needed on this size of a loop.
>
> ONE GLITCH: It works quite well, but it DOES NOT have a deep null like
> I've experienced with other loops. In fact, it only has about a 1 "S"
> unit change when turning from end on (where the peak should be) to
> flat side facing the beacon (where the null should be). At least that

> is how it works with the 24/7 (groundwave) beacons. We'll see what
> happens at night time.
>
> I suspect that must mean it has poor rejection of the "E" field and is
> sort of acting like a "Tuned Voltage Probe", not just responding to
> the magnetic field. I don't believe that there is anything I can do
> about it now as I'm NOT about to take it down again for modification. . .
>
> OK, I took a LOT of pictures of the loop, both while it was still on
> the ground as well as up in it's operating position. You may see the
> picture at my NDB Audio Archive (I made an album just for them).
> See the pics here
> http://www.ipernity.com/doc/ko6bb/album/288231
>

If you've got links, post them in the Links section!
http://groups.yahoo.com/group/loopantennas/links

Post files here. If the file comes from a website, please put it in the
Links rather than uploading the file.
http://groups.yahoo.com/group/loopantennas/files

You can now view images at higher resolution in Photos. Upload JPG and GIF
into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
http://ph.groups.yahoo.com/group/loopantennas/photos

And please trim all this when replying!Yahoo! Groups Links

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.2677 / Virus Database: 2591/5817 - Release Date: 10/08/12

9378. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 15:34:00 UTC
From: brian nsl
Topic: 9372 Message: 9378

Bill,
In the posted text you say that the 5ft x 3ft loop has ' two windings of No 20 magnet wire
'
but opening the file it shows 5 turns on one side and 1 turn on the other, does that equate to the two windings.
Could you clarify please as I like the compact rotatable design ?????
Regards,
72, Brian, G0NSL
----- Original Message -----
From: William Young
To: loopantennas@yahoogroups.com
Sent: Tuesday, October 09, 2012 3:39 AM
Subject: RE: [loopantennas] My new Loop antenna is completed and installed

Just for comparison you might look at my 3 foot X 5 foot rectangular loop also for 200 kHz to 520 kHz approximately. There are two windings of AWG #20 magnet wire "bunch" wound, not spaced. It's on the floor of my house behind a bookcase; it does not rotate. I can receive an NDB in Puerto Rico and one on Grand Cayman with it plus several other NDB's. See it at http://groups.yahoo.com/group/loopantennas/files/3%27%20X%205%27%20loop/ . I modelled it in LTSPICE before building it. Bill Young WD5HOH

>

9379. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 16:37:11 UTC
From: Phil
Topic: 9372 Message: 9379

Hi Phil, Phil here,
I'll try to answer your questions.

When I was purchasing the supplies for my loop I looked for a 4 way "cross section". The only ones in this town were for smaller diameters of PVC pipe. I wanted a diameter that was large enough to let the mast section slide part way up the center section, as well as be rigid. Later I was told of a couple on-line suppliers that had the cross section, but the loop frame was already build, and I really didn't have the funds to start over again (I sold my Grundig S750 to finance this project).

As to the reason for the screws. Yes, the glue would have 'probably' held it OK, but I had an almost full box of deck screws and I wanted to be sure that the loop held together and didn't come apart. While we don't get hurricanes or anything, certain times of the year we do get some pretty good winds with very high momentary gusts. Before I had the vinyl roof laid over the sheetmetal one (it had developed pinhole leaks), a good wind gust would sort of "raise" the roof a bit and you'd hear these noises of the sheetmetal flexing (hard to describe).

Also it gets quite hot here and some PVC pipe projects in the past have "sagged". That combined with "flopping around" in the wind I didn't want to take a chance. I toyed with the idea of a single cross section with end Tees, But with a need for 22 "wide spaced" turns I figured out that they wouldn't fit on a single Tee section (not wide enough), and extending the Tee with a short section of PVC pipe would make for an uneven winding surface.

So I came on the idea of the little arms, each with a slot cut in it and a "Styling Comb" inserted as a wire spreader. Some expanding foam sprayed in each arm hold the combs in place, and to strengthen the weakened arms (cutting the slot weakened them) a second cross section of smaller diameter PVC pipe was used to strengthen it. And that "cross brace" adds a great deal of rigidity to the entire unit, something I was looking for so it wouldn't "flop in the wind".

And finally, some Silicon Rubber (RTV) on each comb and spreader insures everything stays where it should, as well as sealing certain things (like the wire holes in the top of the amplifier section).

Which brings up another point. to make sure that there is no condensation and water buildup in the amplifier section, the bottom hole where the control wire exits is oversized and NOT sealed so as to allow any condensation to drain (and the amplifier PC board is longer than need be to raise it above the floor of the amplifier housing). No need

for moldy-green circuit boards :)

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW
4 Foot Square Tuned Loop at 15 Feet AGL for LF

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 10/9/2012 2:38 AM, Myamiphil wrote:
>
>
> Hi Phil
>
> The antenna looks great!... Got a few questions....
>
> You probably bought the pipes from a big box store. I recall when
> making PVC chairs, I saw nice cross tee with 4 connections. It would
> have been perfect for this project. One of my questions... Why the
> screws on the joints.... Wouldn't the PVC glue hold the joints? Or
> were you concerned that strong wind would blow it apart? IS that why
> you used a double frame? Would a single pipe and a tee end suffice?..
> (4 ft sides on your antenna?)
>
> You've answered the obvious, that a loop up on a pole mount or outside
> when your inside, will definitely need a rotor...($$$). For a small
> loop I was thinking of using a servo and a chain gear, run by an
> Arduino maybe.
>
> Best Regards
>
> Phil
> Lat: 40.8367633
> Long: -74.1768412
>
> http://del.icio.us/myamiphil <http://del.icio.us/myamiphil%20>
>
>
<snip>

9380. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 00:53:23 UTC
From: Don
Topic: 9372 Message: 9380

Very well done Phil

73's
Don/Ve2ud

On 08/10/2012 8:39 PM, Phil wrote:
>
> OK,
> Today I wound the coil on the loop frame, installed the rotator and then
> had the neighbor help me get the entire thing up on the roof and
> installed on the Push-up TV mast. That part was a bit of a pain because
> the top section of the mast is jammed in place and won't go up or down
> any. That meant that we had to lift the entire loop antenna up high
> enough to get the rotator to slide over the mast. Luckily I had the
> foresight to install the rotator on the loop mast BEFORE trying to get
> it into place or we never would have got it up. A LOT of really hard
> work for two old pharts (neighbor is 62 and I'm 69)! I just soaked
> under a hot shower and took two extra strength Tylenol capsules, but I
> bet I'll still feel it later.
>
> It is wound with 22 turns of 18AWG Enamel Insulated solid wire, it's 4
> feet on a side (six feet across corner to corner). I used Beautician
> Wide Toothed "Styling Combs" as wire spacers, then used a short section
> of skinny PVC pipe halfway down each leg to space the turns further
> apart (sort of a "basket weave").
>
> That installation on the mast was the only really hard part, the rest,
> including winding the coil was a piece of cake in comparison.
>
> BEFORE winding the coil on the frame I had the forethought to test the
> loop amplifier and varactor tuning unit. I did that by connecting a
> small ferrite loopstick where the main loop would connect, then tuning
> the Icom R-75 to the MW band to see if the electronics worked OK. They
> did.
>
> Testing the loop everything works well. It tunes about 175kHz to
> 450kHz. The signal it puts out on the stronger 24/7 beacons runs between
> 20-30 dB stronger than the three foot Ratzlaff which is up at 35 feet
> AGL, but the Ratzlaff whip has a MUCH better signal/noise ratio. That's
> NO SURPRISE as it's noise floor dropped dramatically when it was
> relocated from the spot where the loop now resides to it's new
> location. I could probably lower the noise a bit by raising the loop,
> but I DARE NOT put it up any higher than it now is.
>
> Also, the loop amp has more gain than needed, I could have probably just

> used a FET Follower buffer only and didn't need the following Bipolar
> Emitter follower. It doesn't hurt anything as it doesn't overload, just
> has a lot more gain than is needed on this size of a loop.
>
> ONE GLITCH: It works quite well, but it DOES NOT have a deep null like
> I've experienced with other loops. In fact, it only has about a 1 "S"
> unit change when turning from end on (where the peak should be) to flat
> side facing the beacon (where the null should be). At least that is how
> it works with the 24/7 (groundwave) beacons. We'll see what happens at
> night time.
>
> I suspect that must mean it has poor rejection of the "E" field and is
> sort of acting like a "Tuned Voltage Probe", not just responding to the
> magnetic field. I don't believe that there is anything I can do about it
> now as I'm NOT about to take it down again for modification. . .
>
> OK, I took a LOT of pictures of the loop, both while it was still on the
> ground as well as up in it's operating position. You may see the
> picture at my NDB Audio Archive (I made an album just for them).
> See the pics here
> http://www.ipernity.com/doc/ko6bb/album/288231
>
> --
> 73 de Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
> http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)
>
> RADIOS:
> Grundigs: S-350 (2006) & G6 (2011).
> Icom: R-75 with Cascaded 250Hz CW Filters.
> Kenwood: TS130S HF Transceiver (circa 1980).
> Radio Shack: DX-380 digital portable (circa 1990).
> Zenith: Royal-7000 Transoceanic (circa 1969).
>
> ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
> Timewave DSP-599zx and Homebrew 6 Hz Filter.
>
> ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
> Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
>

9381. Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 17:39:20 UTC
From: Chris Trask
Topic: 9381 Message: 9381

While searching for dual transistors that are suitable for use with the active negative inductor circuits I came up with, I came across some interesting offerings on eBay. Specifically, there is a seller in Canada who has MBT3904DW1 and MBT3906DW1 devices available at very reasonable prices. And there was also a somewhat interesting FMW2 device, which is a pair of 2CS2412 NPN transistors with a common base connection. These are not monolithic duals, but are instead a pair of individual die on a single carrier. Usually, devices such as this are comprised of two die that are immediately adjacent on the wafer, so their characteristics are fairly well matched, certainly better than using two separate devices.

I also came across the MBT3946, BC846BP and BC847BP, which are NPN/PNP complementary pairs. Those may prove useful for IMD compensation schemes.

Chris

9382. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 18:32:20 UTC
From: Don
Topic: 9372 Message: 9382

Hi Brian,

I think he meant to say "two separate windings of"

Don KPC6NDB
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 09-Oct-12 08:34, brian nsl wrote:
>
>
> /Bill,/
> / In the posted text you say that the 5ft x 3ft loop has ' two
> windings of No 20 magnet wire '/
> /but opening the file it shows 5 turns on one side and 1 turn on the
> other, does that equate to the two windings./
> /Could you clarify please as I like the compact rotatable design ?????/
> /Regards,/
> /72, Brian, G0NSL/
>
> ----- Original Message -----
> *From:* William Young <mailto:lpwjy@...>
> *To:* loopantennas@yahoogroups.com
> <mailto:loopantennas@yahoogroups.com>
> *Sent:* Tuesday, October 09, 2012 3:39 AM
> *Subject:* RE: [loopantennas] My new Loop antenna is completed and
> installed
>
> Just for comparison you might look at my 3 foot X 5 foot rectangular
> loop also for 200 kHz to 520 kHz approximately. There are two
> windings of AWG #20 magnet wire "bunch" wound, not spaced. It's on
> the floor of my house behind a bookcase; it does not rotate. I can
> receive an NDB in Puerto Rico and one on Grand Cayman with it plus
> several other NDB's. See it at
> http://groups.yahoo.com/group/loopantennas/files/3%27%20X%205%27%20loop/
> . I modelled it in LTSPICE before building it. Bill Young WD5HOH
>
> >
>
>
>

>
>
> No virus found in this message.
> Checked by AVG - www.avg.com <http://www.avg.com>
> Version: 2013.0.2677 / Virus Database: 2591/5808 - Release Date: 10/03/12
>

9383. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 18:37:50 UTC
From: Phil
Topic: 9372 Message: 9383

Thank you Don.

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW
4 Foot/side Tuned Loop at 15 Feet AGL for LF

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 10/9/2012 12:53 AM, Don wrote:
>
>
> Very well done Phil
>
> 73's
> Don/Ve2ud
>
>
>
>
> On 08/10/2012 8:39 PM, Phil wrote:
>>
>> OK,
>> Today I wound the coil on the loop frame, installed the rotator and then
>> had the neighbor help me get the entire thing up on the roof and
>> installed on the Push-up TV mast. That part was a bit of a pain because
>> the top section of the mast is jammed in place and won't go up or down
>> any. That meant that we had to lift the entire loop antenna up high
>> enough to get the rotator to slide over the mast. Luckily I had the
>> foresight to install the rotator on the loop mast BEFORE trying to get
>> it into place or we never would have got it up. A LOT of really hard
>> work for two old pharts (neighbor is 62 and I'm 69)! I just soaked
>> under a hot shower and took two extra strength Tylenol capsules, but I

>> bet I'll still feel it later.
>>
>> It is wound with 22 turns of 18AWG Enamel Insulated solid wire, it's 4
>> feet on a side (six feet across corner to corner). I used Beautician
>> Wide Toothed "Styling Combs" as wire spacers, then used a short section
>> of skinny PVC pipe halfway down each leg to space the turns further
>> apart (sort of a "basket weave").
>>
>> That installation on the mast was the only really hard part, the rest,
>> including winding the coil was a piece of cake in comparison.
>>
>> BEFORE winding the coil on the frame I had the forethought to test the
>> loop amplifier and varactor tuning unit. I did that by connecting a
>> small ferrite loopstick where the main loop would connect, then tuning
>> the Icom R-75 to the MW band to see if the electronics worked OK. They
>> did.
>>
>> Testing the loop everything works well. It tunes about 175kHz to
>> 450kHz. The signal it puts out on the stronger 24/7 beacons runs between
>> 20-30 dB stronger than the three foot Ratzlaff which is up at 35 feet
>> AGL, but the Ratzlaff whip has a MUCH better signal/noise ratio. That's
>> NO SURPRISE as it's noise floor dropped dramatically when it was
>> relocated from the spot where the loop now resides to it's new
>> location. I could probably lower the noise a bit by raising the loop,
>> but I DARE NOT put it up any higher than it now is.
>>
>> Also, the loop amp has more gain than needed, I could have probably just
>> used a FET Follower buffer only and didn't need the following Bipolar
>> Emitter follower. It doesn't hurt anything as it doesn't overload, just
>> has a lot more gain than is needed on this size of a loop.
>>
>> ONE GLITCH: It works quite well, but it DOES NOT have a deep null like
>> I've experienced with other loops. In fact, it only has about a 1 "S"
>> unit change when turning from end on (where the peak should be) to flat
>> side facing the beacon (where the null should be). At least that is how
>> it works with the 24/7 (groundwave) beacons. We'll see what happens at
>> night time.
>>
>> I suspect that must mean it has poor rejection of the "E" field and is
>> sort of acting like a "Tuned Voltage Probe", not just responding to the
>> magnetic field. I don't believe that there is anything I can do about it
>> now as I'm NOT about to take it down again for modification. . .
>>
>> OK, I took a LOT of pictures of the loop, both while it was still on the
>> ground as well as up in it's operating position. You may see the
>> picture at my NDB Audio Archive (I made an album just for them).
>> See the pics here
>> http://www.ipernity.com/doc/ko6bb/album/288231
>>

9384. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 18:39:05 UTC
From: Phil
Topic: 9372 Message: 9384

Interesting. Only problem, indoor loops or other indoor antennas don't
work at all well in this mobile home.

73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW
4 Foot/side Tuned Loop at 15 Feet AGL for LF

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

On 10/9/2012 2:39 AM, William Young wrote:
>
>
> Just for comparison you might look at my 3 foot X 5 foot rectangular
> loop also for 200 kHz to 520 kHz approximately. There are two
> windings of AWG #20 magnet wire "bunch" wound, not spaced. It's on
> the floor of my house behind a bookcase; it does not rotate. I can
> receive an NDB in Puerto Rico and one on Grand Cayman with it plus
> several other NDB's. See it at
> http://groups.yahoo.com/group/loopantennas/files/3%27%20X%205%27%20loop/
> . I modelled it in LTSPICE before building it. Bill Young WD5HOH
<snip>

9385. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 18:40:49 UTC
From: brian nsl
Topic: 9372 Message: 9385

Don,
Thanks for your interpretation.
Two turns was quite correct it was just the layout that
was bugging my brain hi!
Regards,
72, Brian, GØNSL.
----- Original Message -----
From: Don
To: loopantennas@yahoogroups.com
Sent: Tuesday, October 09, 2012 7:32 PM
Subject: Re: [loopantennas] My new Loop antenna is completed and installed

Hi Brian,

I think he meant to say "two separate windings of"

Don KPC6NDB
Upland, CA

9386. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 18:42:01 UTC
From: Don
Topic: 9372 Message: 9386

I'll second that unless they are at a window!

Don KPC6NDB
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 09-Oct-12 11:39, Phil wrote:
> Interesting. Only problem, indoor loops or other indoor antennas don't
> work at all well in this mobile home.
>
> 73 de Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
> http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)
>
> RADIOS:
> Grundigs: S-350 (2006) & G6 (2011).
> Icom: R-75 with Cascaded 250Hz CW Filters.
> Kenwood: TS130S HF Transceiver (circa 1980).
> Radio Shack: DX-380 digital portable (circa 1990).
> Zenith: Royal-7000 Transoceanic (circa 1969).
>
> ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
> Timewave DSP-599zx and Homebrew 6 Hz Filter.
>
> ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
> Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW
> 4 Foot/side Tuned Loop at 15 Feet AGL for LF
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 10/9/2012 2:39 AM, William Young wrote:
>>
>>
>> Just for comparison you might look at my 3 foot X 5 foot rectangular
>> loop also for 200 kHz to 520 kHz approximately. There are two
>> windings of AWG #20 magnet wire "bunch" wound, not spaced. It's on
>> the floor of my house behind a bookcase; it does not rotate. I can
>> receive an NDB in Puerto Rico and one on Grand Cayman with it plus
>> several other NDB's. See it at
>> http://groups.yahoo.com/group/loopantennas/files/3%27%20X%205%27%20loop/

>> . I modelled it in LTSPICE before building it. Bill Young WD5HOH
> <snip>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.2677 / Virus Database: 2591/5808 - Release Date: 10/03/12
>
>

9387. RE: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 19:46:00 UTC
From: William Young
Topic: 9372 Message: 9387

To clarify as requested; There are two windings of AWG #20 magnet wire, one five turn winding and one one turn winding. The five turn winding is tuned with a three section variable capacitor, 397 pf each section. this three section variable capacitor is housed in a metal box an connected to the tuned winding with a length of coax of known(measured) capacitance. I can select one section, two sections or three sections in parallel. There are some additional capacitances switch selected to extend the tuned range lower in frequency(see the schematic). The five turn tuned winding is 2.5 inches from and parallel to the one turn winding which offers an approximately 50 Ohm impedance to the antenna input terminal of my Ten Tec RX320D receiver at 375 kHz. The 2.5 inch separation was arrived at by repeated tries with the LTSPICE IV model which indicated to me which numerical value of coupling coefficient was optimum. I then used equations from the cited Terman handbook to calculated the separation in inches. Before I put this loop antenna behind a bookcase I did some experimenting with its directionality. At best it's broadly directional. It's now permanently oriented east-west which seems to work well. I don't have radiant barrier in my house, so I do receive some with indoor antennas. My other antenna is an eight foot length of aluminum angle stock leaned in one corner with a single 2N3819 JFET "impedance transformer". It's not bad above 3 mHz, although the one turn winding of the above described two winding loop has lower noise and stronger signals at 9 - 10 mHz and 15 - 17 mHz. I have a "hard mounted" antenna selector switch which enable rapid comparison. Bill Young WD5HOH

To: loopantennas@yahoogroups.com
From: stb55@...
Date: Tue, 9 Oct 2012 11:42:01 -0700
Subject: Re: [loopantennas] My new Loop antenna is completed and installed

I'll second that unless they are at a window!

Don KPC6NDB
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 09-Oct-12 11:39, Phil wrote:
> Interesting. Only problem, indoor loops or other indoor antennas don't
> work at all well in this mobile home.
>
> 73 de Phil, KO6BB
> http://www.qsl.net/ko6bb/ (Web Page)
> http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)
>
> RADIOS:

> Grundigs: S-350 (2006) & G6 (2011).
> Icom: R-75 with Cascaded 250Hz CW Filters.
> Kenwood: TS130S HF Transceiver (circa 1980).
> Radio Shack: DX-380 digital portable (circa 1990).
> Zenith: Royal-7000 Transoceanic (circa 1969).
>
> ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
> Timewave DSP-599zx and Homebrew 6 Hz Filter.
>
> ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
> Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW
> 4 Foot/side Tuned Loop at 15 Feet AGL for LF
>
> Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh
>
> On 10/9/2012 2:39 AM, William Young wrote:
>>
>>
>> Just for comparison you might look at my 3 foot X 5 foot rectangular
>> loop also for 200 kHz to 520 kHz approximately. There are two
>> windings of AWG #20 magnet wire "bunch" wound, not spaced. It's on
>> the floor of my house behind a bookcase; it does not rotate. I can
>> receive an NDB in Puerto Rico and one on Grand Cayman with it plus
>> several other NDB's. See it at
>> http://groups.yahoo.com/group/loopantennas/files/3%27%20X%205%27%20loop/
>> . I modelled it in LTSPICE before building it. Bill Young WD5HOH
> <snip>
>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
>
> -----
> No virus found in this message.

> Checked by AVG - www.avg.com
> Version: 2013.0.2677 / Virus Database: 2591/5808 - Release Date: 10/03/12
>
>

9388. Re: [loopantennas] My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 21:15:39 UTC
From: brian nsl
Topic: 9372 Message: 9388

Bill,
Thank you for the extensive clarification of the loop antenna,
much appreciated indeed, certainly gives all the facts to
construct a replica.
Good luck with the project.
Regards,
72, Brian, GØNSL.

----- Original Message -----
From: William Young
To: loopantennas@yahoogroups.com
Sent: Tuesday, October 09, 2012 8:46 PM
Subject: RE: [loopantennas] My new Loop antenna is completed and installed

9389. Re: My new Loop antenna is completed and installed

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 22:14:38 UTC
From: tenorman1952
Topic: 9372 Message: 9389

--- In loopantennas@yahoogroups.com, Phil <ko6bb1@...> wrote:
>
> OK,
> Today I wound the coil on the loop frame, installed the rotator and then
> had the neighbor help me get the entire thing up on the roof and
> installed on the Push-up TV mast. That part was a bit of a pain because
> the top section of the mast is jammed in place and won't go up or down
> any. That meant that we had to lift the entire loop antenna up h

(trimmed)

Hey, Phil! Looks great!

Paul - AE5JU

9390. small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-10 13:55:28 UTC
From: billnopic
Topic: 9390 Message: 9390

Morning all,
I am new to HF and have to struggle with Attic Antennas. I have a relatively large 86 foot horizontal loop in the attic and it tunes fairly well with my SGC-239 Tuner.

I am interested in trying a small loop. One that I may be able to rotate.

When I look at small loop writes ups, invariably there is some kind of "network" required. My one simple question is: Can I build a small loop and tune it with one of my tuners and forget these "networks"?

Thanks
73
Bill

9391. Tuning a magloop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-09 20:12:48 UTC
From: lughi
Topic: 9391 Message: 9391

I want to make a magloop and put it up in a tree if i make it for 20m by using a halfwave length. do I need the tuning cap if I already have a tuner in use in my shack?

I made a 40m loop using welding wire and fiberglass tent poles. It work good but I need to put it higher than 20'. Thanks KD0KNL Lewis.

9392. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-11 12:46:11 UTC
From: pond.james_pond
Topic: 9381 Message: 9392

Thanks for the info Chris.

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> While searching for dual transistors that are suitable for use with the active negative inductor circuits I came up with, I came across some interesting offerings on eBay. Specifically, there is a seller in Canada who has MBT3904DW1 and MBT3906DW1 devices available at very reasonable prices. And there was also a somewhat interesting FMW2 device, which is a pair of 2CS2412 NPN transistors with a common base connection. These are not monolithic duals, but are instead a pair of individual die on a single carrier. Usually, devices such as this are comprised of two die that are immediately adjacent on the wafer, so their characteristics are fairly well matched, certainly better than using two separate devices.
>
> I also came across the MBT3946, BC846BP and BC847BP, which are NPN/PNP complementary pairs. Those may prove useful for IMD compensation schemes.
>
> Chris
>

9393. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-11 14:47:10 UTC
From: Chris Trask
Topic: 9381 Message: 9393

>
> >
> > While searching for dual transistors that are suitable for use
> > with the active negative inductor circuits I came up with, I came
> > across some interesting offerings on eBay. Specifically, there is
> > a seller in Canada who has MBT3904DW1 and MBT3906DW1 devices
> > available at very reasonable prices. And there was also a somewhat
> > interesting FMW2 device, which is a pair of 2CS2412 NPN transistors
> > with a common base connection. These are not monolithic duals, but
> > are instead a pair of individual die on a single carrier. Usually,
> > devices such as this are comprised of two die that are immediately
> > adjacent on the wafer, so their characteristics are fairly well
> > matched, certainly better than using two separate devices.
> >
> > I also came across the MBT3946, BC846BP and BC847BP, which are
> > NPN/PNP complementary pairs. Those may prove useful for IMD
> > compensation schemes.
>
>Thanks for the info Chris.
>

I bought myself one lot each of all of these. Modelling my first negative inductor on PSpice with the 2N3904 shows that for a 1-ohm source and load the performance should be flat out to 15MHz, with 2-ohms out to 29MHz, and with 5-ohms out to 45MHz. I'm thinking of using one of these initially in place of the varactors in my remotely tuned antenna:

http://www.home.earthlink.net/~christrask/Varactor%20Tuned%20Loop%20Antenna.pdf

Chris

>--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:

>> Chris
>>
>
>

9394. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-11 22:03:14 UTC
From: Jerry Barr
Topic: 9381 Message: 9394

ptol not good timing butr love the sense of humor Mr Pond
jerry kj6ntl

From: pond.james_pond <crusty@...m>
To: loopantennas@yahoogroups.com
Sent: Thursday, October 11, 2012 5:46 AM
Subject: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Thanks for the info Chris.

--- In mailto:loopantennas%40yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> While searching for dual transistors that are suitable for use with the active negative inductor circuits I came up with, I came across some interesting offerings on eBay. Specifically, there is a seller in Canada who has MBT3904DW1 and MBT3906DW1 devices available at very reasonable prices. And there was also a somewhat interesting FMW2 device, which is a pair of 2CS2412 NPN transistors with a common base connection. These are not monolithic duals, but are instead a pair of individual die on a single carrier. Usually, devices such as this are comprised of two die that are immediately adjacent on the wafer, so their characteristics are fairly well matched, certainly better than using two separate devices.
>
> I also came across the MBT3946, BC846BP and BC847BP, which are NPN/PNP complementary pairs. Those may prove useful for IMD compensation schemes.
>
> Chris
>

9395. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-12 21:00:19 UTC
From: pond.james_pond
Topic: 9381 Message: 9395

Hi Jerry. My username?. Had it for many years (video game joke), need to get a new one and swap my group subscriptions over. No offense intended.
Regards,
Chris.

--- In loopantennas@yahoogroups.com, Jerry Barr <kj6ntl@...> wrote:
>
> ptol not good timing butr love the sense of humor Mr Pond
> jerry kj6ntl
>
>
> _____
> From: pond.james_pond <crusty@...>
> To: loopantennas@yahoogroups.com
> Sent: Thursday, October 11, 2012 5:46 AM
> Subject: [loopantennas] Re: Dual Transistors for Active Negative Inductors
>
>
>
> Â
>
> Thanks for the info Chris.
>
> --- In mailto:loopantennas%40yahoogroups.com, Chris Trask <christrask@> wrote:
> >
> > While searching for dual transistors that are suitable for use with the active negative inductor circuits I came up with, I came across some interesting offerings on eBay. Specifically, there is a seller in Canada who has MBT3904DW1 and MBT3906DW1 devices available at very reasonable prices. And there was also a somewhat interesting FMW2 device, which is a pair of 2CS2412 NPN transistors with a common base connection. These are not monolithic duals, but are instead a pair of individual die on a single carrier. Usually, devices such as this are comprised of two die that are immediately adjacent on the wafer, so their characteristics are fairly well matched, certainly better than using two separate devices.
> >
> > I also came across the MBT3946, BC846BP and BC847BP, which are NPN/PNP complementary pairs. Those may prove useful for IMD compensation schemes.
> >
> > Chris
> >
>

9396. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-13 02:10:38 UTC
From: Jerry Barr
Topic: 9381 Message: 9396

no offense at all took me a bit but when it hit/ i was grinnin ear to ear/ i wud keep it were it me its a good one
jerry

_____
From: pond.james_pond <crusty@...>
To: loopantennas@yahoogroups.com
Sent: Friday, October 12, 2012 2:00 PM
Subject: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Hi Jerry. My username?. Had it for many years (video game joke), need to get a new one and swap my group subscriptions over. No offense intended.
Regards,
Chris.

--- In mailto:loopantennas%40yahoogroups.com, Jerry Barr <kj6ntl@...> wrote:
>
> ptol not good timing butr love the sense of humor Mr Pond
> jerry kj6ntl
>
>
> _____
> From: pond.james_pond <crusty@...>
> To: mailto:loopantennas%40yahoogroups.com
> Sent: Thursday, October 11, 2012 5:46 AM
> Subject: [loopantennas] Re: Dual Transistors for Active Negative Inductors
>
>
>
> Â
>
> Thanks for the info Chris.
>
> --- In mailto:loopantennas%40yahoogroups.com, Chris Trask <christrask@> wrote:
> >
> > While searching for dual transistors that are suitable for use with the active negative inductor circuits I came up with, I came across some interesting offerings on eBay. Specifically, there is a seller in Canada who has MBT3904DW1 and MBT3906DW1 devices available at very reasonable prices. And there was also a somewhat interesting FMW2 device, which is a pair of 2CS2412 NPN transistors with a common base connection. These are not monolithic duals, but are instead a pair of individual die on a single carrier. Usually, devices such as this are comprised of two die that are immediately adjacent on the wafer, so their characteristics are fairly well matched, certainly better than using two separate devices.
> >
> > I also came across the MBT3946, BC846BP and BC847BP, which are NPN/PNP complementary

pairs. Those may prove useful for IMD compensation schemes.
> >
> > Chris
> >
>

9397. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-13 20:38:49 UTC
From: David
Topic: 9381 Message: 9397

Digikey and Mouser also have dual transistors, in both surface mount and leaded format, in prices that vary between more expensive and less expensive than the auction site. I'm not recommending one source over the other and I haven't compared specs with the part Chris found. I just did a quick search to see what options I had and was surprised at how much discrete stuff is still available from current production.

Dave Sarraf

>><christrask@> wrote:

While searching for dual transistors that are suitable for use with the active negative inductor circuits I came up with, I came across some interesting offerings on eBay. Specifically, there is a seller in Canada who has MBT3904DW1 and MBT3906DW1 devices available at very reasonable prices. And there was also a somewhat interesting FMW2 device, which is a pair of 2CS2412 NPN transistors with a common base connection. These are not monolithic duals, but are instead a pair of individual die on a single carrier. Usually, devices such as this are comprised of two die that are immediately adjacent on the wafer, so their characteristics are fairly well matched, certainly better than using two separate devices.

>>

9398. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-14 07:09:33 UTC
From: Judi Black_Lake
Topic: 9381 Message: 9398

The MBT3904 series is available from ON Semiconductor and you can order samples.

ORDER:http://www.onsemi.com/PowerSolutions/product.do?id=MBT3904DW1
DATASHEET:http://www.onsemi.com/pub_link/Collateral/MBT3904DW1T1-D.PDF

9399. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-14 13:03:12 UTC
From: Chris Trask
Topic: 9381 Message: 9399

>
> Digikey and Mouser also have dual transistors, in both surface mount
> and leaded format, in prices that vary between more expensive and less
> expensive than the auction site. I'm not recommending one source over
> the other and I haven't compared specs with the part Chris found. I
> just did a quick search to see what options I had and was surprised at
> how much discrete stuff is still available from current production.
>

I looked through Digikey and Mouser and came up with the BFM505 and DMC206E2 as being suitable candidates for the active negative inductor circuits. Not exactly cheap, but they both look like good performers.

I have difficulty recommending any of the NEC/CEL monolithic duals as I've noticed over the years that their offerings are not exactly stable.

Chris

9400. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-15 18:58:17 UTC
From: claudio
Topic: 9381 Message: 9400

Hi Chris,
I've been out of the topic because of my job, but now I'm coming back again.
Are you looking for a NPN/PNP matched pair ? Or simply two matched NPN for the Linvill's type NIC ?
During the gaps of my job I found very interesting SiGe transistors from Infineon (we are using them at 15 Ghz) namely the BFP740 or BFP420, they have high Ft and low noise, I suspect that they will work well in some of the schemes we've worked up to now including the Linvill's one. I suspect this because in my simulations I can see the input noise rising according to the gain fall due to Ft limits...will keep you informed.
Anyway I'm in stall because of noise and IMD...!

73s Claudio
--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> > Digikey and Mouser also have dual transistors, in both surface mount
> > and leaded format, in prices that vary between more expensive and less
> > expensive than the auction site. I'm not recommending one source over
> > the other and I haven't compared specs with the part Chris found. I
> > just did a quick search to see what options I had and was surprised at
> > how much discrete stuff is still available from current production.
> > >
>
> I looked through Digikey and Mouser and came up with the BFM505 and DMC206E2 as being suitable candidates for the active negative inductor circuits. Not exactly cheap, but they both look like good performers.
>
> I have difficulty recommending any of the NEC/CEL monolithic duals as I've noticed over the years that their offerings are not exactly stable.
>
> Chris
>

9401. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 15:53:05 UTC
From: Bill Nopic
Topic: 9390 Message: 9401

My question must have been obtuse?

Can anyone give me a quick answer?

I am using an SGC-239 Remote Tuner. On the SGC website they show their tuners directly feeding small loops.
But this is the only place I have ever seen this. Every other Small Loop mentioned on the web has a VariableCap/network associated with it???

>_____
> From: billnopic <billnopic@...>
>To: loopantennas@yahoogroups.com
>Sent: Wednesday, October 10, 2012 9:55 AM
>Subject: [loopantennas] small (magnetic) loops and tuners.
>
>
>
>Morning all,
>I am new to HF and have to struggle with Attic Antennas. I have a relatively large 86 foot horizontal loop in the attic and it tunes fairly well with my SGC-239 Tuner.
>
>I am interested in trying a small loop. One that I may be able to rotate.
>
>When I look at small loop writes ups, invariably there is some kind of "network" required. My one simple question is: Can I build a small loop and tune it with one of my tuners and forget these "networks"?
>
>Thanks
>73
>Bill
>
>
>
>
>

9402. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 16:28:22 UTC
From: Roberto
Topic: 9381 Message: 9402

Ciao !
I would try to build a breadboard of "small antenna" @ 27 MHz and I would like to undertake two different options for active matching, to be compared as follows :

Option a) using MAX2180 (AM section) antenna amplifier

Option b) using BFM505 for practical NIC circuits shown by Chris:
Fig.5 on pag.5 of "Active Negative Inductor" Report
http://home.earthlink.net/~christrask/Active%20Negative%20Inductors.pdf
Fig.6 on pag.5 of "Linvill feedback amplifier" Report
http://home.earthlink.net/~christrask/Linvill%20Feedback%20Amplifier.pdf

I would be truly glad of receiving your advise

Warmest ciao !
Roberto

--- In loopantennas@yahoogroups.com, "claudio" <aetna50@...> wrote:
>
>
>
> Hi Chris,
> I've been out of the topic because of my job, but now I'm coming back again.
> Are you looking for a NPN/PNP matched pair ? Or simply two matched NPN for the Linvill's type NIC ?
> During the gaps of my job I found very interesting SiGe transistors from Infineon (we are using them at 15 Ghz) namely the BFP740 or BFP420, they have high Ft and low noise, I suspect that they will work well in some of the schemes we've worked up to now including the Linvill's one. I suspect this because in my simulations I can see the input noise rising according to the gain fall due to Ft limits...will keep you informed.
> Anyway I'm in stall because of noise and IMD...!
>
> 73s Claudio
> --- In loopantennas@yahoogroups.com, Chris Trask <christrask@> wrote:
> >
> > >
> > > Digikey and Mouser also have dual transistors, in both surface mount
> > > and leaded format, in prices that vary between more expensive and less
> > > expensive than the auction site. I'm not recommending one source over
> > > the other and I haven't compared specs with the part Chris found. I
> > > just did a quick search to see what options I had and was surprised at
> > > how much discrete stuff is still available from current production.
> > >
> >
> > I looked through Digikey and Mouser and came up with the BFM505 and DMC206E2 as being suitable candidates for the active negative inductor circuits. Not exactly cheap, but they

both look like good performers.
> >
> > I have difficulty recommending any of the NEC/CEL monolithic duals as I've noticed over the years that their offerings are not exactly stable.
> >
> > Chris
> >
>

9403. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 17:18:20 UTC
From: Don Sanders
Topic: 9390 Message: 9403

Bill, small loops have very small feed impedances, less than 1 ohm, in many cases.
The SGC tuners are not made to handle this low impedance.
SGC RECOMMENDS AN 80 FOOT CIRCUMFERENCE LOOP.
You dont specify what bands you want to operate.
Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference, would be 6.4 feet or about 2 meters diameter.
That would be rotatable and probably matched by the tuner on 20 to 10 meters.
On 40 it requires about 180 pf cap to resonate and would have 15% efficienc, y though the tuner may match it on 40 and 30 meters.
Also the small loops develop very high voltage at the tuner and it may not work with more than qrp power.

Don W4BWS
On Tue, Oct 16, 2012 at 10:53 AM, Bill Nopic <billnopic@...> wrote:

> **
>
>
> My question must have been obtuse?
>
> Can anyone give me a quick answer?
>
> I am using an SGC-239 Remote Tuner. On the SGC website they show their
> tuners directly feeding small loops.
> But this is the only place I have ever seen this. Every other Small Loop
> mentioned on the web has a VariableCap/network associated with it???
>
> ------------------------------
> *From:* billnopic <billnopic@...>
> *To:* loopantennas@yahoogroups.com
> *Sent:* Wednesday, October 10, 2012 9:55 AM
> *Subject:* [loopantennas] small (magnetic) loops and tuners.
>
>
> Morning all,
> I am new to HF and have to struggle with Attic Antennas. I have a
> relatively large 86 foot horizontal loop in the attic and it tunes fairly
> well with my SGC-239 Tuner.
>
> I am interested in trying a small loop. One that I may be able to rotate.
>
> When I look at small loop writes ups, invariably there is some kind of
> "network" required. My one simple question is: Can I build a small loop and

> tune it with one of my tuners and forget these "networks"?
>
> Thanks
> 73
> Bill
>
>
>
>
>

9404. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 18:27:12 UTC
From: Chris Trask
Topic: 9381 Message: 9404

>
> Ciao !
> I would try to build a breadboard of "small antenna" @ 27 MHz and I
would
> like to undertake two different options for active matching, to be
compared as
> follows :
>
> Option a) using MAX2180 (AM section) antenna amplifier
>
> Option b) using BFM505 for practical NIC circuits shown by Chris:
> Fig.5 on pag.5 of "Active Negative Inductor" Report
> http://home.earthlink.net/~christrask/Active%20Negative%20Inductors.pdf
> Fig.6 on pag.5 of "Linvill feedback amplifier" Report
> http://home.earthlink.net/~christrask/Linvill%20Feedback%20Amplifier.pdf
>
> I would be truly glad of receiving your advise
>

I have done a considerable amount of modeling to determine where the active negative inductors I described would work best. The usable bandwidth of the circuit of Fig. 5 is directly proportional to the embedding impedance. In other words, the usable bandwidth increases as the embedding impedance increases. There is a limit to this imposed by the transistors, and I found the for HF frequencies an embedding impedance of about 5 ohms works best.

The combination I would recommend would be to use the negative inductor circuit in a balanced configuration, coupled in place of the varactors in Fig. 4 of my earlier paper on varactor-tuned loop matching networks:

http://www.home.earthlink.net/~christrask/Paper011.html

To make a balanced negative inductor for this application, add a third winding to transformer T2 of Fig. 5, using a trifilar twist of wires to ensure good coupling and balance. Be careful to get the correct phase connections when doing this. It might be prudent for me to add this application to the negative inductor paper as that was the intended use from the beginning.

Chris

9405. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 18:51:14 UTC
From: Bill Nopic
Topic: 9390 Message: 9405

Don,

Thanks for the reply.

Here is where I am getting my inspiration (could be stupidity too:)
SGC website in the StealthBook.PDF File on page 23.

http://www.sgcworld.com/Publications/Manuals/stealthman.pdf

A 4X4 pvc frame with the 80 feet of wire you mentioned. Does this not constitute a "small loop"?

As to which Bands, I am too new to HF to have a particular requirement, except I did want short (100-500 miles) range capability on 75 meters, directional. Hence my quest.

My thought was to build this as a "delta?" triangular loop with the PVC pipe. I can actually make it proportionally somewhat bigger than a 4X4 square or rectangle if that helps and still be able to mount it on a rotor. And fit in my attic.

Do you think this is feasible? I don't mean to ignore your points in your email, but not sure it all makes sense yet:) Although failing everything else, I will try your:

"Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
would be 6.4 feet or about 2 meters diameter."

Thanks again.
Bill
N2VIL

>_____
> From: Don Sanders <w4bws1@...>
>To: loopantennas@yahoogroups.com
>Sent: Tuesday, October 16, 2012 1:18 PM
>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>
>
>
>Bill, small loops have very small feed impedances, less than 1 ohm, in many cases.
>The SGC tuners are not made to handle this low impedance.
>SGC RECOMMENDS AN 80 FOOT CIRCUMFERENCE LOOP.
>
>You dont specify what bands you want to operate.
>Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>would be 6.4 feet or about 2 meters diameter.
>That would be rotatable and probably matched by the tuner on 20 to 10 meters.
>On 40 it requires about 180 pf cap to resonate and would have 15% efficienc,
>y though the tuner may match it on 40 and 30 meters.

>Also the small loops develop very high voltage at the tuner and it may not work with more than qrp power.
>
>Don W4BWS
>
>On Tue, Oct 16, 2012 at 10:53 AM, Bill Nopic <billnopic@...> wrote:
>
>
>>
>>My question must have been obtuse?
>>
>>
>>Can anyone give me a quick answer?
>>
>>
>>I am using an SGC-239 Remote Tuner. On the SGC website they show their tuners directly feeding small loops.
>>But this is the only place I have ever seen this. Every other Small Loop mentioned on the web has a VariableCap/network associated with it???
>>
>>
>>
>>>>_____
>>> From: billnopic <billnopic@...>
>>>To: loopantennas@yahoogroups.com
>>>Sent: Wednesday, October 10, 2012 9:55 AM
>>>Subject: [loopantennas] small (magnetic) loops and tuners.
>>>
>>>
>>>
>>>Morning all,
>>>I am new to HF and have to struggle with Attic Antennas. I have a relatively large 86 foot horizontal loop in the attic and it tunes fairly well with my SGC-239 Tuner.
>>>
>>>I am interested in trying a small loop. One that I may be able to rotate.
>>>
>>>When I look at small loop writes ups, invariably there is some kind of "network" required. My one simple question is: Can I build a small loop and tune it with one of my tuners and forget these "networks"?
>>>
>>>Thanks
>>>73
>>>Bill
>>>
>>>
>>>
>>>
>
>
>

>

9406. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 19:31:44 UTC
From: KenW
Topic: 9390 Message: 9406

At my last apartment, in NJ,I had a 5 foot square with the 80 feet of wire. That was the size of the window frame. It loaded 80 to 10 meters with the SG-237. When I was moving I found I had a Low Pass filter under the desk in the line. No wonder 6 meters wouldn't load.

The important thing is the 80 feet of wire.

Only worked Cuba on ssb and psk31 with the bands being dead at the time.

>Don,
>
>Thanks for the reply.
>
>Here is where I am getting my inspiration (could be stupidity too:)
>SGC website in the StealthBook.PDF File on page 23.
>
>http://www.sgcworld.com/Publications/Manuals/stealthman.pdf
>
>A 4X4 pvc frame with the 80 feet of wire you mentioned. Does this not constitute a "small loop"?
>
>As to which Bands, I am too new to HF to have a particular requirement, except I did want short (100-500 miles) range capability on 75 meters, directional. Hence my quest.
>
>
>My thought was to build this as a "delta?" triangular loop with the PVC pipe. I can actually make it proportionally somewhat bigger than a 4X4 square or rectangle if that helps and still be able to mount it on a rotor. And fit in my attic.
>
>
>Do you think this is feasible? I don't mean to ignore your points in your email, but not sure it all makes sense yet:) Although failing everything else, I will try your:
>
>
>"Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>would be 6.4 feet or about 2 meters diameter."
>
>Thanks again.
>Bill
>N2VIL
>
>
>
>
>>_____
>> From: Don Sanders <w4bws1@...>

>>To: loopantennas@yahoogroups.com
>>Sent: Tuesday, October 16, 2012 1:18 PM
>>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>>
>>
>>
>>Bill, small loops have very small feed impedances, less than 1 ohm, in many cases.
>>The SGC tuners are not made to handle this low impedance.
>>SGC RECOMMENDS AN 80 FOOT CIRCUMFERENCE LOOP.
>>
>>You dont specify what bands you want to operate.
>>Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>would be 6.4 feet or about 2 meters diameter.
>>That would be rotatable and probably matched by the tuner on 20 to 10 meters.
>>On 40 it requires about 180 pf cap to resonate and would have 15% efficienc,
>>y though the tuner may match it on 40 and 30 meters.
>>Also the small loops develop very high voltage at the tuner and it may not work with more than qrp power.
>>
>>Don W4BWS
>>
>>On Tue, Oct 16, 2012 at 10:53 AM, Bill Nopic <billnopic@...> wrote:
>>
>>
>>>
>>>My question must have been obtuse?
>>>
>>>
>>>Can anyone give me a quick answer?
>>>
>>>
>>>I am using an SGC-239 Remote Tuner. On the SGC website they show their tuners directly feeding small loops.
>>>But this is the only place I have ever seen this. Every other Small Loop mentioned on the web has a VariableCap/network associated with it???
>>>
>>>
>>>
>>>>_____
>>>> From: billnopic <billnopic@...>
>>>>To: loopantennas@yahoogroups.com
>>>>Sent: Wednesday, October 10, 2012 9:55 AM
>>>>Subject: [loopantennas] small (magnetic) loops and tuners.
>>>>
>>>>
>>>>
>>>>Morning all,
>>>>I am new to HF and have to struggle with Attic Antennas. I have a relatively large 86 foot horizontal loop in the attic and it tunes fairly well with my SGC-239 Tuner.
>>>>

>>>>I am interested in trying a small loop. One that I may be able to rotate.
>>>>
>>>>When I look at small loop writes ups, invariably there is some kind of "network" required. My one simple question is: Can I build a small loop and tune it with one of my tuners and forget these "networks"?
>>>>
>>>>Thanks
>>>>73
>>>>Bill
>>>>
>>>>
>>>>
>>>>
>>
>>
>>
>>

Ken

9407. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 20:34:00 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9407

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /Active Negative Inductor Application.pdf
Uploaded by : chris3trask <christrask@...>
Description : Balanced loop antenna matching network using an active negative inductor..

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/Active%20Negative%20Inductor%20Applicatio
n.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

chris3trask <christrask@...>

9408. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 20:39:30 UTC
From: Chris
Topic: 9381 Message: 9408

<<SNIP>>

>
> To make a balanced negative inductor for this application, add a third
> winding to transformer T2 of Fig. 5, using a trifilar twist of wires to
> ensure good coupling and balance. Be careful to get the correct phase
> connections when doing this. It might be prudent for me to add this
> application to the negative inductor paper as that was the intended use from
> the beginning.
>

I just uploaded a schematic into the group files section to help illustrate this, and the announcement appeared about a minute ago. I'll add this schematic to the active negative inductor paper later, along with further comments about the selection of transistors and other details.

Chris

9409. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 22:08:14 UTC
From: Bill Nopic
Topic: 9390 Message: 9409

Thanks Ken.

So it was just wound around the square??

I am plotting and planning my new loop.....:)

Bill
N2VIL

>_________________________________
> From: KenW <w2bdp@...>
>To: loopantennas@yahoogroups.com
>Sent: Tuesday, October 16, 2012 3:31 PM
>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>
>
>
>At my last apartment, in NJ,I had a 5 foot square with the 80 feet of
>wire. That was the size of the window frame. It loaded 80 to 10 meters
>with the SG-237. When I was moving I found I had a Low Pass filter under
>the desk in the line. No wonder 6 meters wouldn't load.
>
>The important thing is the 80 feet of wire.
>
>Only worked Cuba on ssb and psk31 with the bands being dead at the time.
>
>>Don,
>>
>>Thanks for the reply.
>>
>>Here is where I am getting my inspiration (could be stupidity too:)
>>SGC website in the StealthBook.PDF File on page 23.
>>
>>http://www.sgcworld.com/Publications/Manuals/stealthman.pdf
>>
>>A 4X4 pvc frame with the 80 feet of wire you mentioned. Does this not constitute a "small loop"?
>>
>>As to which Bands, I am too new to HF to have a particular requirement, except I did want short (100-500 miles) range capability on 75 meters, directional. Hence my quest.
>>
>>
>>My thought was to build this as a "delta?" triangular loop with the PVC pipe. I can actually make it proportionally somewhat bigger than a 4X4 square or rectangle if that helps and still be able to mount it on a rotor. And fit in my attic.
>>

>>
>>Do you think this is feasible? I don't mean to ignore your points in your email, but not sure it all makes sense yet:) Although failing everything else, I will try your:
>>
>>
>>"Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>would be 6.4 feet or about 2 meters diameter."
>>
>>Thanks again.
>>Bill
>>N2VIL
>>
>>
>>
>>
>>>_____
>>> From: Don Sanders <w4bws1@...>
>>>To: loopantennas@yahoogroups.com
>>>Sent: Tuesday, October 16, 2012 1:18 PM
>>>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>>>
>>>
>>>
>>>Bill, small loops have very small feed impedances, less than 1 ohm, in many cases.
>>>The SGC tuners are not made to handle this low impedance.
>>>SGC RECOMMENDS AN 80 FOOT CIRCUMFERENCE LOOP.
>>>
>>>You dont specify what bands you want to operate.
>>>Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>>would be 6.4 feet or about 2 meters diameter.
>>>That would be rotatable and probably matched by the tuner on 20 to 10 meters.
>>>On 40 it requires about 180 pf cap to resonate and would have 15% efficienc,
>>>y though the tuner may match it on 40 and 30 meters.
>>>Also the small loops develop very high voltage at the tuner and it may not work with more than qrp power.
>>>
>>>Don W4BWS
>>>
>>>On Tue, Oct 16, 2012 at 10:53 AM, Bill Nopic <billnopic@...> wrote:
>>>
>>>
>>>>
>>>>My question must have been obtuse?
>>>>
>>>>
>>>>Can anyone give me a quick answer?
>>>>
>>>>
>>>>I am using an SGC-239 Remote Tuner. On the SGC website they show their tuners directly feeding small loops.

>>>>But this is the only place I have ever seen this. Every other Small Loop mentioned on the web has a VariableCap/network associated with it???
>>>>
>>>>
>>>>
>>>>>_____
>>>>> From: billnopic <billnopic@...>
>>>>>To: loopantennas@yahoogroups.com
>>>>>Sent: Wednesday, October 10, 2012 9:55 AM
>>>>>Subject: [loopantennas] small (magnetic) loops and tuners.
>>>>>
>>>>>
>>>>>
>>>>>Morning all,
>>>>>I am new to HF and have to struggle with Attic Antennas. I have a relatively large 86 foot horizontal loop in the attic and it tunes fairly well with my SGC-239 Tuner.
>>>>>
>>>>>I am interested in trying a small loop. One that I may be able to rotate.
>>>>>
>>>>>When I look at small loop writes ups, invariably there is some kind of "network" required. My one simple question is: Can I build a small loop and tune it with one of my tuners and forget these "networks"?
>>>>>
>>>>>Thanks
>>>>>73
>>>>>Bill
>>>>>
>>>>>
>>>>>
>>>>>
>>>
>>>
>>>
>>>
>
>Ken
>
>
>
>

9410. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-16 23:40:42 UTC
From: KenW
Topic: 9390 Message: 9410

On Tue, 16 Oct 2012 15:08:14 -0700 (PDT), you wrote:

>Thanks Ken.
>
>So it was just wound around the square??
>
>I am plotting and planning my new loop.....:)
>
>Bill
>N2VIL
>
Yes. Here in Colorado I tried a 7 foot square loop and it did not do as
well as the 5 foot square and then the SGC-237 had to be sent for repair.
I purchased a MFJ mag loop and still trying to get that running. I have
to move it around in this apartment/balcony and play with it.

In time. I had a real nice dx station in NJ and I really haven't gotten
back into radio. Maybe when it gets to below freezing and don't go out
I will get the 'wanting' back.
>
>
>>_________________________________
>> From: KenW <w2bdp@...>
>>To: loopantennas@yahoogroups.com
>>Sent: Tuesday, October 16, 2012 3:31 PM
>>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>>
>>
>>
>>At my last apartment, in NJ,I had a 5 foot square with the 80 feet of
>>wire. That was the size of the window frame. It loaded 80 to 10 meters
>>with the SG-237. When I was moving I found I had a Low Pass filter under
>>the desk in the line. No wonder 6 meters wouldn't load.
>>
>>The important thing is the 80 feet of wire.
>>
>>Only worked Cuba on ssb and psk31 with the bands being dead at the time.
>>
>>>>Don,
>>>
>>>Thanks for the reply.
>>>
>>>Here is where I am getting my inspiration (could be stupidity too:)
>>>SGC website in the StealthBook.PDF File on page 23.
>>>

>>>http://www.sgcworld.com/Publications/Manuals/stealthman.pdf
>>>
>>>A 4X4 pvc frame with the 80 feet of wire you mentioned. Does this not constitute a "small loop"?
>>>
>>>As to which Bands, I am too new to HF to have a particular requirement, except I did want short (100-500 miles) range capability on 75 meters, directional. Hence my quest.
>>>
>>>
>>>My thought was to build this as a "delta?" triangular loop with the PVC pipe. I can actually make it proportionally somewhat bigger than a 4X4 square or rectangle if that helps and still be able to mount it on a rotor. And fit in my attic.
>>>
>>>
>>>Do you think this is feasible? I don't mean to ignore your points in your email, but not sure it all makes sense yet:) Although failing everything else, I will try your:
>>>
>>>
>>>"Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>>would be 6.4 feet or about 2 meters diameter."
>>>
>>>Thanks again.
>>>Bill
>>>N2VIL
>>>
>>>
>>>
>>>
>>>>_____
>>>> From: Don Sanders <w4bws1@...>
>>>>To: loopantennas@yahoogroups.com
>>>>Sent: Tuesday, October 16, 2012 1:18 PM
>>>>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>>>>
>>>>
>>>>
>>>>Bill, small loops have very small feed impedances, less than 1 ohm, in many cases.
>>>>The SGC tuners are not made to handle this low impedance.
>>>>SGC RECOMMENDS AN 80 FOOT CIRCUMFERENCE LOOP.
>>>>
>>>>You dont specify what bands you want to operate.
>>>>Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>>>would be 6.4 feet or about 2 meters diameter.
>>>>That would be rotatable and probably matched by the tuner on 20 to 10 meters.
>>>>On 40 it requires about 180 pf cap to resonate and would have 15% efficienc,
>>>>y though the tuner may match it on 40 and 30 meters.
>>>>Also the small loops develop very high voltage at the tuner and it may not work with more than qrp power.
>>>>
>>>>Don W4BWS

>>>>
>>>>On Tue, Oct 16, 2012 at 10:53 AM, Bill Nopic <billnopic@...> wrote:
>>>>
>>>>
>>>>>
>>>>>My question must have been obtuse?
>>>>>
>>>>>
>>>>>Can anyone give me a quick answer?
>>>>>
>>>>>
>>>>>I am using an SGC-239 Remote Tuner. On the SGC website they show their tuners directly feeding small loops.
>>>>>But this is the only place I have ever seen this. Every other Small Loop mentioned on the web has a VariableCap/network associated with it???
>>>>>
>>>>>
>>>>>
>>>>>>_____
>>>>>> From: billnopic <billnopic@yahoo.com>
>>>>>>To: loopantennas@yahoogroups.com
>>>>>>Sent: Wednesday, October 10, 2012 9:55 AM
>>>>>>Subject: [loopantennas] small (magnetic) loops and tuners.
>>>>>>
>>>>>>
>>>>>>
>>>>>>Morning all,
>>>>>>I am new to HF and have to struggle with Attic Antennas. I have a relatively large 86 foot horizontal loop in the attic and it tunes fairly well with my SGC-239 Tuner.
>>>>>>
>>>>>>I am interested in trying a small loop. One that I may be able to rotate.
>>>>>>
>>>>>>When I look at small loop writes ups, invariably there is some kind of "network" required. My one simple question is: Can I build a small loop and tune it with one of my tuners and forget these "networks"?
>>>>>>
>>>>>>Thanks
>>>>>>73
>>>>>>Bill
>>>>>>
>>>>>>
>>>>>>
>>>>>>
>>>>
>>>>
>>>>
>>>>
>>
>>Ken
>>

>>
>>
>>

Ken...W2BDP\0
Brighton Colorado

9411. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-17 03:46:16 UTC
From: Don Sanders
Topic: 9390 Message: 9411

Bill, I downloaded the Stealth book and reviewed the pictures and descriptions of their loops.
Yes we are talking about a different antenna from your first post.
I guess a loop 5 foot on a side is smaller than a loop 20 foot on a side.
A 4 turn loop is different from a 4 sided one turn loop.

A small loop is usually refering to a magnetic loop of .1 to .3 wavelength one turn circumference.
What they are talking, and you, about is an 80 foot wire coiled into 3 or 4 turns.
OK , well the smaller the turns, tyhe less length in the sides and the lower efficiency.

For use at 80and 40 meters you should consider making the loop as LARGE as possible.
Consider a one or two turn loop horizontal in the attic area. This would be rectangle of 40 feet
in each turn and possibly 15 foot by 5 foot or 10 by 10. This will be much more useful for contacts.
and it will be omnidirectional. No rotation needed.
For 20 and up it will also work but probably not as well as a tuned dipole.
A 4 turn loop 5 foot on a side will work but you will get some weak signal reports.

Don W4BWS

On Tue, Oct 16, 2012 at 1:51 PM, Bill Nopic <billnopic@...> wrote:

> **
>
>
> Don,
>
> Thanks for the reply.
>
> Here is where I am getting my inspiration (could be stupidity too:)
> SGC website in the StealthBook.PDF File on page 23.
>
> http://www.sgcworld.com/Publications/Manuals/stealthman.pdf
>
> A 4X4 pvc frame with the 80 feet of wire you mentioned. Does this not
> constitute a "small loop"?
>
> As to which Bands, I am too new to HF to have a particular requirement,
> except I did want short (100-500 miles) range capability on 75 meters,
> directional. Hence my quest.

>
> My thought was to build this as a "delta?" triangular loop with the PVC
> pipe. I can actually make it proportionally somewhat bigger than a 4X4
> square or rectangle if that helps and still be able to mount it on a rotor.
> And fit in my attic.
>
> Do you think this is feasible? I don't mean to ignore your points in your
> email, but not sure it all makes sense yet:) Although failing everything
> else, I will try your:
>
> "Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
> would be 6.4 feet or about 2 meters diameter."
>
> Thanks again.
> Bill
> N2VIL
>
> ------------------------------
> *From:* Don Sanders <w4bws1@gmail.com>
> *To:* loopantennas@yahoogroups.com
> *Sent:* Tuesday, October 16, 2012 1:18 PM
> *Subject:* Re: [loopantennas] small (magnetic) loops and tuners.
>
>
> Bill, small loops have very small feed impedances, less than 1 ohm, in
> many cases.
> The SGC tuners are not made to handle this low impedance.
> SGC RECOMMENDS AN 80 FOOT CIRCUMFERENCE LOOP.
> You dont specify what bands you want to operate.
> Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
> would be 6.4 feet or about 2 meters diameter.
> That would be rotatable and probably matched by the tuner on 20 to 10
> meters.
> On 40 it requires about 180 pf cap to resonate and would have 15%
> efficienc,
> y though the tuner may match it on 40 and 30 meters.
> Also the small loops develop very high voltage at the tuner and it may not
> work with more than qrp power.
>
> Don W4BWS
> On Tue, Oct 16, 2012 at 10:53 AM, Bill Nopic <billnopic@...> wrote:
>
> **
>
> My question must have been obtuse?
>
> Can anyone give me a quick answer?
>
> I am using an SGC-239 Remote Tuner. On the SGC website they show their
> tuners directly feeding small loops.

> But this is the only place I have ever seen this. Every other Small Loop
> mentioned on the web has a VariableCap/network associated with it???
>
> ------------------------------
> *From:* billnopic <billnopic@...>
> *To:* loopantennas@yahoogroups.com
> *Sent:* Wednesday, October 10, 2012 9:55 AM
> *Subject:* [loopantennas] small (magnetic) loops and tuners.
>
>
> Morning all,
> I am new to HF and have to struggle with Attic Antennas. I have a
> relatively large 86 foot horizontal loop in the attic and it tunes fairly
> well with my SGC-239 Tuner.
>
> I am interested in trying a small loop. One that I may be able to rotate.
>
> When I look at small loop writes ups, invariably there is some kind of
> "network" required. My one simple question is: Can I build a small loop and
> tune it with one of my tuners and forget these "networks"?
>
> Thanks
> 73
> Bill
>
>
>
>
>
>
>
>

9412. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-17 12:54:36 UTC
From: Bill Nopic
Topic: 9390 Message: 9412

Thanks Don,

I will try to absorb the info after some coffee:)
It starting to make sense and I will experiment a little and see what I come up with.

I did send an email to SGC and here is what they said.

"Our couplers work best with basic antennas. Having added coils, caphats,
other capacitive elements, etc. generally do not allow the coupler to perform
properly. The SG-239 will work well with a loop antenna. Only issue
is it's physical size. For operation on 160m the couplers needs a minimum
100 foot antenna - this equates to a 200 foot loop. You can accomplish by
having two turns on a 25 foot square frame. For a smaller rotatable frame then
simply use more turns. To help eliminate any RF issues that could develop
it is best to feed it with a short run (3 - 10 feet would do)of 300-600 ohm
ladder line style lead. 16 Ga wire is minimum size. Copper tubing
can be used but the physical size then becomes an issue."

So all good food for thought. Also had a couple of other readers respond with good info and observations.

Thanks again!
Have fun.
Bill
N2VIL

>_____
> From: Don Sanders <w4bws1@...>
>To: loopantennas@yahoogroups.com
>Sent: Tuesday, October 16, 2012 11:46 PM
>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>
>
>
>Bill, I downloaded the Stealth book and reviewed the pictures and descriptions of their loops.
>Yes we are talking about a different antenna from your first post.
>I guess a loop 5 foot on a side is smaller than a loop 20 foot on a side.
> A 4 turn loop is different from a 4 sided one turn loop.
>
>A small loop is usually refering to a magnetic loop of .1 to .3 wavelength one turn circumference.
>What they are talking, and you, about is an 80 foot wire coiled into 3 or 4 turns.
>OK , well the smaller the turns, tyhe less length in the sides and the lower efficiency.
>
>For use at 80and 40 meters you should consider making the loop as LARGE as possible.

>Consider a one or two turn loop horizontal in the attic area. This would be rectangle of 40 feet
>in each turn and possibly 15 foot by 5 foot or 10 by 10. This will be much more useful for contacts.
>and it will be omnidirectional. No rotation needed.
>For 20 and up it will also work but probably not as well as a tuned dipole.
>A 4 turn loop 5 foot on a side will work but you will get some weak signal reports.
>
>Don W4BWS
>
>
>On Tue, Oct 16, 2012 at 1:51 PM, Bill Nopic <billnopic@...> wrote:
>
>
>>
>>Don,
>>
>>
>>Thanks for the reply.
>>
>>
>>Here is where I am getting my inspiration (could be stupidity too:)
>>SGC website in the StealthBook.PDF File on page 23.
>>
>>
>>http://www.sgcworld.com/Publications/Manuals/stealthman.pdf
>>
>>
>>A 4X4 pvc frame with the 80 feet of wire you mentioned. Does this not constitute a "small loop"?
>>
>>
>>As to which Bands, I am too new to HF to have a particular requirement, except I did want short (100-500 miles) range capability on 75 meters, directional. Hence my quest.
>>
>>
>>
>>My thought was to build this as a "delta?" triangular loop with the PVC pipe. I can actually make it proportionally somewhat bigger than a 4X4 square or rectangle if that helps and still be able to mount it on a rotor. And fit in my attic.
>>
>>
>>
>>Do you think this is feasible? I don't mean to ignore your points in your email, but not sure it all makes sense yet:) Although failing everything else, I will try your:
>>
>>
>>"Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>would be 6.4 feet or about 2 meters diameter."
>>

>>Thanks again.
>>Bill
>>N2VIL
>>
>>
>>
>>
>>>_____
>>> From: Don Sanders <w4bws1@...>
>>>To: loopantennas@yahoogroups.com
>>>Sent: Tuesday, October 16, 2012 1:18 PM
>>>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>>>
>>>
>>>
>>>
>>>Bill, small loops have very small feed impedances, less than 1 ohm, in many cases.
>>>The SGC tuners are not made to handle this low impedance.
>>>SGC RECOMMENDS AN 80 FOOT CIRCUMFERENCE LOOP.
>>>
>>>You dont specify what bands you want to operate.
>>>Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>>would be 6.4 feet or about 2 meters diameter.
>>>That would be rotatable and probably matched by the tuner on 20 to 10 meters.
>>>On 40 it requires about 180 pf cap to resonate and would have 15% efficienc,
>>>y though the tuner may match it on 40 and 30 meters.
>>>Also the small loops develop very high voltage at the tuner and it may not work with more than qrp power.
>>>
>>>Don W4BWS
>>>
>>>On Tue, Oct 16, 2012 at 10:53 AM, Bill Nopic <billnopic@...> wrote:
>>>
>>>
>>>>
>>>>My question must have been obtuse?
>>>>
>>>>
>>>>Can anyone give me a quick answer?
>>>>
>>>>
>>>>I am using an SGC-239 Remote Tuner. On the SGC website they show their tuners directly feeding small loops.
>>>>But this is the only place I have ever seen this. Every other Small Loop mentioned on the web has a VariableCap/network associated with it???
>>>>
>>>>
>>>>
>>>>>_____
>>>>> From: billnopic <billnopic@...>

>>>>>To: loopantennas@yahoogroups.com
>>>>>Sent: Wednesday, October 10, 2012 9:55 AM
>>>>>Subject: [loopantennas] small (magnetic) loops and tuners.
>>>>>
>>>>>
>>>>>
>>>>>Morning all,
>>>>>I am new to HF and have to struggle with Attic Antennas. I have a relatively large 86 foot horizontal loop in the attic and it tunes fairly well with my SGC-239 Tuner.
>>>>>
>>>>>I am interested in trying a small loop. One that I may be able to rotate.
>>>>>
>>>>>When I look at small loop writes ups, invariably there is some kind of "network" required. My one simple question is: Can I build a small loop and tune it with one of my tuners and forget these "networks"?
>>>>>
>>>>>Thanks
>>>>>73
>>>>>Bill
>>>>>
>>>>>
>>>>>
>>>>>
>>>
>>>
>>>
>
>
>
>

9413. Re: [loopantennas] small (magnetic) loops and tuners.

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-17 13:06:08 UTC
From: Bill Nopic
Topic: 9390 Message: 9413

Thanks Ken,
I am cussing and discussing with myself.
Trying to put it all together and come up with a good antenna based on the info everyone has provided.

have fun
Bill
N2VIL

Yes. Here in Colorado I tried a 7 foot square loop and it did not do as
>well as the 5 foot square and then the SGC-237 had to be sent for repair.
>I purchased a MFJ mag loop and still trying to get that running. I have
>to move it around in this apartment/balcony and play with it.
>
>In time. I had a real nice dx station in NJ and I really haven't gotten
>back into radio. Maybe when it gets to below freezing and don't go out
>I will get the 'wanting' back.
>>
>>
>>>_____
>>> From: KenW <w2bdp@...>
>>>To: loopantennas@yahoogroups.com
>>>Sent: Tuesday, October 16, 2012 3:31 PM
>>>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>>>
>>>
>>>
>>>At my last apartment, in NJ,I had a 5 foot square with the 80 feet of
>>>wire. That was the size of the window frame. It loaded 80 to 10 meters
>>>with the SG-237. When I was moving I found I had a Low Pass filter under
>>>the desk in the line. No wonder 6 meters wouldn't load.
>>>
>>>The important thing is the 80 feet of wire.
>>>
>>>Only worked Cuba on ssb and psk31 with the bands being dead at the time.
>>>
>>>>Don,
>>>>
>>>>Thanks for the reply.
>>>>
>>>>Here is where I am getting my inspiration (could be stupidity too:)
>>>>SGC website in the StealthBook.PDF File on page 23.
>>>>
>>>>http://www.sgcworld.com/Publications/Manuals/stealthman.pdf
>>>>

>>>>A 4X4 pvc frame with the 80 feet of wire you mentioned. Does this not constitute a "small loop"?
>>>>
>>>>As to which Bands, I am too new to HF to have a particular requirement, except I did want short (100-500 miles) range capability on 75 meters, directional. Hence my quest.
>>>>
>>>>
>>>>My thought was to build this as a "delta?" triangular loop with the PVC pipe. I can actually make it proportionally somewhat bigger than a 4X4 square or rectangle if that helps and still be able to mount it on a rotor. And fit in my attic.
>>>>
>>>>
>>>>Do you think this is feasible? I don't mean to ignore your points in your email, but not sure it all makes sense yet:) Although failing everything else, I will try your:
>>>>
>>>>
>>>>"Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>>>would be 6.4 feet or about 2 meters diameter."
>>>>
>>>>Thanks again.
>>>>Bill
>>>>N2VIL
>>>>
>>>>
>>>>
>>>>
>>>>>_____
>>>>> From: Don Sanders <w4bws1@...>
>>>>>To: loopantennas@yahoogroups.com
>>>>>Sent: Tuesday, October 16, 2012 1:18 PM
>>>>>Subject: Re: [loopantennas] small (magnetic) loops and tuners.
>>>>>
>>>>>
>>>>>
>>>>>Bill, small loops have very small feed impedances, less than 1 ohm, in many cases.
>>>>>The SGC tuners are not made to handle this low impedance.
>>>>>SGC RECOMMENDS AN 80 FOOT CIRCUMFERENCE LOOP.
>>>>>
>>>>>You dont specify what bands you want to operate.
>>>>>Perhaps a loop about 1/3 wave at 20 meters, aprox 20 feet circumference,
>>>>>would be 6.4 feet or about 2 meters diameter.
>>>>>That would be rotatable and probably matched by the tuner on 20 to 10 meters.
>>>>>On 40 it requires about 180 pf cap to resonate and would have 15% efficienc,
>>>>>y though the tuner may match it on 40 and 30 meters.
>>>>>Also the small loops develop very high voltage at the tuner and it may not work with more than qrp power.
>>>>>
>>>>>Don W4BWS
>>>>>
>>>>>On Tue, Oct 16, 2012 at 10:53 AM, Bill Nopic <billnopic@...> wrote:

>>>>>
>>>>>
>>>>>>
>>>>>>My question must have been obtuse?
>>>>>>
>>>>>>
>>>>>>Can anyone give me a quick answer?
>>>>>>
>>>>>>
>>>>>>I am using an SGC-239 Remote Tuner. On the SGC website they show their tuners directly feeding small loops.
>>>>>>But this is the only place I have ever seen this. Every other Small Loop mentioned on the web has a VariableCap/network associated with it???
>>>>>>
>>>>>>
>>>>>>
>>>>>>>_____
>>>>>>> From: billnopic <billnopic@...>
>>>>>>>To: loopantennas@yahoogroups.com
>>>>>>>Sent: Wednesday, October 10, 2012 9:55 AM
>>>>>>>Subject: [loopantennas] small (magnetic) loops and tuners.
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>Morning all,
>>>>>>>I am new to HF and have to struggle with Attic Antennas. I have a relatively large 86 foot horizontal loop in the attic and it tunes fairly well with my SGC-239 Tuner.
>>>>>>>
>>>>>>>I am interested in trying a small loop. One that I may be able to rotate.
>>>>>>>
>>>>>>>When I look at small loop writes ups, invariably there is some kind of "network" required. My one simple question is: Can I build a small loop and tune it with one of my tuners and forget these "networks"?
>>>>>>>
>>>>>>>Thanks
>>>>>>>73
>>>>>>>Bill
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>
>>>>>
>>>>>
>>>>>
>>>
>>>Ken
>>>
>>>
>>>

>>>
>
>Ken...W2BDP\0
>Brighton Colorado
>
>
>
>

9414. Loop gain lower when wet?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-22 21:42:27 UTC
From: Phil
Topic: 9414 Message: 9414

Hi All,
The tunable LF loop that I put up a couple weeks ago seems to be affected a bit when thoroughly wet. Just possibly there may be some additional path losses over the roughly 65 miles affecting the readings too.

In the AM mode FCH-344 typically reads about S9+50dB on the R-75 S meter, with an occasional kick up to S9+60 on modulation peaks. Right now we're having a nice heavy rain storm and FCH-344 is reading S9+30, peaking to S9+40 on modulation peaks.

Oddly enough, the tuning of the loop (Voltage tuned via Varactor) doesn't seem to have changed, or, if it did, not by very much (it tunes very sharply around that frequency). Perhaps the difference is due to coil dielectric losses of water versus that of air, though the 22 turns are rather wide spaced.

As a reminder of what it looks like, see the pictures here. . .
http://www.ipernity.com/doc/ko6bb/album/288231

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

Audio Interface: Two Mark One Earholes.
Decoder Software: Gray-matter between two ears.

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW
4 Foot/side Tuned Rotatable Loop at 15 Feet AGL for LF

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

9415. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-25 21:48:43 UTC
From: Roberto GIUSTO
Topic: 9381 Message: 9415
Attachments: 3 described; binary payloads are missing from this source WARC

I have just created a LTSpice simulation using two 2N2222 transistorsLet me know your comments and suggestions
Warmest ciao !
Rob

9416. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors [3 Attachments]

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-25 22:25:39 UTC
From: Chris Trask
Topic: 9416 Message: 9416

>
> I have just created a LTSpice simulation using two 2N2222 transistorsLet me
> know your comments and suggestions
>

What bias voltage and current are you using?

Looks like the solid line is signal current and the dashed line is phase.

If you place a 5-ohm resistor in series with the signal source you should see better results. My simulations showed this impedance to be close to ideal.

Chris

9417. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-26 04:43:27 UTC
From: Roberto GIUSTO
Topic: 9381 Message: 9417
Attachments: 4 described; binary payloads are missing from this source WARC

Dear Chris,
the series-resistor of 100 Ohm gives Collector currents of 60 mA, therefore, leaving the supply voltage at 7 V and increasing the series-resistor on the collector up to 470 Ohm, we get 13 mA (see the enclosed simulation results of DRAFT2)
Regarding the Source resistance of 5 Ohm, I have replaced the former small-signal Current source (Itest1) with a small-signal Voltage source V2 in series with the required 5 Ohm resistance. The result is here enclosed in DRAFT3.
It seems this circuit shows "ideal inductive" behaviour at lower frequencies under 10 MHz, ...and "non-Foster" behaviour in the band 30MHz-50MHz..isn't it ?
Warmest regards,   Roberto
--- Ven 26/10/12, Chris Trask <christrask@...> ha scritto:

Da: Chris Trask <christrask@...>
Oggetto: Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors
A: loopantennas@yahoogroups.com
Data: Venerdì 26 ottobre 2012, 00:25

>

> I have just created a LTSpice simulation using two 2N2222 transistorsLet

me

> know your comments and suggestions

>

What bias voltage and current are you using?

Looks like the solid line is signal current and the dashed line is

phase.

If you place a 5-ohm resistor in series with the signal source you

should see better results. My simulations showed this impedance

to be close to ideal.

Chris

9418. Actual comparisons of my Loop antenna VS. the Whip

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-27 06:27:42 UTC
From: Phil
Topic: 9418 Message: 9418

Tonight I conducted a number of experiments comparing the two antennas. I tuned FCH-344 which has a reasonably strong and steady signal here, then first checked the loop by rotating it. Even though the signal strength of FCH didn't seem to change much as observed on the "S" meter I could get a definite null on the power-line noise as I turned it. The quietest spot seemed to be almost due North/South, which is basically the same results I saw with various loop antenna experiments shortly after I moved in here almost 13 years ago.

Then I set the loop for the quietest background and switched between the Loop and the Ratzlaff active whip. Keep in mind that the whip is located about 21 feet higher than the loop and is in a MUCH quieter location. Also, the loop has much higher gain than the whip due to it's being resonant, and I inadvertently used an amplifier with more gain than was actually needed.

That recording starts with the whip, switches to the loop, back to the whip, then finally the loop again.

And finally, these tests were run in the AM "wide" (6kHz) mode as the difference is more noticeable than when using the narrow CW mode combined with narrow audio filters. . .

Hear the tests here (pictures of the two antennas are also on the site in separate albums).
http://www.ipernity.com/blog/ko6bb/424927

--
73 de Phil, KO6BB
http://www.qsl.net/ko6bb/ (Web Page)
http://www.ipernity.com/home/ko6bb (NDB Audio Archive Blog)

RADIOS:
Grundigs: S-350 (2006) & G6 (2011).
Icom: R-75 with Cascaded 250Hz CW Filters.
Kenwood: TS130S HF Transceiver (circa 1980).
Radio Shack: DX-380 digital portable (circa 1990).
Zenith: Royal-7000 Transoceanic (circa 1969).

Audio Interface: Two Mark One Earholes.
Decoder Software: Gray-matter between two ears.

ACCESSORIES: Homebrew LF-MF Pre-Amp, MFJ-949E HF Tuner
Timewave DSP-599zx and Homebrew 6 Hz Filter.

ANTENNAS: 88' Long Ladder-line fed dipole at 35 feet AGL.
Ratzlaff 3 Foot Active Whip at 36 Feet AGL for LF/MW

4 Foot/side Tuned Rotatable Loop at 15 Feet AGL for LF

Merced, Central California, 37, 18, 37N 120, 30, 6W CM97rh

9419. Re: Actual comparisons of my Loop antenna VS. the Whip

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-10-28 22:29:44 UTC
From: Dean Wayman
Topic: 9418 Message: 9419

--- In loopantennas@yahoogroups.com, Phil <ko6bb1@...> wrote:
>
> Tonight I conducted a number of experiments comparing the two antennas.
> I tuned FCH-344 which has a reasonably strong and steady signal here,
> then first checked the loop by rotating it. Even though the signal
> strength of FCH didn't seem to change much as observed on the "S" meter
> I could get a definite null on the power-line noise as I turned it. The
> quietest spot seemed to be almost due North/South, which is basically
> the same results I saw with various loop antenna experiments shortly
> after I moved in here almost 13 years ago.
>
> Then I set the loop for the quietest background and switched between the
> Loop and the Ratzlaff active whip. Keep in mind that the whip is
> located about 21 feet higher than the loop and is in a MUCH quieter
> location. Also, the loop has much higher gain than the whip due to it's
> being resonant, and I inadvertently used an amplifier with more gain
> than was actually needed.
>
Sounds very similar to my experience here ,i'm still learning the in-and-outs of phasing but it has helped my dx a lot ,in fact last night i heard a station from California (1kw 1212miles) that i would have never heard without the phaser and antennas i have ,gl with your setup :)

Dean_0

9420. again: SPICE modeling Dual Transistors for NIC Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-03 20:57:14 UTC
From: Roberto
Topic: 9416 Message: 9420

Ciao Chris,
I have set the same values of your SPICE_circuit simulation just for computing the actual frequency response in two cases of interest, using 2N3904 and 2N2222 transistors. It seems that the bandwidth is limited to frequencies between 100KHz and 500-600KHz where the first resonance occurs (see the "continuous line" impedance reaching its minimum in the 2N2222 circuit model while the "broken line" of phase is abruptly changing of 180°. NOTE that also in the 2N3904 circuit model you get anyway this abrupt phase change of 180°)

I will try further freq.response simulations using different values of primary/secondary inductances of transformers

Find enclosed my results in PDF, together with the "LTSpice model" of 2N2222 circuit. Your comments and valuable suggestions are welcome !

Warmest ciao ! Roberto

Kindly see the FILES section for getting these simulation results
---

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > I have just created a LTSpice simulation using two 2N2222 transistorsLet
> me
> > know your comments and suggestions
> >
>
> What bias voltage and current are you using?
>
> Looks like the solid line is signal current and the dashed line is
> phase.
>
> If you place a 5-ohm resistor in series with the signal source you
> should see better results. My simulations showed this impedance
> to be close to ideal.
>
> Chris
>

9421. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-03 21:38:52 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9421

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /LTspice_simulates_2-NPN_Neg-INDUCTANCE/MODIFIED_TRANSFORMERS_600nH_SPICE_Freq_response_1-100MHz.pdf
Uploaded by : robert_giusto <robert_giusto@...>
Description : nice HF freq.response (active negative inductor using 2 x 2N3904) between 10 MHz and 30 MHz using transformer windings of 600 nH

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/LTspice_simulates_2-NPN_Neg-INDUCTANCE/MODIFIED_TRANSFORMERS_600nH_SPICE_Freq_response_1-100MHz.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

robert_giusto <robert_giusto@...>

9422. To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-05 17:04:08 UTC
From: Fred
Topic: 9422 Message: 9422

Hey gang,

One of the trees holding my 80 mtr horizontal loop came down (thanks to Sandy), so this weekend was spent workin on the ole antenna. I've always just fed it with coax, and was reading about people feeding them with "Ugly Baluns," which is just about 20' of coax wrapped around 4" pvc.

Then I thought about commercially made baluns, and wound up looking at a DX engineering balun. Question is, the dx engineering option is close to $100. The Ugly Balun is a lot cheaper. I remember reading that you don't want to use a balun on a loop fed with coax, so now I'm at a loss.

At this point I'm thinking I'll just continue to use what has been working, just coax right into the antenna. Can't help thinking I could squeeze out a little more performance with a balun..Any advice? Thanks in advance.

73's de KB8VIV

P.S. I use it from 10-80 meters

9423. Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-05 18:15:26 UTC
From: tenorman1952
Topic: 9422 Message: 9423

The "Ugly" balun is best described as a choke, rather than a balun. It's function is to reduce RF on the shield. I used one for a while on a multidipole, and while it worked fine on the upper bands, when using my amp (AL-811H at anything over 400 watts) I got RF in the shack on 80/75 meters.

Snap on Ferrite beads worked far, far better. I used the RCT-2 from Fairite, and 15 beads seemed to work the best.

Ferrite beads is also what is inside most "1:1 Current Baluns". Same thing as what I had, only inside a PVC tube.

But neither the beads nor the "ugly balun" (choke balun) provide any impedance matching. Many use a 4:1 current balun for loops.

Paul -
AE-5JU

--- In loopantennas@yahoogroups.com, "Fred" <desmoface@...> wrote:
>
> Hey gang,
>
> One of the trees holding my 80 mtr horizontal loop came down (thanks to Sandy), so this weekend was spent workin on the ole antenna. I've always just fed it with coax, and was reading about people feeding them with "Ugly Baluns," which is just about 20' of coax wrapped around 4" pvc.
>
> Then I thought about commercially made baluns, and wound up looking at a DX engineering balun. Question is, the dx engineering option is close to $100. The Ugly Balun is a lot cheaper. I remember reading that you don't want to use a balun on a loop fed with coax, so now I'm at a loss.
>
> At this point I'm thinking I'll just continue to use what has been working, just coax right into the antenna. Can't help thinking I could squeeze out a little more performance with a balun..Any advice? Thanks in advance.
>
> 73's de KB8VIV
>
> P.S. I use it from 10-80 meters

9424. Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-05 18:22:03 UTC
From: Fred
Topic: 9422 Message: 9424

Hi Paul, thanks for the reply. I'm never running over 100 watts, but I'll look into your recommendation of the RCT-2. Thanks again for the advice.

73's de kb8viv

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> The "Ugly" balun is best described as a choke, rather than a balun. It's function is to reduce RF on the shield. I used one for a while on a multidipole, and while it worked fine on the upper bands, when using my amp (AL-811H at anything over 400 watts) I got RF in the shack on 80/75 meters.
>
> Snap on Ferrite beads worked far, far better. I used the RCT-2 from Fairite, and 15 beads seemed to work the best.
>
> Ferrite beads is also what is inside most "1:1 Current Baluns". Same thing as what I had, only inside a PVC tube.
>
> But neither the beads nor the "ugly balun" (choke balun) provide any impedance matching. Many use a 4:1 current balun for loops.
>
> Paul -
> AE-5JU
>
> --- In loopantennas@yahoogroups.com, "Fred" <desmoface@> wrote:
> >
> > Hey gang,
> >
> > One of the trees holding my 80 mtr horizontal loop came down (thanks to Sandy), so this weekend was spent workin on the ole antenna. I've always just fed it with coax, and was reading about people feeding them with "Ugly Baluns," which is just about 20' of coax wrapped around 4" pvc.
> >
> > Then I thought about commercially made baluns, and wound up looking at a DX engineering balun. Question is, the dx engineering option is close to $100. The Ugly Balun is a lot cheaper. I remember reading that you don't want to use a balun on a loop fed with coax, so now I'm at a loss.
> >
> > At this point I'm thinking I'll just continue to use what has been working, just coax right into the antenna. Can't help thinking I could squeeze out a little more performance with a balun..Any advice? Thanks in advance.
> >
> > 73's de KB8VIV
> >
> > P.S. I use it from 10-80 meters

>

9425. Re: [loopantennas] Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-05 18:31:35 UTC
From: Steve Zeiger
Topic: 9422 Message: 9425

Paul,

I just looked those up online, I actually have some small ones that I use on my computer. So you just put these on the coax nere the attenna feedpoint, or near the trasmitter? Thanks again.

Steve
kb8viv

From: tenorman1952 <tenorman1952@yahoo.com>
To: loopantennas@yahoogroups.com
Sent: Mon, November 5, 2012 1:15:37 PM
Subject: [loopantennas] Re: To Balun, or not to Balun, that is the ?

The "Ugly" balun is best described as a choke, rather than a balun. It's function is to reduce RF on the shield. I used one for a while on a multidipole, and while it worked fine on the upper bands, when using my amp (AL-811H at anything over 400 watts) I got RF in the shack on 80/75 meters.

Snap on Ferrite beads worked far, far better. I used the RCT-2 from Fairite, and 15 beads seemed to work the best.

Ferrite beads is also what is inside most "1:1 Current Baluns". Same thing as what I had, only inside a PVC tube.

But neither the beads nor the "ugly balun" (choke balun) provide any impedance matching. Many use a 4:1 current balun for loops.

Paul -
AE-5JU

--- In loopantennas@yahoogroups.com, "Fred" <desmoface@...> wrote:
>
> Hey gang,
>
> One of the trees holding my 80 mtr horizontal loop came down (thanks to Sandy),
>so this weekend was spent workin on the ole antenna. I've always just fed it
>with coax, and was reading about people feeding them with "Ugly Baluns," which
>is just about 20' of coax wrapped around 4" pvc.
>
>
> Then I thought about commercially made baluns, and wound up looking at a DX
>engineering balun. Question is, the dx engineering option is close to $100. The
>Ugly Balun is a lot cheaper. I remember reading that you don't want to use a
>balun on a loop fed with coax, so now I'm at a loss.
>

> At this point I'm thinking I'll just continue to use what has been working,
>just coax right into the antenna. Can't help thinking I could squeeze out a
>little more performance with a balun..Any advice? Thanks in advance.
>
> 73's de KB8VIV
>
> P.S. I use it from 10-80 meters

9426. Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-06 18:56:16 UTC
From: tenorman1952
Topic: 9422 Message: 9426

--- In loopantennas@yahoogroups.com, Steve Zeiger <desmoface@...> wrote:
>
> Paul,
>
> I just looked those up online, I actually have some small ones that I use on my
> computer.Â So you just put these on the coax nere the attenna feedpoint, or near
> the trasmitter?Â Thanks again.
>
> Steve
> kb8viv
>

Put them on up by the feedpoint. The RCT-2 fits the .240" coax I have, which is LMR-240. This size also fits RG-8X.

Also, I have two extension cord reels, each with 50' of RG-8X flexible coax. I keep these for portable / field day operations. I have 10 beads on one end of each of these reels.

Note that you need more beads for lower frequencies, fewer beads for higher. 1 or 2 beads is sufficient for a 2 m / 70 cm J-pole, for example.

8 to 10 beads for 40 meters on up. Etc.

The FairRite RCT-4 fits 0.400" coax, 9912, LMR-400, RG-8/U, etc.

For these beads there are several sources:

www.hamcity.com and on the left click "Chokes".

https://www.hamcity.com/store/pc/Chokes-RFI-c655.htm

I see only the RCT-2 listed at Ham City (Jun's Electronics) at this time. They used to sell two other sizes.

http://www.newark.com/ferrite-beads?isRedirect=true

At Palomar Engineers:

http://palomar-engineers.com/ferrite-beads

The FSB-1/4 is the FairRite RCT-2

Also look here:

http://palomar-engineers.com/1-1-balun-kits

This requires you to install before putting the connector on the coax.

And also at Radio Dan:

http://www.radiodan.com/Henry/parts/RF_chokes.htm

Paul - AE5JU

9427. Re: [loopantennas] Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-06 19:13:27 UTC
From: Steve Zeiger
Topic: 9422 Message: 9427

Hi Paul, thanks again for all the helpful information. I'll probably add some at the feedpoint. Also, thanks for the links.

Steve

_____
From: tenorman1952 <tenorman1952@...>
To: loopantennas@yahoogroups.com
Sent: Tue, November 6, 2012 1:56:32 PM
Subject: [loopantennas] Re: To Balun, or not to Balun, that is the ?

--- In loopantennas@yahoogroups.com, Steve Zeiger <desmoface@...> wrote:
>
> Paul,
>
> I just looked those up online, I actually have some small ones that I use on my
>
> computer.Â So you just put these on the coax nere the attenna feedpoint, or
>near
>
> the trasmitter?Â Thanks again.
>
> Steve
> kb8viv
>

Put them on up by the feedpoint. The RCT-2 fits the .240" coax I have, which is LMR-240. This size also fits RG-8X.

Also, I have two extension cord reels, each with 50' of RG-8X flexible coax. I keep these for portable / field day operations. I have 10 beads on one end of each of these reels.

Note that you need more beads for lower frequencies, fewer beads for higher. 1 or 2 beads is sufficient for a 2 m / 70 cm J-pole, for example.

8 to 10 beads for 40 meters on up. Etc.

The FairRite RCT-4 fits 0.400" coax, 9912, LMR-400, RG-8/U, etc.

For these beads there are several sources:

www.hamcity.com and on the left click "Chokes".

https://www.hamcity.com/store/pc/Chokes-RFI-c655.htm

I see only the RCT-2 listed at Ham City (Jun's Electronics) at this time. They used to sell two other sizes.

http://www.newark.com/ferrite-beads?isRedirect=true

At Palomar Engineers:

http://palomar-engineers.com/ferrite-beads

The FSB-1/4 is the FairRite RCT-2

Also look here:

http://palomar-engineers.com/1-1-balun-kits

This requires you to install before putting the connector on the coax.

And also at Radio Dan:

http://www.radiodan.com/Henry/parts/RF_chokes.htm

Paul - AE5JU

9428. Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-07 18:04:53 UTC
From: kj4wrk
Topic: 9422 Message: 9428

I use an "ugly balun" choke with my 40M horizontal loop positioned just under the 4:1 balun and get great matches from 40m up through 6m.

I use this balun directly connected to the loop:
Mod III 4:1 Tuner Balun 1.5 - 54MHz 5kw - #4124 (4124t - Studs on top)

73s,
Steve (KJ4WRK)

--- In loopantennas@yahoogroups.com, Steve Zeiger <desmoface@...> wrote:
>
> Hi Paul, thanks again for all the helpful information.Â I'll probably add some
> at the feedpoint.Â Also, thanks for the links.
>
> Steve
>
>
>
>
> _____
> From: tenorman1952 <tenorman1952@...>
> To: loopantennas@yahoogroups.com
> Sent: Tue, November 6, 2012 1:56:32 PM
> Subject: [loopantennas] Re: To Balun, or not to Balun, that is the ?
>
> Â
>
>
> --- In loopantennas@yahoogroups.com, Steve Zeiger <desmoface@> wrote:
> > >
> > > Paul,
> > >
> > > I just looked those up online, I actually have some small ones that I use on my
> > >
> > > computer.Ã□Â So you just put these on the coax nere the attenna feedpoint, or
> > >near
> > >
> > > the trasmitter?Ã□Â Thanks again.
> > >
> > > Steve
> > > kb8viv
> > >
>
> Put them on up by the feedpoint. The RCT-2 fits the .240" coax I have, which is
> LMR-240. This size also fits RG-8X.

>
> Also, I have two extension cord reels, each with 50' of RG-8X flexible coax. I
> keep these for portable / field day operations. I have 10 beads on one end of
> each of these reels.
>
> Note that you need more beads for lower frequencies, fewer beads for higher. 1
> or 2 beads is sufficient for a 2 m / 70 cm J-pole, for example.
>
> 8 to 10 beads for 40 meters on up. Etc.
>
> The FairRite RCT-4 fits 0.400" coax, 9912, LMR-400, RG-8/U, etc.
>
> For these beads there are several sources:
>
> www.hamcity.com and on the left click "Chokes".
>
> https://www.hamcity.com/store/pc/Chokes-RFI-c655.htm
>
> I see only the RCT-2 listed at Ham City (Jun's Electronics) at this time. They
> used to sell two other sizes.
>
> http://www.newark.com/ferrite-beads?isRedirect=true
>
> At Palomar Engineers:
>
> http://palomar-engineers.com/ferrite-beads
>
> The FSB-1/4 is the FairRite RCT-2
>
> Also look here:
>
> http://palomar-engineers.com/1-1-balun-kits
>
> This requires you to install before putting the connector on the coax.
>
> And also at Radio Dan:
>
> http://www.radiodan.com/Henry/parts/RF_chokes.htm
>
> Paul - AE5JU
>

9429. 3m Diameter, 10Mhz, Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-09 11:47:30 UTC
From: g3zxx
Topic: 9429 Message: 9429

Hi All,
Just a quickie, to advise, those that may be interested in Magnetic Loops, that I've been playing with 3m diameter loop, as an intermediate step to building a 6m Diameter version.
I've uploaded a website with all my constructional and test data, plus log book,etc., at:
https://sites.google.com/site/g3zxxmagneticloops/Home
<https://sites.google.com/site/g3zxxmagneticloops/Home>
The info may be of interest, to some, but I'd be very interested in receiving any feedback, recommendations or comments, on the un-conventional methods, I've used, prior to starting on the 6m version.
Thanks to all those who maintain the group.
Cheers & 73'sDave, G3ZXX.

9430. Re: [loopantennas] Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-06 23:37:43 UTC
From: Jim Bo
Topic: 9422 Message: 9430

Look at Arrow Electronics.

They surprised me a number of times on cost and service for ferrite material

Lower in price than the "regulars" that are recommended. They have the Fair-Rite 31 mix for the lowest cost (based on 5 websites I looked at before calling the search process "over".

For < 2MHz suggest to use 73 material, but look at specs for your application.

Jim
WA9ZBV

----- Original Message -----
From: Steve Zeiger
To: loopantennas@yahoogroups.com
Sent: Tuesday, November 06, 2012 11:13 AM
Subject: Re: [loopantennas] Re: To Balun, or not to Balun, that is the ?

Hi Paul, thanks again for all the helpful information. I'll probably add some at the feedpoint. Also, thanks for the links.

Steve

From: tenorman1952 <tenorman1952@...>
To: loopantennas@yahoogroups.com
Sent: Tue, November 6, 2012 1:56:32 PM
Subject: [loopantennas] Re: To Balun, or not to Balun, that is the ?

--- In loopantennas@yahoogroups.com, Steve Zeiger <desmoface@...> wrote:
>
> Paul,
>
> I just looked those up online, I actually have some small ones that I use on my
> computer.Â So you just put these on the coax nere the attenna feedpoint, or near
> the trasmitter?Â Thanks again.
>
> Steve
> kb8viv
>

Put them on up by the feedpoint. The RCT-2 fits the .240" coax I have, which is LMR-240. This size also fits RG-8X.

Also, I have two extension cord reels, each with 50' of RG-8X flexible coax. I keep these for portable / field day operations. I have 10 beads on one end of each of these reels.

Note that you need more beads for lower frequencies, fewer beads for higher. 1 or 2 beads is sufficient for a 2 m / 70 cm J-pole, for example.

8 to 10 beads for 40 meters on up. Etc.

The FairRite RCT-4 fits 0.400" coax, 9912, LMR-400, RG-8/U, etc.

For these beads there are several sources:

www.hamcity.com and on the left click "Chokes".

https://www.hamcity.com/store/pc/Chokes-RFI-c655.htm

I see only the RCT-2 listed at Ham City (Jun's Electronics) at this time. They used to sell two other sizes.

http://www.newark.com/ferrite-beads?isRedirect=true

At Palomar Engineers:

http://palomar-engineers.com/ferrite-beads

The FSB-1/4 is the FairRite RCT-2

Also look here:

http://palomar-engineers.com/1-1-balun-kits

This requires you to install before putting the connector on the coax.

And also at Radio Dan:

http://www.radiodan.com/Henry/parts/RF_chokes.htm

Paul - AE5JU

9431. Re: [loopantennas] Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-09 16:26:20 UTC
From: Steve Zeiger
Topic: 9422 Message: 9431

Hi Jim, thanks for the info.

kb8viv

From: Jim Bo <jbollit@...>
To: loopantennas@yahoogroups.com
Sent: Fri, November 9, 2012 11:24:32 AM
Subject: Re: [loopantennas] Re: To Balun, or not to Balun, that is the ?

☐

Look at Arrow Electronics.

They surprised me a number of times on cost and service for ferrite material

Lower in price than the "regulars" that are recommended. They have the
Fair-Rite 31 mix for the lowest cost (based on 5 websites I looked at before
calling the search process "over".

For < 2MHz suggest to use 73 material, but look at specs for your application.

Jim
WA9ZBV

----- Original Message -----
>From: Steve Zeiger
>To: loopantennas@yahoogroups.com
>Sent: Tuesday, November 06, 2012 11:13 AM
>Subject: Re: [loopantennas] Re: To Balun, or not to Balun, that is the ?
>
>
>Hi Paul, thanks again for all the helpful information. I'll probably add some
>at the feedpoint. Also, thanks for the links.
>
>Steve
>
>
>
>

From: tenorman1952 <tenorman1952@...>
>To: loopantennas@yahoogroups.com
>Sent: Tue, November 6, 2012 1:56:32 PM
>Subject: [loopantennas] Re: To Balun, or not to Balun, that is the ?
>
>

>
>
>--- In loopantennas@yahoogroups.com, Steve Zeiger <desmoface@...> wrote:
>>
>> Paul,
>>
>> I just looked those up online, I actually have some small ones that I use on my
>>
>> computer.Â So you just put these on the coax nere the attenna feedpoint, or
>>near
>>
>> the trasmitter?Â Thanks again.
>>
>> Steve
>> kb8viv
>>
>
>Put them on up by the feedpoint. The RCT-2 fits the .240" coax I have, which is
>LMR-240. This size also fits RG-8X.
>
>Also, I have two extension cord reels, each with 50' of RG-8X flexible coax. I
>keep these for portable / field day operations. I have 10 beads on one end of
>each of these reels.
>
>Note that you need more beads for lower frequencies, fewer beads for higher. 1
>or 2 beads is sufficient for a 2 m / 70 cm J-pole, for example.
>
>8 to 10 beads for 40 meters on up. Etc.
>
>The FairRite RCT-4 fits 0.400" coax, 9912, LMR-400, RG-8/U, etc.
>
>For these beads there are several sources:
>
>www.hamcity.com and on the left click "Chokes".
>
>https://www.hamcity.com/store/pc/Chokes-RFI-c655.htm
>
>I see only the RCT-2 listed at Ham City (Jun's Electronics) at this time. They
>used to sell two other sizes.
>
>http://www.newark.com/ferrite-beads?isRedirect=true
>
>At Palomar Engineers:
>
>http://palomar-engineers.com/ferrite-beads
>
>The FSB-1/4 is the FairRite RCT-2
>
>Also look here:
>

>http://palomar-engineers.com/1-1-balun-kits
>
>This requires you to install before putting the connector on the coax.
>
>And also at Radio Dan:
>
>http://www.radiodan.com/Henry/parts/RF_chokes.htm
>
>Paul - AE5JU
>
>

9432. Re: 3m Diameter, 10Mhz, Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-10 11:07:54 UTC
From: Srh Srh
Topic: 9429 Message: 9432

Hello Dave

Thanks for a well written and very informative article.

I have been playing with loops of various types / sizes for the last year. Right now I have 4 of them undergoing testing, of which 2 are mag loops. I am of the view that the ham radio community has always under estimated the loop. With JT65 and 20 watts I have made contact all over the world.

3 months or so ago I bought a badly damaged MFJ 1786X mag loop that I am restoring, paid £25 for it so if I fail it's not a catastrophe particuarly

73 Stephen M0GWI

9433. Re: To Balun, or not to Balun, that is the ?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-10 13:26:25 UTC
From: Kuby
Topic: 9422 Message: 9433

Has anyone figured out the math to an UglyBalun, so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.

The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.

Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of coax function.

--- In loopantennas@yahoogroups.com, "tenorman1952" <tenorman1952@...> wrote:
>
> The "Ugly" balun is best described as a choke, rather than a balun. It's function is to reduce RF on the shield. I used one for a while on a multidipole, and while it worked fine on the upper bands, when using my amp (AL-811H at anything over 400 watts) I got RF in the shack on 80/75 meters.
>
> Snap on Ferrite beads worked far, far better. I used the RCT-2 from Fairite, and 15 beads seemed to work the best.
>
> Ferrite beads is also what is inside most "1:1 Current Baluns". Same thing as what I had, only inside a PVC tube.
>
> But neither the beads nor the "ugly balun" (choke balun) provide any impedance matching. Many use a 4:1 current balun for loops.
>
> Paul -
> AE-5JU
>
> --- In loopantennas@yahoogroups.com, "Fred" <desmoface@> wrote:
> >
> > Hey gang,
> >
> > One of the trees holding my 80 mtr horizontal loop came down (thanks to Sandy), so this weekend was spent workin on the ole antenna. I've always just fed it with coax, and was reading about people feeding them with "Ugly Baluns," which is just about 20' of coax wrapped around 4" pvc.
> >
> > Then I thought about commercially made baluns, and wound up looking at a DX engineering balun. Question is, the dx engineering option is close to $100. The Ugly Balun is a lot cheaper. I remember reading that you don't want to use a balun on a loop fed with coax, so now I'm at a loss.
> >
> > At this point I'm thinking I'll just continue to use what has been working, just coax

right into the antenna. Can't help thinking I could squeeze out a little more performance with a balun..Any advice? Thanks in advance.
> >
> > 73's de KB8VIV
> >
> > P.S. I use it from 10-80 meters
>

9434. Re: 3m Diameter, 10Mhz, Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-11 00:35:59 UTC
From: g3zxx
Topic: 9429 Message: 9434

Hi Stephen, M0GWI.
Thank you for the feedback and nice comments, on the Magnetic Loop project <https://sites.google.com/site/g3zxxmagneticloops/> , much appreciated.
Like me, new'ish to this type of antenna .. hi.
It was only as a result of working some stations, on JT65a, with what I can only describe as "Stunning signals", that made me think about finding out more and eventually lead me to building my first experimental loop, just over a year, or so, ago.
Please let me (us all) know how the refurbishment goes.
Keep in touch.
Cheers & 73'sDave, G3ZXX <http://www.g3zxx.webnode.com> .

--- In loopantennas@yahoogroups.com, Srh Srh <stephen_qrp@...> wrote:
>
> Hello Dave
>
> Thanks for a well written and very informative article.
>
> I have been playing with loops of various types / sizes for the last year. Right now I have 4 of them undergoing testing, of which 2 are mag loops. I am of the view that the ham radio community has always under estimated the loop. With JT65 and 20 watts I have made contact all over the world.
>
> 3 months or so ago I bought a badly damaged MFJ 1786X mag loop that I am restoring, paid £25 for it so if I fail it's not a catastrophe particuarly
>
> 73 Stephen M0GWI
>

9435. Re: 3m Diameter, 10Mhz, Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-11 01:27:31 UTC
From: w0sgm
Topic: 9429 Message: 9435

--- In loopantennas@yahoogroups.com, Srh Srh <stephen_qrp@...> wrote:
>
> Hello Dave
>
> Thanks for a well written and very informative article.
>
> I have been playing with loops of various types / sizes for the last year. Right now I have 4 of them undergoing testing, of which 2 are mag loops. I am of the view that the ham radio community has always under estimated the loop. With JT65 and 20 watts I have made contact all over the world.
>
> 3 months or so ago I bought a badly damaged MFJ 1786X mag loop that I am restoring, paid £25 for it so if I fail it's not a catastrophe particuarly
>
> 73 Stephen M0GWI
>
loops work great..mag or not...
with JT65 and 1.5w,I've made contacts all over the world....
5w SSB too..

Scott W0SGM

9436. Re: [loopantennas] Re: 3m Diameter, 10Mhz, Magnetic Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-11 03:58:40 UTC
From: Jerry Barr
Topic: 9429 Message: 9436

how many magnets in a true magnetic loop?

Jerry KJ6NTL

From: w0sgm <w0sgm@...>
To: loopantennas@yahoogroups.com
Sent: Saturday, November 10, 2012 5:27 PM
Subject: [loopantennas] Re: 3m Diameter, 10Mhz, Magnetic Loop

--- In mailto:loopantennas%40yahoogroups.com, Srh Srh <stephen_qrp@...> wrote:
>
> Hello Dave
>
> Thanks for a well written and very informative article.
>
> I have been playing with loops of various types / sizes for the last year. Right now I have 4 of them undergoing testing, of which 2 are mag loops. I am of the view that the ham radio community has always under estimated the loop. With JT65 and 20 watts I have made contact all over the world.
>
> 3 months or so ago I bought a badly damaged MFJ 1786X mag loop that I am restoring, paid £25 for it so if I fail it's not a catastrophe particuarly
>
> 73 Stephen M0GWI
>
loops work great..mag or not...
with JT65 and 1.5w,I've made contacts all over the world....
5w SSB too..

Scott W0SGM

9437. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-12 14:10:41 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9437

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /TheTwinHexloopantennas.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : The Twin Hex one meter loop antennas, one MW and one LW

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/TheTwinHexloopantennas.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

everettsharp74 <everettsharp@...>

9438. Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-12 15:04:04 UTC
From: Kuby
Topic: 9438 Message: 9438

Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.

The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.

Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.

9439. Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-12 15:27:43 UTC
From: pond.james_pond
Topic: 9438 Message: 9439

There's some useful information on air-core chokes here:
http://www.karinya.net/g3txq/chokes/
HTH

--- In loopantennas@yahoogroups.com, "Kuby" <n6jsx@...> wrote:
>
> Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.
>
> The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.
>
> Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.
>

9440. Re: [loopantennas] Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 02:00:07 UTC
From: Jim Bo
Topic: 9438 Message: 9440

Ugly Baluns DO NOT work "as advertised".

I have tried many variations and evaluated them with an AIM analyzer and the choking impedance is unpredictible.

Get some 31 material ferrite clamp ons from Arrow Electronics (Fair Rite p/n) 0431177081

at $11.00 each

This will get it done, the ugly balun is VERY frequency limited and has little choking impedance.

Jim

WA9ZBV

----- Original Message -----
From: Kuby
To: loopantennas@yahoogroups.com
Sent: Monday, November 12, 2012 7:04 AM
Subject: [loopantennas] Ugly Balun (choke)

Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.

The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.

Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.

9441. Twinhexloopantennas by Everett Sharp N8CNP

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 09:57:46 UTC
From: dx11
Topic: 9441 Message: 9441

Everett, I did take a look at the file you downloaded in the files section. These are really beautifully made antennas, it is always a joy to see at a job well done.

But, how did you arrive at the choice for the impedance ratio for the transformer from the single turn pickup loop to the coax.

As far I have understood from following this group for years a single small, untuned loop has a very low impedance, far lower than the 50 Ohms of the coax, but you seem to transform the pickup impedance down with a ratio of 3200/50? What am I missing?

Regards,

Cor Beijersbergen

9442. Re: [loopantennas] Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 12:09:19 UTC
From: desmoface@yahoo.com
Topic: 9438 Message: 9442

How many would you recommend for a full wave 80 meter loop? May almost be cheaper to just go with a balun from dx engineering.

Kb8viv

Sent from my iPad

On Nov 12, 2012, at 9:00 PM, "Jim Bo" <jbollit@...> wrote:

> Ugly Baluns DO NOT work "as advertised".
>
> I have tried many variations and evaluated them with an AIM analyzer and the choking impedance is unpredictible.
>
> Get some 31 material ferrite clamp ons from Arrow Electronics (Fair Rite p/n)
> 0431177081
>
> at $11.00 each
>
>
>
> This will get it done, the ugly balun is VERY frequency limited and has little choking impedance.
>
>
>
> Jim
>
> WA9ZBV
>
>
>
>
>
> ----- Original Message -----
> From: Kuby
> To: loopantennas@yahoogroups.com
> Sent: Monday, November 12, 2012 7:04 AM
> Subject: [loopantennas] Ugly Balun (choke)
>
>
> Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.
>
> The current UB design looks to have coax near 40m 1/4 wavelength (if that is the

correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.
>
> Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.
>
>
>

9443. Re: [loopantennas] Twinhexloopantennas by Everett Sharp N8CNP

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 14:15:36 UTC
From: everettsharp@aol.com
Topic: 9441 Message: 9443

Hi Cor,

Well there is no short answer. Anyway here is how I arrived at the 3,200/50 (64/1) ratio. I have been experimenting with both air loop and Ferrite Sleeve loop antennas now for the last several months. The problem that I keep running into was coupling. There is not much information that I could find on the subject. So I started experimenting with different approaches to couple up to the various loop antennas that I was experimenting with, without degrading the performance of the antenna.

So what I found out was that, in most cases, a one turn pickup loop worked the best, however, it still loaded the tank circuit, when connectedt to a 50 ohm load. So I started experimenting with matching transformers, first using toroids, then later moving to binocular cores. I started out using a 9:1 ratio and it helped, but there was still some loading of the tank circuit. I also had a ferrite rod, with a 5 turn winding, that was also connected to 50 ohm coax, that was used for inductive coupling. By using a A/B switch, I was able to switch back and forth between the two different coupling approaches. When I was using the ferrite rod coupling there was never an issue with loading the tank circuit.

Later I purchased a AC volt meter, with a RF probe. I connected the RF probe across the variable capacitor on the air loop, with it tuned to a local radio station. What I noticed was that when I used the ferrite pickup coil there was little, if any drop in the voltage, however, when I moved the A/B switch to the one turn coupling loop, with the 9:1 matching transformer, there was a very large drop in voltage. So this is when I decided to start trying higher ratios, going from the 9:1, 16:1, 32:1 and finally with the 64:1 ratio, I no longer saw much, if any voltage drop. I also noticed that I now had a higher S meter reading on my Icom R75, than I had using the ferrite pickup coil. In the past with the lower ratio transformers the S meter readings were always a little lower, that with the ferrite rod.

I told you that it would be long answer and not very technical, however, with a lot of work and experimenting I came up with a solution, without using the traditional amplifier approach to couple to a 50 ohm load.

73's Everett N8CNP

In a message dated 11/13/2012 3:57:58 A.M. Central Standard Time, dx11@... writes:

Everett, I did take a look at the file you downloaded in the files section. These are really beautifully made antennas, it is always a joy to see at a job well done.
But, how did you arrive at the choice for the impedance ratio for the transformer from the single turn pickup loop to the coax.

As far I have understood from following this group for years a single small, untuned loop has a very low impedance, far lower than the 50 Ohms of the coax, but you seem to transform the pickup impedance down with a ratio of 3200/50? What am I missing?
< /span>
Regards,
Cor Beijersbergen

9444. RE: [loopantennas] Twinhexloopantennas by Everett Sharp N8CNP

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 16:08:51 UTC
From: dx11
Topic: 9441 Message: 9444

Hello Everett,

Thanks for your elaborate answer. It is of value to me because it shows that an approach is possible that deviates from the loop antennas I have seen mostly, that is with one pickup winding feeding directly into 50 Ohm coax. The MW loop of Radio Netherlands is an example of that concept.

I suppose you have optimized for a minimal loading of the tuned LC combination of the receiving windings for the sake of a small bandwidth.

I wonder, you have made measurements of the voltage across the tuning capacitor at different transformer ratios, did you also take into account the S/N ratio of the received signal. You said the S reading was higher with the high transformation ratio, but that is not the same as a good signal quality.

In other designs one can see a one turn pickup loop with a diameter of 20% of the main loop. This might lead to the same result as your high-ratio transformer.

BTW. How are your reception results with these antennas? Did you do some serious listening yet?

Regards,

Cor Beijersbergen

>>>>Hi Cor,

Well there is no short answer. Anyway here is how I arrived at the 3,200/50 (64/1) ratio. I have been experimenting with both air loop and Ferrite Sleeve loop antennas now for the last several months….<<<

9445. Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 16:33:10 UTC
From: pond.james_pond
Topic: 9438 Message: 9445

clamp-ons are inefficient and costly.

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> Ugly Baluns DO NOT work "as advertised".
>
> I have tried many variations and evaluated them with an AIM analyzer and the choking impedance is unpredictible.
>
> Get some 31 material ferrite clamp ons from Arrow Electronics (Fair Rite p/n)
> 0431177081
>
> at $11.00 each
>
>
>
> This will get it done, the ugly balun is VERY frequency limited and has little choking impedance.
>
>
>
> Jim
>
> WA9ZBV
>
>
>
>
>
>
> ----- Original Message -----
> From: Kuby
> To: loopantennas@yahoogroups.com
> Sent: Monday, November 12, 2012 7:04 AM
> Subject: [loopantennas] Ugly Balun (choke)
>
>
>
> Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.
>
> The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.

>
> Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.
>

9446. Re: [loopantennas] Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 17:21:38 UTC
From: Jim Bo
Topic: 9438 Message: 9446

Another general statement that does not hold true in many cases.

I analyzed the clamp on and solid ferrite core versus cost, and found, yet again, pricing does not only depend on "specs" or "efficiency.

You are correct in stating that for a given volume of ferrite material, an un-gapped (solid torrid) will give you higher "efficiency" (being defined as impedance per turn) at a cost of $XX.

If you look at the snap on cores, the volume of the core I mentioned is significantly higher (don't have the old analysis anymore), helping towards attaining the impedance per turn of the solid torrid.

Now, if you look at pricing, this is where the market comes into play. Fair-Rite has priced the snap on's that has only a small association with raw material costs. They threw a lot of ferrite at the big snap on to improve the impedance per turn, and determined their market would pay a slight premium for the convince of "snap on".

One could use the solid torrid rather easily for a new installation, but for existing installs, the snap on worked better for me.

Each case is different, and one should look at the major criteria involved in bringing a solution to the issue at hand.

I have a friend who likes to work the DOG (DX). He told me that I could be doing these types of analysis, measure actual performance with test equipment, and write mails like this, or I could be working the DOG.

He is at 8 band DXCC and on the door step (if not there now) of Honor Roll.

As you can see, I am still typing.............................

Jim

WA9ZBV

----- Original Message -----
From: pond.james_pond
To: loopantennas@yahoogroups.com
Sent: Tuesday, November 13, 2012 8:33 AM
Subject: [loopantennas] Re: Ugly Balun (choke)

clamp-ons are inefficient and costly.

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> Ugly Baluns DO NOT work "as advertised".
>

> I have tried many variations and evaluated them with an AIM analyzer and the choking impedance is unpredictible.
>
> Get some 31 material ferrite clamp ons from Arrow Electronics (Fair Rite p/n)
> 0431177081
>
> at $11.00 each
>
>
>
> This will get it done, the ugly balun is VERY frequency limited and has little choking impedance.
>
>
>
> Jim
>
> WA9ZBV
>
>
>
>
>
> ----- Original Message -----
> From: Kuby
> To: loopantennas@yahoogroups.com
> Sent: Monday, November 12, 2012 7:04 AM
> Subject: [loopantennas] Ugly Balun (choke)
>
>
>
> Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.
>
> The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.
>
> Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.
>

9447. RE: [loopantennas] Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 18:00:28 UTC
From: Kjell W. Strom
Topic: 9438 Message: 9447

Check the work done by G3TXQ:

http://www.karinya.net/g3txq/chokes/

73,
Kjell, PB3SM - SM6CPI

From: loopantennas@yahoogroups.com
[mailto:loopantennas@yahoogroups.com] On Behalf Of Jim Bo
Sent: 13 November 2012 18:22
To: loopantennas@yahoogroups.com
Subject: Re: [loopantennas] Re: Ugly Balun (choke)

Another general statement that does not hold true in many cases.

I analyzed the clamp on and solid ferrite core versus cost, and found, yet again, pricing does not only depend on "specs" or "efficiency.

You are correct in stating that for a given volume of ferrite material, an un-gapped (solid torrid) will give you higher "efficiency" (being defined as impedance per turn) at a cost of $XX.

If you look at the snap on cores, the volume of the core I mentioned is significantly higher (don't have the old analysis anymore), helping towards attaining the impedance per turn of the solid torrid.

Now, if you look at pricing, this is where the market comes into play. Fair-Rite has priced the snap on's that has only a small association with raw material costs. They threw a lot of ferrite at the big snap on to improve the impedance per turn, and determined their market would pay a slight premium for the convince of "snap on".

One could use the solid torrid rather easily for a new installation, but for existing installs, the snap on worked better for me.

Each case is different, and one should look at the major criteria involved in bringing a solution to the issue at hand.

I have a friend who likes to work the DOG (DX). He told me that I could be doing these types of analysis, measure actual performance with test equipment, and write mails like this, or I

could be working the DOG.

He is at 8 band DXCC and on the door step (if not there now) of
Honor Roll.

As you can see, I am still typing.....

Jim

WA9ZBV

----- Original Message -----
From: pond.james_pond <mailto:crusty@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, November 13, 2012 8:33 AM
Subject: [loopantennas] Re: Ugly Balun (choke)

clamp-ons are inefficient and costly.

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...>
wrote:
>
> Ugly Baluns DO NOT work "as advertised".
>
> I have tried many variations and evaluated them with an AIM
analyzer and the choking impedance is unpredictible.
>
> Get some 31 material ferrite clamp ons from Arrow Electronics
(Fair Rite p/n)
> 0431177081
>
> at $11.00 each
>
>
>
> This will get it done, the ugly balun is VERY frequency
limited and has little choking impedance.
>
>
>
> Jim
>
> WA9ZBV
>
>
>
>
>
> ----- Original Message -----
> From: Kuby
> To: loopantennas@yahoogroups.com
<mailto:loopantennas%40yahoogroups.com>

> Sent: Monday, November 12, 2012 7:04 AM
> Subject: [loopantennas] Ugly Balun (choke)
>
>
>
> Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.
>
> The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.
>
> Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.
>

9448. Re: [loopantennas] Twinhexloopantennas by Everett Sharp N8CNP

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 19:29:10 UTC
From: everettsharp@aol.com
Topic: 9441 Message: 9448

Hi again Cor,

To answer your question re: S/N, after deciding on the 64:1 Matching transformer. I saw no noticeable increase on the noise floor, by taking S meter readings, off station, between the ferrite induction coupling and the loop coupling, but as I mentioned, there was a slight increase in the S meter reading with the loop coupling versus the ferrite pickup. Probably the most notable change was the improvement in the tuning sharpness, which was now on par with the ferrite coupling. It is so sharp that I am considering adding resistor, with a switch, so I can take it the resistor in and out of the circuit, to kill some of the Q on some stations.

The performance of these two antennas is superior to any air loops that I have built to date, with my largest being 4'. The 4' air loop just used PVC covered 18 gage wire which was spaced on 1/4 centers, but it did not perform as well as the Hex loops. You might say why are they better and my only answer is that it maybe the Litz wire. The Hex MW antenna is quitter, has sharper tuning and has better rotational nulls and also does a better job on weaker stations. Also the Hex Loop had a wider tuning range than the 4' air loop, using the same Variable Capacitor, which again is because of the Litz wire, which has a lower distributed capacitance than the 18 gage wire, which also had more wire spacing than the MW Hex loop.

Two days ago I put up a 45' PAR type antenna (45' long end feed using a 9:1 matching transformer and grounded) and during the day the noise levels were so high that I was not able to pick up many stations, however, I was able to pick up many, many more stations on the MW Hex loop, which was in my basement. During the evenings the noise had quitted down and the Hex loop was working as well and sometimes better than the Par antenna. The PAR antenna did show a few more S units than the Hex loop, but with the higher readings so came the increased noise levels.

There was no comparison between the LW Hex loop and the PAR antenna, as I was hearing NDB's that were quite readable, that I could not even hear with the PAR antenna, night time and daytime. The way I constructed the two antennas did not make them work any better, than using some other types of construction, it was the Litz wire and non the loading coupling that made the big improvements.

73's Everett N8CNP

In a message dated 11/13/2012 10:10:14 A.M. Central Standard Time, dx11@... writes:

Hello Everett,
Thanks for your elaborate answer. It is of value to me because it shows that an approach is possible that deviates from the loop antennas I have seen

mostly, that is with one pickup winding feeding directly into 50 Ohm coax. The MW loop of Radio Netherlands is an example of that concept.
I suppose you have optimized for a minimal loading of the tuned LC combination of the receiving windings for the sake of a small bandwidth.
I wonder, you have made measurements of the voltage across the tuning capacitor at different transformer ratios, did you also take into account the S/N ratio of the received signal. You said the S reading was higher with the high transformation ratio, but that is not the same as a good signal quality.
In other designs one can see a one turn pickup loop with a diameter of 20% of the main loop. This might lead to the same result as your high-ratio transformer.
BTW. How are your reception results with these antennas? Did you do some serious listening yet?
Regards,
Cor Beijersbergen

>>>>Hi Cor,

Well there is no short answer. Anyway here is how I arrived at the 3,200/50 (64/1) ratio. I have been experimenting with both air loop and Ferrite Sleeve loop antennas now for the last several months….<<<

9449. Re: [loopantennas] Twinhexloopantennas by Everett Sharp N8CNP

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 20:18:39 UTC
From: ve7sl@shaw.ca
Topic: 9441 Message: 9449

Everett - I'm wondering if you experimented with the distance between the main loop and the one-turn pickup loop before trying the various transformers? These big loops have a huge field and I'm just wondering if it might be overcoupled in the present position and if setting it back further (perhaps inside the main loop) would result in less loading-effect when connected to 50 ohms?

Steve

WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

9450. Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 21:59:10 UTC
From: Kuby
Topic: 9438 Message: 9450

I did and he has no math.... to his charts either....

--- In loopantennas@yahoogroups.com, "Kjell W. Strom" <strom.lime@...> wrote:
>
> Check the work done by G3TXQ:
>
> http://www.karinya.net/g3txq/chokes/
>
> 73,
> Kjell, PB3SM - SM6CPI
>
>
>
> _____
>
> From: loopantennas@yahoogroups.com
> [mailto:loopantennas@yahoogroups.com] On Behalf Of Jim Bo
> Sent: 13 November 2012 18:22
> To: loopantennas@yahoogroups.com
> Subject: Re: [loopantennas] Re: Ugly Balun (choke)
>
>
>
>
>
>
>
> Another general statement that does not hold true in many cases.
>
>
>
> I analyzed the clamp on and solid ferrite core versus cost, and
> found, yet again, pricing does not only depend on "specs" or
> "efficiency.
>
>
>
> You are correct in stating that for a given volume of ferrite
> material, an un-gapped (solid torrid) will give you higher
> "efficiency" (being defined as impedance per turn) at a cost of
> $XX.
>
>
>
> If you look at the snap on cores, the volume of the core I
> mentioned is significantly higher (don't have the old analysis

> anymore), helping towards attaining the impedance per turn of
> the solid torrid.
>
>
>
> Now, if you look at pricing, this is where the market comes into
> play. Fair-Rite has priced the snap on's that has only a small
> association with raw material costs. They threw a lot of
> ferrite at the big snap on to improve the impedance per turn,
> and determined their market would pay a slight premium for the
> convince of "snap on".
>
>
>
> One could use the solid torrid rather easily for a new
> installation, but for existing installs, the snap on worked
> better for me.
>
>
>
> Each case is different, and one should look at the major
> criteria involved in bringing a solution to the issue at hand.
>
>
>
> I have a friend who likes to work the DOG (DX). He told me that
> I could be doing these types of analysis, measure actual
> performance with test equipment, and write mails like this, or I
> could be working the DOG.
>
>
>
> He is at 8 band DXCC and on the door step (if not there now) of
> Honor Roll.
>
>
>
> As you can see, I am still typing.....
>
>
>
> Jim
>
>
>
> WA9ZBV
>
>
>
>

>
>
> ----- Original Message -----
> From: pond.james_pond <mailto:crusty@...>
> To: loopantennas@yahoogroups.com
> Sent: Tuesday, November 13, 2012 8:33 AM
> Subject: [loopantennas] Re: Ugly Balun (choke)
>
>
>
> clamp-ons are inefficient and costly.
>
> --- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@>
> wrote:
> >
> > Ugly Baluns DO NOT work "as advertised".
> >
> > I have tried many variations and evaluated them with an AIM
> analyzer and the choking impedance is unpredictible.
> >
> > Get some 31 material ferrite clamp ons from Arrow Electronics
> (Fair Rite p/n)
> > 0431177081
> >
> > at $11.00 each
> >
> >
> >
> > This will get it done, the ugly balun is VERY frequency
> limited and has little choking impedance.
> >
> >
> >
> > Jim
> >
> > WA9ZBV
> >
> >
> >
> >
> >
> > ----- Original Message -----
> > From: Kuby
> > To: loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>
> > Sent: Monday, November 12, 2012 7:04 AM
> > Subject: [loopantennas] Ugly Balun (choke)
> >
> >
> >

> > Has anyone figured out the math to an UglyBalun (UB), so we
> could optimize it for the bands we use it on? To me the UB coax
> appears to be 'short' a number of turns (coax length) for
> 60-160m use.
> >
> > The current UB design looks to have coax near 40m 1/4
> wavelength (if that is the correlation of the UB to frequency).
> Also the UB appears to have been designed around using it on a
> tri-band (10/15/20m) beam to replace the six-6" turns that
> Cushcraft A3/A4 and other beams require.
> >
> > Th UB is not a balun that transforms impedance it is a choke
> keeping RF off the coax shield, retaining the integrity of the
> coax function.
> >
>

9451. Re: [loopantennas] Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-13 23:16:53 UTC
From: Jim Bo
Topic: 9438 Message: 9451

For 80 meters, I would get two snap on chokes from Arrow (I ordered 10 as they are useful in other areas) and put three turns (remember that when the coax goes thru the core it is one turn, so three turns "look" like two loops), with each turn being 12 inch in diameter. Space the two cores about 2 feet apart. You want to keep the turns at a 12 diameter to keep the self resonance of the coax/core above 80 meters, and give you "enough" choking impedance on 80 meters, so the cores do not overheat.

Jim

WA9ZBV

----- Original Message -----
From: Kuby
To: loopantennas@yahoogroups.com
Sent: Tuesday, November 13, 2012 1:59 PM
Subject: [loopantennas] Re: Ugly Balun (choke)

I did and he has no math.... to his charts either....

--- In loopantennas@yahoogroups.com, "Kjell W. Strom" <strom.lime@...> wrote:
>
> Check the work done by G3TXQ:
>
> http://www.karinya.net/g3txq/chokes/
>
> 73,
> Kjell, PB3SM - SM6CPI
>
>
>
> _____
>
> From: loopantennas@yahoogroups.com
> [mailto:loopantennas@yahoogroups.com] On Behalf Of Jim Bo
> Sent: 13 November 2012 18:22
> To: loopantennas@yahoogroups.com
> Subject: Re: [loopantennas] Re: Ugly Balun (choke)
>
>
>
>
>
>
>
> Another general statement that does not hold true in many cases.
>
>

>
> I analyzed the clamp on and solid ferrite core versus cost, and
> found, yet again, pricing does not only depend on "specs" or
> "efficiency.
>
>
>
> You are correct in stating that for a given volume of ferrite
> material, an un-gapped (solid torrid) will give you higher
> "efficiency" (being defined as impedance per turn) at a cost of
> $XX.
>
>
>
> If you look at the snap on cores, the volume of the core I
> mentioned is significantly higher (don't have the old analysis
> anymore), helping towards attaining the impedance per turn of
> the solid torrid.
>
>
>
> Now, if you look at pricing, this is where the market comes into
> play. Fair-Rite has priced the snap on's that has only a small
> association with raw material costs. They threw a lot of
> ferrite at the big snap on to improve the impedance per turn,
> and determined their market would pay a slight premium for the
> convince of "snap on".
>
>
>
> One could use the solid torrid rather easily for a new
> installation, but for existing installs, the snap on worked
> better for me.
>
>
>
> Each case is different, and one should look at the major
> criteria involved in bringing a solution to the issue at hand.
>
>
>
> I have a friend who likes to work the DOG (DX). He told me that
> I could be doing these types of analysis, measure actual
> performance with test equipment, and write mails like this, or I
> could be working the DOG.
>
>
>
> He is at 8 band DXCC and on the door step (if not there now) of
> Honor Roll.

>
>
>
> As you can see, I am still typing.....
>
>
>
> Jim
>
>
>
> WA9ZBV
>
>
>
>
>
>
>
> ----- Original Message -----
> From: pond.james_pond <mailto:crusty@...>
> To: loopantennas@yahoogroups.com
> Sent: Tuesday, November 13, 2012 8:33 AM
> Subject: [loopantennas] Re: Ugly Balun (choke)
>
>
>
> clamp-ons are inefficient and costly.
>
> --- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@>
> wrote:
> >
> > Ugly Baluns DO NOT work "as advertised".
> >
> > I have tried many variations and evaluated them with an AIM
> analyzer and the choking impedance is unpredictible.
> >
> > Get some 31 material ferrite clamp ons from Arrow Electronics
> (Fair Rite p/n)
> > 0431177081
> >
> > at $11.00 each
> >
> >
> >
> > This will get it done, the ugly balun is VERY frequency
> limited and has little choking impedance.
> >
> >
> >
> > Jim

> >
> > WA9ZBV
> >
> >
> >
> >
> >
> > ----- Original Message -----
> > From: Kuby
> > To: loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>
> > Sent: Monday, November 12, 2012 7:04 AM
> > Subject: [loopantennas] Ugly Balun (choke)
> >
> >
> >
> > Has anyone figured out the math to an UglyBalun (UB), so we
> could optimize it for the bands we use it on? To me the UB coax
> appears to be 'short' a number of turns (coax length) for
> 60-160m use.
> >
> > The current UB design looks to have coax near 40m 1/4
> wavelength (if that is the correlation of the UB to frequency).
> Also the UB appears to have been designed around using it on a
> tri-band (10/15/20m) beam to replace the six-6" turns that
> Cushcraft A3/A4 and other beams require.
> >
> > Th UB is not a balun that transforms impedance it is a choke
> keeping RF off the coax shield, retaining the integrity of the
> coax function.
> >
>

9452. Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-14 15:06:37 UTC
From: pond.james_pond
Topic: 9438 Message: 9452

10 x Bird foot warmers @ $10 a pop.

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> Another general statement that does not hold true in many cases.
>
>
>
> I analyzed the clamp on and solid ferrite core versus cost, and found, yet again, pricing does not only depend on "specs" or "efficiency.
>
>
>
> You are correct in stating that for a given volume of ferrite material, an un-gapped (solid torrid) will give you higher "efficiency" (being defined as impedance per turn) at a cost of $XX.
>
>
>
> If you look at the snap on cores, the volume of the core I mentioned is significantly higher (don't have the old analysis anymore), helping towards attaining the impedance per turn of the solid torrid.
>
>
>
> Now, if you look at pricing, this is where the market comes into play. Fair-Rite has priced the snap on's that has only a small association with raw material costs. They threw a lot of ferrite at the big snap on to improve the impedance per turn, and determined their market would pay a slight premium for the convince of "snap on".
>
>
>
> One could use the solid torrid rather easily for a new installation, but for existing installs, the snap on worked better for me.
>
>
>
> Each case is different, and one should look at the major criteria involved in bringing a solution to the issue at hand.
>
>
>
> I have a friend who likes to work the DOG (DX). He told me that I could be doing these types of analysis, measure actual performance with test equipment, and write mails like this, or I could be working the DOG.

>
>
>
> He is at 8 band DXCC and on the door step (if not there now) of Honor Roll.
>
>
>
> As you can see, I am still typing.....
>
>
>
> Jim
>
>
>
> WA9ZBV
>
>
>
>
>
>
> ----- Original Message -----
> From: pond.james_pond
> To: loopantennas@yahoogroups.com
> Sent: Tuesday, November 13, 2012 8:33 AM
> Subject: [loopantennas] Re: Ugly Balun (choke)
>
>
>
> clamp-ons are inefficient and costly.
>
> --- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@> wrote:
> >
> > Ugly Baluns DO NOT work "as advertised".
> >
> > I have tried many variations and evaluated them with an AIM analyzer and the choking impedance is unpredictible.
> >
> > Get some 31 material ferrite clamp ons from Arrow Electronics (Fair Rite p/n)
> > 0431177081
> >
> > at $11.00 each
> >
> >
> >
> > This will get it done, the ugly balun is VERY frequency limited and has little choking impedance.
> >
> >
> >

> > Jim
> >
> > WA9ZBV
> >
> >
> >
> >
> >
> > ----- Original Message -----
> > From: Kuby
> > To: loopantennas@yahoogroups.com
> > Sent: Monday, November 12, 2012 7:04 AM
> > Subject: [loopantennas] Ugly Balun (choke)
> >
> >
> >
> > Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.
> >
> > The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.
> >
> > Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.
> >
>

9453. Re: [loopantennas] Twinhexloopantennas by Everett Sharp N8CNP

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-14 17:28:43 UTC
From: brian nsl
Topic: 9441 Message: 9453

Everett,
Just reading your file section entries / photos, excellent creations
like works of art.
The loops certainly match the kitchen hi!
Now going to digest the text part,
Regards,
72, Brian, GØNSL.
----- Original Message -----
From: everettsharp@aol.com
To: loopantennas@yahoogroups.com
Sent: Tuesday, November 13, 2012 7:29 PM
Subject: Re: [loopantennas] Twinhexloopantennas by Everett Sharp N8CNP

9454. Re: [loopantennas] Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-14 18:52:23 UTC
From: Jim Bo
Topic: 9438 Message: 9454

And.....your constructive suggestion??

Jim
WA9ZBV

BTW, the Rs of the choke on 80 meters is in the 4K ohm vinicity.
How much power do you need to run to warm up bird's feet with 8k ohm (two chokes)???

It is engineering and math, and the number two is the same on earth as it is in another galaxy. What does your math say??

----- Original Message -----
From: pond.james_pond
To: loopantennas@yahoogroups.com
Sent: Wednesday, November 14, 2012 7:06 AM
Subject: [loopantennas] Re: Ugly Balun (choke)

10 x Bird foot warmers @ $10 a pop.

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> Another general statement that does not hold true in many cases.
>
>
>
> I analyzed the clamp on and solid ferrite core versus cost, and found, yet again, pricing does not only depend on "specs" or "efficiency.
>
>
>
> You are correct in stating that for a given volume of ferrite material, an un-gapped (solid torrid) will give you higher "efficiency" (being defined as impedance per turn) at a cost of $XX.
>
>
>
> If you look at the snap on cores, the volume of the core I mentioned is significantly higher (don't have the old analysis anymore), helping towards attaining the impedance per turn of the solid torrid.
>
>
>
> Now, if you look at pricing, this is where the market comes into play. Fair-Rite has priced the snap on's that has only a small association with raw material costs. They threw a lot of ferrite at the big snap on to improve the impedance per turn, and determined their market would pay a slight premium for the convince of "snap on".

>
>
>
> One could use the solid torrid rather easily for a new installation, but for existing installs, the snap on worked better for me.
>
>
>
> Each case is different, and one should look at the major criteria involved in bringing a solution to the issue at hand.
>
>
>
> I have a friend who likes to work the DOG (DX). He told me that I could be doing these types of analysis, measure actual performance with test equipment, and write mails like this, or I could be working the DOG.
>
>
>
> He is at 8 band DXCC and on the door step (if not there now) of Honor Roll.
>
>
>
> As you can see, I am still typing.....
>
>
>
> Jim
>
>
>
> WA9ZBV
>
>
>
>
>
> ----- Original Message -----
> From: pond.james_pond
> To: loopantennas@yahoogroups.com
> Sent: Tuesday, November 13, 2012 8:33 AM
> Subject: [loopantennas] Re: Ugly Balun (choke)
>
>
>
> clamp-ons are inefficient and costly.
>
> --- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@> wrote:
> >
> > Ugly Baluns DO NOT work "as advertised".

> >
> > I have tried many variations and evaluated them with an AIM analyzer and the choking impedance is unpredictible.
> >
> > Get some 31 material ferrite clamp ons from Arrow Electronics (Fair Rite p/n)
> > 0431177081
> >
> > at $11.00 each
> >
> >
> >
> > This will get it done, the ugly balun is VERY frequency limited and has little choking impedance.
> >
> >
> >
> > Jim
> >
> > WA9ZBV
> >
> >
> >
> >
> >
> > ----- Original Message -----
> > From: Kuby
> > To: loopantennas@yahoogroups.com
> > Sent: Monday, November 12, 2012 7:04 AM
> > Subject: [loopantennas] Ugly Balun (choke)
> >
> >
> >
> > Has anyone figured out the math to an UglyBalun (UB), so we could optimize it for the bands we use it on? To me the UB coax appears to be 'short' a number of turns (coax length) for 60-160m use.
> >
> > The current UB design looks to have coax near 40m 1/4 wavelength (if that is the correlation of the UB to frequency). Also the UB appears to have been designed around using it on a tri-band (10/15/20m) beam to replace the six-6" turns that Cushcraft A3/A4 and other beams require.
> >
> > Th UB is not a balun that transforms impedance it is a choke keeping RF off the coax shield, retaining the integrity of the coax function.
> >
>

9455. Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-16 17:45:08 UTC
From: tenorman1952
Topic: 9438 Message: 9455

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> And.....your constructive suggestion??
>
> Jim
> WA9ZBV
>

For 40 m on up, 8 snap on ferrite beads.

For 80 m on up, 15 beads.

Or a good 1:1 current balun.

For my antenna (fan dipole for 75/40/20 m) when running my amp, I am using a 1:1 current balun #823A from Clear Signal Products (aka the Coax Man) in Oklahoma City.

http://coaxman.com/showdetail.php?fetchitemnum=823A

The snap on beads got rid of the RF in the shack, but the balun works equally well. I use the beads now on reels of RG-8X for portable operations.

Paul - AE5JU

9456. Re: [loopantennas] Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-16 20:56:05 UTC
From: Jim Bo
Topic: 9438 Message: 9456

Paul,

What mix do you use and what is the mfg part number?

Have you measured the choking impedance vs. frequency of your set up, and if so, what were the results?

Tnx

Jim
WA9ZBV

----- Original Message -----
From: tenorman1952
To: loopantennas@yahoogroups.com
Sent: Friday, November 16, 2012 9:45 AM
Subject: [loopantennas] Re: Ugly Balun (choke)

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> And.....your constructive suggestion??
>
> Jim
> WA9ZBV
>

For 40 m on up, 8 snap on ferrite beads.

For 80 m on up, 15 beads.

Or a good 1:1 current balun.

For my antenna (fan dipole for 75/40/20 m) when running my amp, I am using a 1:1 current balun #823A from Clear Signal Products (aka the Coax Man) in Oklahoma City.

http://coaxman.com/showdetail.php?fetchitemnum=823A

The snap on beads got rid of the RF in the shack, but the balun works equally well. I use the beads now on reels of RG-8X for portable operations.

Paul - AE5JU

9457. Re: Ugly Balun (choke)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-17 17:58:01 UTC
From: tenorman1952
Topic: 9438 Message: 9457

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> Paul,
>
> What mix do you use and what is the mfg part number?

Fair Rite RCT-2 snapped on LMR-240.

>
> Have you measured the choking impedance vs. frequency of your set up, and if so, what were the results?
>
> Tnx
>
> Jim
> WA9ZBV

No, I just kept adding beads until the "RF in the Shack" problem disappeared, and added a few more for extra. The symptoms were tingle from the metal mic (Heil HM-10) and a fluttering oscillation of my amp at anything over 350-400 watts on 80 meters. Also affected by proximity of the mic to the receiver (Ten-Tec Jupiter) and amp (Ameritron AL-811H), which are side by side.

No problems at 100 w, and when not using the amp.

I had a big bag of the Fair Rite RCT-2s, and kept putting on two at a time until the problem disappeared, then added a few more.

At the suggestion of very knowledgeable ham in these matters I contacted Clear Signal. The fellow there suggested their 1:1 Current Balun to replace both my fan dipole's center insulator and the beads. No problems since.

The FairRite Snap On Ferrite Beads are available from

www.hamcity.com (Jun's Electronics) RCT-2 for RG-8X and LMR-240, other 0.240" dia coax. RCT-4 for LMR-400, 9913, RG-213, other 0.400" dia coax.

https://www.hamcity.com/store/pc/Chokes-RFI-c655.htm

http://www.newark.com/ferrite-beads?isRedirect=true

http://palomar-engineers.com/ferrite-beads Scroll down to Split Beads. FSB-1/4 is FairRite RCT-2. FSB-1/2 is RCT-4.

Also look here:

http://palomar-engineers.com/1-1-balun-kits

http://www.radiodan.com/Henry/parts/RF_chokes.htm

Paul - AE5JU

9458. Function of Shielded Receiving Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 03:47:46 UTC
From: jurgen.brac
Topic: 9458 Message: 9458

Hallo folks,
I hope, there are some "experts" in this group to answer me a fundamental question and help me understand how loops work.

As protection against noise generated by modern electronic devices shielding a loop is recommended. But ...

...the alu caps of IF transformers in a superhet receiver prevent electric AND magnetic coupling between adjacent stages. So, how can an electromagnetic wave penetrate the loop shield and induce a current in the loop wires ?
I know, there must be a gap in the shield at the top, but normally there is also a hole on top of the IF cap. And the gap is only just a few millimeters wide. A wave, lets say 80m, cannot creep inside through a small gap like that.
What happens, when both sides of the gap are just a fraction of a millimeter apart ?

Looking forward to receive your "sophisticated" explanations,
this is Jurgen from Germany.

9459. Re: [loopantennas] Function of Shielded Receiving Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 04:09:52 UTC
From: ve7sl@shaw.ca
Topic: 9458 Message: 9459

> As protection against noise generated by modern electronic devices
> shielding a loop is recommended. But ...

This is not the case. A shielded loop will not offer any shielding to external noise compared to any other type of loop. The shield refers only to the outer element...the one with the gap cut into it. The shield is in fact the actual 'antenna' part of the loop, not the inner conductor. Signals picked up by the shield are coupled into the one turn inner loop and then to the feedpoint.

Steve / 73

WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

9460. Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 09:56:09 UTC
From: Roberto
Topic: 9381 Message: 9460

Dear Chris,
I've built the circuit using two 2N3904, it's oscillating!

Thus, back to my LTSpice simulation now for checking transient behaviour (that is in time_domain for large signal) I found that instability affects such circuit configuration.

Therefore, if you simulate the behaviour in the frequency domain you get just small-signal response of the circuit and you cannot see this instability.

Look at my simulation result NIC_2N3904_INSTABILITY.pdf in the "Files" section, folder : LTspice_simulates_2-NPN_Neg_INDUCTANCE

I will send this result also by email, for your convenience...

Warmest ciao !

--- In loopantennas@yahoogroups.com, "Chris Trask" <christrask@...> wrote:
>
> >
> > Ciao !
> > I would try to build a breadboard of "small antenna" @ 27 MHz and I
> would
> > like to undertake two different options for active matching, to be
> compared as
> > follows :
> >
> > Option a) using MAX2180 (AM section) antenna amplifier
> >
> > Option b) using BFM505 for practical NIC circuits shown by Chris:
> > Fig.5 on pag.5 of "Active Negative Inductor" Report
> > http://home.earthlink.net/~christrask/Active%20Negative%20Inductors.pdf
> > Fig.6 on pag.5 of "Linvill feedback amplifier" Report
> > http://home.earthlink.net/~christrask/Linvill%20Feedback%20Amplifier.pdf
> >
> > I would be truly glad of receiving your advise
> >
>
> I have done a considerable amount of modeling to determine where the
> active negative inductors I described would work best. The usable bandwidth
> of the circuit of Fig. 5 is directly proportional to the embedding
> impedance. In other words, the usable bandwidth increases as the embedding
> impedance increases. There is a limit to this imposed by the transistors,
> and I found the for HF frequencies an embedding impedance of about 5 ohms
> works best.
>
> The combination I would recommend would be to use the negative inductor

> circuit in a balanced configuration, coupled in place of the varactors in
> Fig. 4 of my earlier paper on varactor-tuned loop matching networks:
>
> http://www.home.earthlink.net/~christrask/Paper011.html
>
> To make a balanced negative inductor for this application, add a third
> winding to transformer T2 of Fig. 5, using a trifilar twist of wires to
> ensure good coupling and balance. Be careful to get the correct phase
> connections when doing this. It might be prudent for me to add this
> application to the negative inductor paper as that was the intended use from
> the beginning.
>
> Chris
>

9461. New file uploaded to loopantennas

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 09:57:28 UTC
From: loopantennas@yahoogroups.com
Topic: 4 Message: 9461

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the loopantennas
group.

File : /LTspice_simulates_2-NPN_Neg-INDUCTANCE/NIC_2N3904_INSTABILITY.pdf
Uploaded by : robert_giusto <robert_giusto@...>
Description : Transient simulation with Spice shows circuit instability !

You can access this file at the URL:
http://groups.yahoo.com/group/loopantennas/files/LTspice_simulates_2-NPN_Neg-INDUCTANCE/NIC_2N3904_INSTABILITY.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

robert_giusto <robert_giusto@...>

9462. Re: [loopantennas] Function of Shielded Receiving Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 11:30:59 UTC
From: Jack Smith
Topic: 9458 Message: 9462

Steve:

Isn't it the case that in the "near field" of two antennas, the normal electromagnetic wave "far field" simplification fails and one must consider separately electromagnetic and reactive coupling between the two? Reactive coupling being magnetic and capacitive.

As I recall my electromagnetic engineering classes (and it's been > 45 years), the strength of these various couplings varies with 1/R (electric or magnetic field associated with a propagating EM signal; energy is 1/R^2) and with higher orders (1/R^2, etc.) for reactive coupling. Hence, the transferred energy falls off rapidly for the electric and magnetic coupling, so that by about 1/3rd wavelength or so, spacing from the antenna, the EM field predominates and the normal far field rules become increasingly accurate. Wikipedia has a decent overview of this phenomena at http://en.wikipedia.org/wiki/Near_and_far_field

This non-EM coupling is also known as evanescent-wave coupling.

Hence noise between two close spaced antennas - one being a receiving loop and one being associated with a noise source - will couple by both EM and reactive coupling. The capacitive portion of reactive coupling between the source and receiving antenna will be reduced by loop shielding. Electromagnetic coupling (via the usual transverse radiating electromagnetic field) won't be reduced. In some cases, the predominant coupling mechanism between a noise source and a receiving antenna is capacitive coupling. That's certainly not universally the case, but it is in a sufficient number of cases to make a loop useful in reducing local noise pickup for many loop owners.

If the noise source is "distant," (distant being more than roughly 1/3rd of a wavelength) then noise is transferred through electromagnetic radiation and the loop will respond to it just as it does to a legitimate signal. But I don't think that noise sources close to a shielded loop- separation within the near field - work quite the same way.

Jack K8ZOA

On 11/24/2012 11:09 PM, ve7sl@... wrote:
>
> > As protection against noise generated by modern electronic devices
> > shielding a loop is recommended. But ...
>
> This is not the case. A shielded loop will not offer any shielding to
> external noise compared to any other type of loop. The shield refers
> only to

> the outer element...the one with the gap cut into it. The shield is in
> fact
> the actual 'antenna' part of the loop, not the inner conductor. Signals
> picked up by the shield are coupled into the one turn inner loop and
> then to
> the feedpoint.
>
> Steve / 73
>
> WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl
>
>

9463. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 13:51:42 UTC
From: Chris Trask
Topic: 9381 Message: 9463

>
>Dear Chris,
> I've built the circuit using two 2N3904, it's oscillating!
>
> Thus, back to my LTSpice simulation now for checking transient behaviour
> (that is in time_domain for large signal) I found that instability affects
> such circuit configuration.
>
> Therefore, if you simulate the behaviour in the frequency domain you get
> just small-signal response of the circuit and you cannot see this instability.
>
> Look at my simulation result NIC_2N3904_INSTABILITY.pdf in the "Files"
> section, folder : LTspice_simulates_2-NPN_Neg_INDUCTANCE
>
> I will send this result also by email, for your convenience...
>

This may be due to mismatch of the transistors. If the emitter resistance of the second device is larger than that of the first device you'll end up with a negative input resistance. Try adding a small resistance in series with the emitter of the first device.

Chris

9464. Re: [loopantennas] Function of Shielded Receiving Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 14:10:10 UTC
From: Chris Trask
Topic: 9458 Message: 9464

>
> Hallo folks,
> I hope, there are some "experts" in this group to answer me a fundamental
> question and help me understand how loops work.
>
> As protection against noise generated by modern electronic devices shielding
> a loop is recommended. But ...
>

I have a paper in the group files section by the title "Mastering the Art of Shielded Loop Aerials" (file name is Shielded Loop Aerials Rev 0.pdf) which discusses the noise immunity properties of the shielded loop.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

9465. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 17:03:07 UTC
From: Roberto GIUSTO
Topic: 9381 Message: 9465

Dear Chris, the circuit is oscillating even using its SPICE model (for transient simulation), actually in these simulations the two transistors are identical.
  Looking forward receiving your comments and suggestions Warmest regards,
  Roberto

--- Dom 25/11/12, Chris Trask <christrask@...> ha scritto:

Da: Chris Trask <christrask@...>
Oggetto: Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors
A: loopantennas@yahoogroups.com, loopantennas@yahoogroups.com
Data: Domenica 25 novembre 2012, 14:51

>

>Dear Chris,

> I've built the circuit using two 2N3904, it's oscillating!

>

> Thus, back to my LTSpice simulation now for checking transient behaviour

> (that is in time_domain for large signal) I found that instability affects

> such circuit configuration.

>

> Therefore, if you simulate the behaviour in the frequency domain you get

> just small-signal response of the circuit and you cannot see this instability.

>

> Look at my simulation result NIC_2N3904_INSTABILITY.pdf in the "Files"

> section, folder : LTspice_simulates_2-NPN_Neg_INDUCTANCE

>

> I will send this result also by email, for your convenience...

>

This may be due to mismatch of the transistors. If the emitter resistance of the second device is larger than that of the first device you'll end up with a negative input resistance. Try adding a small resistance in series with the emitter of the first device.

Chris

9466. Re: [loopantennas] Function of Shielded Receiving Loop

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 17:56:40 UTC
From: ve7sl@shaw.ca
Topic: 9458 Message: 9466

GM Jack - I think that many amateurs struggling in today's growing noise fields often look to the 'shielded' loop as a possible cure for their rising noise floors (particularly for MW and LF) as it would seem a logical assumption based upon its name. There is no doubt an analytical case to be made for some specific types of closely coupled noise sources but in general, and it has been my practical experience as well, that my shielded loops offered no distinct advantages over my multi-turn air core loops when it came to neighborhood noises. Unfortunately I cannot speak from an engineering background but my understanding of these things is that in order to function at their best, construction tolerances need to be of a very high standard as well as the method of coupling, matching and feeding so as to maintain perfect balance throughout the system. With the amount of noise source crud flooding backyards nowadays, I think it would be almost impossible to determine which type of noise source might respond to high-tolerance loop construction, if any, and which would not. The ability to turn and null certain point sources might make the shielded loop builder a believer but I think in most cases, the same results could be achieved with air core as well. Perhaps my shielded loops were just too large or not as electrically balanced as I have tried to make them but this has been my experience over the past several years of using loops on LF.

Steve / 73

WEB - "The VE7SL Radio Notebook": http://members.shaw.ca/ve7sl

9467. Re: [loopantennas] Re: Dual Transistors for Active Negative Inductors

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 19:35:24 UTC
From: Chris Trask
Topic: 9381 Message: 9467

>
>Dear Chris,
>the circuit is oscillating even using its SPICE model (for transient
>simulation), actually in these simulations the two transistors are
>identical.
> Looking forward receiving your comments and suggestions
>

What is the frequency of the oscillation? My simulation shows that there is a moderate potential for instability around 40MHz or so using the 2N3904. The solution to this is to place a resistor in parallel with the reference inductor.

Chris Trask
N7ZWY / WDX3HLB
Senior Member IEEE
http://www.home.earthlink.net/~christrask/

9468. 140 ft loop plus Vertical

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 02:30:20 UTC
From: yioutta_99
Topic: 9468 Message: 9468

Hi,

I am new to the group and have a question. i have a 145 foot loop that i use on 20 meters. My signal goes Nw to SE. today i put up a 20 meter vertical dipole on the north side of the loop. The loop is a delta (3 corners) and is on a diagonal plane to the ground. The vertical is on the opposite side of the feed point corner of the loop. With both Antennas hooked up in parrell, i get a good 1.3:1 SWR and some good signal reports, but I have no idea what my pattern looks like. Is there a modeling software (freeware) that I can check this out on? Has anyone done this before?

Thanks

Steve

9469. loop antenna - has to be in resonance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 08:33:36 UTC
From: Vojtech
Topic: 9469 Message: 9469

Hello.

I modeled a loop antenna with lumped components in LTspice. My loop is matched the same way as at the last picture on
http://www.w8ji.com/magnetic_receiving_loops.htm
Some call the matching a "voltage divider", although I doubt it works that way.

The loop element was modeled the simplest way as an impedance with series resistance. The result of simulation was, there is a parallel resonance of a very high real impedance at the antenna terminals and there is a series resonance of a low impedance. With careful tuning of both capacitors it is possible to achieve matching to 50 Ohms in series resonance. My understanding is, the loop is tuned by the parallel capacitor sidewise from its resonance frequency to act as an inductor, which is then resonated by the series tuning capacitor. My understanding is, there is little energy exchanged between the loop element and the parallel capacitor forth and back, the majority of energy bouncing happens between the loop element and the series capacitor. I suppose this is a bit naive observation, is it valid?

The results seem to be counter intuitive to me. Usually the loop is resonated to achieve parallel resonance, then the very high impedance is transformed to 50 Ohms with a secondary loop. This circuit certainly does not work the way it is often explained, that the matching tuning capacitor is a voltage divider to match the 50 Ohm real impedance to the loop in parallel resonance.

Is it required that the loop itself is tuned to resonance for the loop antenna to radiate?

I find it interesting that there are little experiments published trying to feed the loop at the capacitor side by transforming the high impedance down. Is it such a technical problem to wind a series of ferrite transformers?

Thanks and 73,
Vojtech OK1IAK

9470. Re: 140 ft loop plus Vertical

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-25 23:09:37 UTC
From: riccardodematteis
Topic: 9468 Message: 9470

this one
http://hamsoft.ca/pages/mmana-gal.php
and this one
http://home.ict.nl/~arivoors/

--- In loopantennas@yahoogroups.com, "yioutta_99" <yioutta_99@...> wrote:
>
> Hi,
>
> I am new to the group and have a question. i have a 145 foot loop that i use on 20 meters. My signal goes Nw to SE. today i put up a 20 meter vertical dipole on the north side of the loop. The loop is a delta (3 corners) and is on a diagonal plane to the ground. The vertical is on the opposite side of the feed point corner of the loop. With both Antennas hooked up in parrell, i get a good 1.3:1 SWR and some good signal reports, but I have no idea what my pattern looks like. Is there a modeling software (freeware) that I can check this out on? Has anyone done this before?
>
> Thanks
>
> Steve
>

9471. Re: [loopantennas] loop antenna - has to be in resonance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-26 17:12:59 UTC
From: Andy
Topic: 9469 Message: 9471

Many questions. I am probably not qualified to answer most of them.
But on this one:

> Is it required that the loop itself is tuned to resonance for the loop antenna to radiate?

No. That is a common (mis-)belief, but I assure you it is not true.
All wires carrying currents radiate, whether resonant or not.
Non-resonant antennas can and do make excellent radiators.

People like to tune them to resonance partly because it makes them
feel good, and partly because it is one step towards getting a nice
impedance for the feedline, and/or matching to the transmitter.
Having a large reactive component means the VSWR is not good, so
transmission line losses are higher.

(Even if it were somehow true that the loop element had to be resonant
in order to radiate, how would you accomplish that? The only way
would be to get out there and trim or add more wire, every time you
QSY. Adding a capacitor doesn't count. It doesn't alter the
resonance of the element itself. It just provides another path for
current to take *around* the radiating element. It changes the
appearance of resonance when looking from the feedline, but it does
not make the loop itself resonant. The loop doesn't know that there
is a capacitor there, all it knows is about the signal driving its
terminals, so it can't change whether or not it radiates based on
whether there is a capacitor or some other stuff connected to the
signal source.)

> I modeled a loop antenna with lumped components in LTspice.

I am puzzled how you did that. How did you represent the impedance of
the loop itself, which is changing vs. frequency? Depending on how
well you modeled that (it's not just a plain simple inductor, its size
is much too large for that), your simulation results might not very
well represent reality. People generally turn to tools such as NEC to
see what the antenna itself looks like, electrically.

> My understanding is, there is little energy exchanged between the loop
> element and the parallel capacitor forth and back, the majority of energy
> bouncing happens between the loop element and the series capacitor.
> I suppose this is a bit naive observation, is it valid?

My guess is: maybe, maybe not. It depends on the relative values of C1 and C2.

But I'm not sure if it matters.

I think in some cases it could be correct to think of the capacitors as a kind of lossless (well, low-loss) voltage divider. But it's not a simple voltage division either and you can get more voltage out than input. The point is, it's an impedance matching device, with two degrees of freedom, and two degrees of freedom are necessary to match complex impedance.

Andy

9475. Re: (unknown)

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-28 17:18:42 UTC
From: AlienRelics
Topic: 2236 Message: 9475

Please don't repost the link.

Steve Greenfield AE7HD

--- In loopantennas@yahoogroups.com, Chris Trask <christrask@...> wrote:
>
> >
> >http://almalivre..........ent/yepyepop.php
> >
>
> Ah, spammed again!
>
> Chris
>

9476. Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-29 09:37:32 UTC
From: y.almuhandesa
Topic: 9476 Message: 9476

Hi:
I need help to design a circle loop antenna to receive frequencies (150-350)kHz long wave
SWR=1
[email] y.almuhandesa@...[/email]

Thanks.

9477. Re: loop antenna - has to be in resonance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-11-30 15:00:45 UTC
From: Bruce Carter
Topic: 9469 Message: 9477

I have done some of this for wireless keyboards and mice operating at about 27 MHz.

First of all, you have to realize that there is NO reason to match to 50 Ohms at the receiving end. A box loop antenna is an inductor and capacitor in parallel, and will have a relatively high impedance (usually 3 to 5 k) on the real axis of a Smith Chart. But as long as the gain stage that follows has at least 10 time higher input impedance, the losses due to mismatch are negligible. This is true for all RF circuits - as long as you have a low impedance driving a high impedance, you will have little or no reflection, low SWR, and matching is not required.

Your application, of course, is transmit. Because your RF amplifier is probably designed to drive 50 Ohm loads, you are stuck with matching. Here is how I did it.

First determine the capacitance to resonate your loop exactly. This will put your box loop on the real axis, way to the right. It should be in the 3 to 5k range.

Back off on your capacitance to raise the point on the Smith Chart to about 20 degrees off axis.

Add a fixed resistor in series with the parallel RC until you get to the circle that will pass through 50 Ohms (most of the time normalized to "1" on the real axis) - the exact center of the chart.

Add a capacitor in parallel to the series R / parallel LC circuit to bring the resonance though the center of the Smith chart.

This is all from memory, from stuff I did 6 or 7 years ago, but I think that is how I did it. Done right, you will hit exactly 50 Ohms at your resonant frequency and energy transfer will be great into your antenna. You are doing a variation of this with your capacitor in series, the fixed resistor is a bit counter intuitive but believe me it works.

9478. Re: [loopantennas] Re: loop antenna - has to be in resonance?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-01 00:49:04 UTC
From: Andy
Topic: 9469 Message: 9478

> ... This is true for all RF circuits - as long as you have a low
> impedance driving a high impedance, you will have little or no reflection,
> low SWR, and matching is not required.

Well, no, that is not true.

If there is some amount of transmission line (coax, feedline, etc.), and if it is a low impedance line driving a high impedance load, then you WILL get reflection, and high SWR.

But if the line lengths are short and the frequencies low enough so that the length is electrically short, then you can treat it as a low frequency circuit, and then the SWR that is on that short line may not bother you. Then, you can get maximum voltage at the load by connecting a high impedance load to the low impedance source. But you still do not get maximum power transfer except when the impedances match.

For reception of radio signals sent short distances, impedance mismatches (and consequent reception inefficiency) is OK because your received signals are so strong.

When the received signals are weaker, like they usually are in radio communications, it's a different story. We can often tolerate the mismatch+inefficiency on MF and HF because the atmospheric noise tends to dominate the signal-to-noise and everything is greater than the receiver's own noise, so some loss in received power (due to the mismatch) doesn't hurt the S/N ratio. But once you get up into VHF and above, you really need to match impedances between antenna and receiver because the receiver's noise is the limiting factor. A mismatch between the antenna and receiver causes signal loss and degraded S/N, and likely inability to receive weaker signals that you should have been able to receive.

> Add a fixed resistor in series with the parallel RC

I am guessing you meant to write inductor or capacitor, not resistor.

Andy

9479. File - Links.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-01 16:46:46 UTC
From: loopantennas@yahoogroups.com
Topic: 5136 Message: 9479

Active AM Antenna With Twin Coil Ferrite by C. Crane Co.
http://www.ccrane.com/antennas/am-antennas/

JLKolb?s antenna links including the KRS AA-1 Active Antenna schematic, antenna preamplfiers, center-tapped loops, and a dual gate FET preselector.
http://jlkolb.cts.com/site/ant.htm

Directional Terminated MW/LW Loop by WellBroook (UK)
K9AY is the Remote Controlled Variable Termination; Provides a Cardioid Reception Pattern with up to 30dB Gain Front-to-Back; Uses Two Delta Loops.
http://www.wellbrook.uk.com/K9AY.html

Kiwa - High Performance MW Air-Core Loop Antenna
High Performance MW Air-Core Loop Antenna by KIWA
http://www.kiwa.com/kiwaloop.html

Palomar Engineers Loop Antennas LW-MW-SW2
Palomar's Loop Antenna gives superb performance on the AM medium-wave broadcast band. The loop rotates and tilts to give deep nulls so you can eliminate local interference. It also allows you to null out a station and listen to another one on the same frequency.
http://www.palomar-engineers.com/Loop_Antenna/loop_antenna.html

The Quantum loop antennas, now V2.0
http://www.dxtools.com/

Terk AM loop at Amazon.com
Here is a place you can buy yourself a TERK AM loop antenna, even some other stuff that is kind of off topic to talk about. 73
http://www.amazon.com/exec/obidos/ASIN/B000069EUW/qid=1075080062/sr=2-1/ref=sr_2_1/102-8712984-4397719

WL1030 by the late Maartenhagg. Plans placed on this website by his friends in his honor.
http://wl1030.com/content/

C Crane Company
They sell the Justice AM Loop Antenna, Select A Tenna, Terk AM 1000
http://www.ccrane.com

Kiwa Electronics
Kwia makes the best products for you and your radio equipment, and also improves things that needed improvement a long time ago.
http://www.kiwa.com

Stormwise Ferrite Rods
Get some huge ferrite rods and a converter to go along with its, heck it even comes with project book.
http://www.stormwise.com

Universal Radio Company
They sell all sorts of loops big and small for LW/MW/SW and VLF also 10 kHz to 15 MHz
http://www.rffun.com

ALA-1530
Find the best UK LF/MF antenna here.
http://www.wellbrook.uk.com/

AOR
This is the site that sells the AOR loop
http://www.aorja.com/ant-e.html

Kiwa Electronics
The maker of the air core loop antenna and other useful items that you may want on your wish list.
http://www.kiwa.com

LF Engineering Company
A group of engineers, who make products for VLF/LF listening even ELF loops!
http://www.lfengineering.com

Select A Tenna by Intensitronics Corp
The maker of the select A tenna, a great AM loop antenna that is a little bigger than the terk
discontinued

Terk Technolegies
The maker of the best sold AM and I use also called the AM-1000 AM loop antenna, there is also technical information on how it works.
http://www.terk.com

Torus Tuner Loop Company
A very specially made loop that is almost as big as a hula hoop
discontinued

GRAHN (Germany) Specialized Loop Antennas for MW and SW Reception Contributed by radiohighfreq
Grahn offers both Ferrite Rod Antennas and Shielded Loop Antennas. Translated from the Gremany Language Webpages here is the "Grahn Specialized Loop Antennas for MW and SW Reception" ULR Address: http://www.grahn-spezialantennen.de/
Use the Google Translate a web Page Tool http://www.google.com/language_tools to convert these webpages to English.
http://makeashorterlink.com/?Z5F025FE4

When considering AM Loop Antennas . . .
- - - It all comes down to Time? & Money?

How much Time? Are you going to be 'using' the Loop Antenna for DXing or simply for "Better" AM Radio Reception (Sports/Talk Radio Loop).

How Much Money? Are you willing to spend for a Loop Antenna to get the kind of better reception you want.

TBL: Time and Money translates to the AM Loop Antenna's Value to You.

The average radio listener (97%), who wants better AM Radio Reception, can spend $100 or less and get an AM Loop Antenna that meets their needs.

Here is a brief list of the more common AM Loop Antennas for $100 or less.

* Twin Coil Ferrite AM Loop Antenna (Active)
- - - http://www.ccrane.com/antennas/am-antennas/

* Torus Tuner 27" Loop Antenna (Passive)
- - - discontinued

* Select-A-Tenna Model #541M (Passive)
- - - discontinued

* Terk AM Advantage Loop Antenna (Passive)
- - - http://www.terk.com/pdfs/Advantage.pdf

* RadioShack AM Loop Antanna # 15-1853 (Passive)
- - - Discontinued (Find 'used' on eBay)

* MTM Scientific AM Radio Loop Antenna (Passive)
* http://www.mtmscientific.com/loop.html
- - - Starter Kit, Deluxe Kit or Finished Antenna!

* * * Home made 'Box' AM Loop Antennas
- Usually 20" to 24" in size
- - Generally a simple Passive antenna
- - - Can be made Active with an add-on amplifier

#1. * Justice AM Loop Antenna (Active)
> - - - discontinued
>

#2. * Torus Tuner 27" Loop Antenna (Passive)
> - - - website gone
>

#3. * Select-A-Tenna Model #541M (Passive)
> - - - website gone
>

#4. * Terk AM Advantage Loop Antenna (Passive)
> - - - http://www.ccrane.com/antennas/am-antennas/
>

#5. * RadioShack AM Loop Antanna # 15-1853 (Passive)
> - - - Discontinued (Find 'used' on eBay)

>
> * MTM Scientific AM Radio Loop Antenna (Passive)
> * http://www.mtmscientific.com/loop.html

> - - - Starter Kit, Deluxe Kit or Finished Antenna!
>
> * * * Home made 'Box' AM Loop Antennas
> - Usually 20" to 24" in size
> - - Generally a simple Passive antenna
> - - - Can be made Active with an add-on amplifier
>
>
> NOTE: Beyond $100 in the $200 to $400 range are the
>

#1.a. Kiwa MW Air Loop Antenna

#1.b. Quantum Loop Antennas

. . . #3. Palomar Loop Antenna

Basic Wire Back Yard Loop Antennas
Full-wave loops are very popular antennas. They are especially useful on 80 and 40 meters where they perform well at modest heights. These are closed loops that are one full wavelength long. Horizontal loops may be fed at any convenient spot. For best performance, make your horizontal loop into a square, especially if it is to be used on several bands.
http://www.radioworks.com/nloop.html

K9AY: How to Build the K9AY Loop Receiving Antenna
AY Technologies Antennas by K9AY. Excellent Antenna for Medium Wave Frequency DXing.
http://www.aytechnologies.com/Products/products.htm

Six Foot Square by Six Turn Loop Antenna
New Mid-Size Loop Antenna by Graham Maynard with Matching Balanced Amplifier: Frequency Range 50KHz - 5000KHz.
http://www.zen22142.zen.co.uk/Circuits/rf/6x6loop.htm

Ten Foot Receiveing Loop for Low-Frequency DXing
A Page out of VE7SL's Note Book. This 10 Ft. Air-Core Receiving Loop was originally designed and constructed for NDB DXing and now is used for LOWFER DX work.
http://members.shaw.ca/ve7sl/loop.html

Dave's HomeMade Loop Antennas
This is the loop antenna my dad built in 1958. Although I was only 8 years old at the time, I knew what this was for and how it worked. WebSite/Pages produced by Dave Schmarder Page Contributed by radiohighfreq
http://www.schmarder.com/radios/misc-stuff/loops.htm

4 Foot Box loop antenna
Heres a 4 foot loop project by Bruce
http://www.mindspring.com/~brucec/loop2.htm

ATL-3 Loop Antenna by Graham Maynard (UK)
Loop & Amp Project: ATL-3 Loop Windings are in the Shape of a Five 26" Sided Spiral
http://www.zen22142.zen.co.uk/Circuits/rf/atl3.htm

Alt-Azimuth Wooden "HOOP LOOP" Antenna by Linus
The Great Pumpkin" Speaks on "How To Make" a Loop Antenna from a Wooden Embroidery Hoop. Read the Exciting Saga of his journey in to the Kingdom of Hooppy-Looppy-Dom presented by RadioIntel.Com.
http://www.radiointel.com/anthooploop.htm

DXers Tool Box - DIY - Tuned Loop Antenna
The DXers Tool Box "How To Build" a Tuned Loop Antenna = How can you vastly improve your Medium Wave reception? The antenna consists of an LC (tuning) circuit formed by the air-core loop and a tuning capacitor.
http://www.geocities.com/SunsetStrip/Underground/8585/loop.html

Embrodary Loops
While these loop are for crafts, they can be a craft of art for improved AM radio reception!
http://www.craftking.com/crafthtml/embroidery_loops.htm

Hard Core DXing
Here's what nordic dx has to offer in their discription of loops in this website
http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

K5DKZ - Three Foot Box Loop Antenna Kit
Complete Parts and Plans for a 3 Ft Box Loop Antenna "Kit" ~$85+SH
http://www.k5dkz.com/4loop1.html

KIT -by- MTM Scientific, Inc. -for- AM Radio DX Loop Antenna
KIT =//= Designed to Build an AM/MW Radio DX Loop Antenna =//= Offered by MTM Scientific =//= Deluxe Loop Antenna Kit: Includes ALL the Hardware for Building this AM/MW Radio DX Loop Antenna.
http://www.mtmscientific.com/loop.html

Long LoopStick Antenna for MW DXing
Wound on a Three (3) Foot Length of PVC pipe, the "Long LoopStick Antenna" was an experiment to try to improve AM radio reception without using a long wire or ground.
http://ourworld.compuserve.com/homepages/Bill_Bowden/page2.htm

TL Loop Receiving Antenna 10 KHz - 30 MHz
The principle of operation is that an rf voltage appears across the terminals of a loop when it is placed in an electromagnetic field. The voltage is proportional to frequency for a given field strength and so at Very Low Frequencies the voltage is very small and requires greater amplification but it is not quite as simple as that. The new TL Loop uses a unique feedback system to optimise the amplification/noise factor over a much wider range than has been possible hitherto.
http://ecforster.netfirms.com/LpAnt/Doc1.html

W2BRI Xmit Loops Contributed by n3hkn
Ham Radio xmitting loops. Detailed plans and reports from Hams experiences. Typical cost is $50 for pipe, capacitor, motor.
http://www.standpipe.com/w2bri/index.htm

"AM Loop Antenna Calculator" - by Bruce Carter
Here is a Great Tool for those Loop Antenna => "What Ifs...."
http://www.mindspring.com/~loop_antenna/amloop_calc4.htm

"Loop Antennas 101" Read This First
Minnesota DX Club's Loop Antenna's web page that is a 'Must Read' =Says It All= A Starting Point Class 101- - - TOPICS: Principles of the Loop Antenna - What is a Loop and Why Use It - Construction Principles - What Can I Use a Loop For - Loops Another Look - Pictures of Home Built PVC loops - Loop Links
http://www.frontiernet.net/~jadale/Loop.htm

* NEW => 2002 AM Loop Antenna Construction "Tips" by Bruce Carter
Introduction / Why Another Loop Antenna Page? / Mathematics of Rectangular Loop Antennas / Construction Articles / Loop Antenna (and Related) Links
http://www.mindspring.com/~loop_antenna/

Loop Antennas at Hard Core DX
TABLE: Number of Turns -v- Size of Loop in the Middle of this webpage.
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Loops and Rods =&= The Ferrite Rod Antenna
Theory / Formulas / Drawings = The use of a small Magnetic Loop as an antenna. The ferrite has the effect of intensifying the magnetic field inside the loop.
http://www.st-andrews.ac.uk/~www_pa/Scots_Guide/RadCom/part7/page5.html

Modify the common AM Radio Loop Antenna
Hard-Core DX & Nordic DX = Topics: Install Larger Ferrite Rod - Fix External Antenna -Add a Long Wire - Or a Loop - Construct it - Connect it - Add an Amplifier. Presented by Bruce Carter
http://www.hard-core-dx.com/nordicdx/antenna/loop/amloop.html

Sensitivity of Multi Turn Receiving Loops
LWCA - Multi turn wire loops are often used as low frequency receiving antennas. Basic electromagnetic theory is developed here as it relates to electrically small multi-turn loops at low frequencies. - Presented by William E. Payne, N4YWK
http://www.vlf.it/octoloop/rlt-n4ywk.htm

Using the Small Loop Antenna by Joe Carr
DXing.Com presents Joe Carr's Radio Tech Notes: Eight Page PDF Document provided by Universal-Radio.Com
http://www.dxing.com/tnotes/tnote09.pdf

How to Get Better AM Radio Reception
Features Loop Antennas and much more. The Antenna is 90% of Your Radio. Still Need More Signal? Try a Better Antenna.
http://geocities.com/SunsetStrip/Towers/3332/amradio.html

Introduction to Broadcast Band AM/BCB/MW DXing
The International Radio Club of America (IRCA) WebPages
http://www.geocities.com/Heartland/5792/bcbdx.htm

** Radio-Antenna-PRO ** H.Hertz-Forum
Remember you may need some Russian Text software for this groupThe international forum for radioengineers, scientists and hams. All about radioelectronics, radiocommunications, radiophysics, electrodynamics. About 250 members from 20 countries. In Russian language. Very active. Lot of interesting researches and discussions.
http://groups.yahoo.com/group/Hz/

Radio DXing with The Interference Problem
This is great for that annoying problem you have with your loop antenna, and you may think its the loop, think again it could be that messed up street light, next doors dimmer switch, and other something else you can't probably solve with just a loop antenna.
http://groups.yahoo.com/group/RadioDx/

"3805er" 80-Meter balanced coax loop
Small shielded rx only loop for 80 meters
http://www.seed-solutions.com/gregordy/Amateur%20Radio/Experimentation/3805er.htm

Magnetic Loop Antennas Receiving - by W8JI
This WebPage's Topic Are: - Small Receiving Loops - Loop Antenna Fields - Dipole Antenna Fields - Radiation - Loop Shielding and Balance - by W8JI
http://www.w8ji.com/magnetic_receiving_loops.htm

Radiation and Fields (Magnetic Loop Antennas) - by W8JI
This WebPage's Topic Are: - Electric Field - Magnetic Field - ElectroMagnetic Field - Near the Antenna - Losses - Near Field - Fresnel Zone - Farfield - Summary - by W8JI
http://www.w8ji.com/radiation_and_fields.htm

Shielded-Loop Receiving Antenna by N5FC
Shielded-Loop antennas have some nice properties that make them desirable as portable receiving antennas.
http://www.io.com/~n5fc/loop_ant.html

Antique Electronic Supply
A sorts of older variable tuning capacitors for your loop antenna that needs one bad.
http://www.tubesandmore.com

Fair Radio Sales
A wide variety of electronic components, radios, and variable capacitors for your loop antenna
http://www.fairradio.com/

Ocean State Electronics
Rhode Island's best selection for a wide variety of the best tuning capacitors for reasonable price, tell them that electronicdx (Adam Ebel) sent you.
http://www.oselectronics.com/ose_p96.htm

The Crystal Set Society
Here are some capacitor available from a club that devotes to Crystal Set Radio
http://www.midnightscience.com/catalog5.html

The Surplus Sales of Nebraska
This surplus store based in the state of Nebraska, has the one you might need, but they have minumim order policy
http://www.surplussales.com/Variables/AirVariables/AirVar1.html

Dan Small Parts and Kits
Dan's wide selection from Canada.
http://www.danssmallpartsandkits.net/

American Science and Surplus
A big spool of wire here just about for AM

http://www.sciplus.com/category.cfm?subsection=15&category=150

DigiKey.com
For ribbon cable and other sorts of wire.
http://www.digikey.com

Femco Magnet Wire
Femco Magnet Wire is a joint venture company that has been supplying round insulated copper magnet (winding) wire to the transplant market since 1988.
http://www.femcomagnetwire.com/

Litz-Wire,com
Welcome to Litz-Wire.com!
http://www.litz-wire.com/

MCM electronics
They do sell wire and magnet wire here
http://www.mcmelectronics.com

MWS Industries
A place for all sorts of wire for business and industry
http://www.mwswire.com

Magnet Wire from Radio Shack
This is what I use often
http://www.radioshack.com/product.asp?catalog%5Fname=CTLG&category%5Fname=CTLG%5F011%5F010%5F004%5F000&product%5Fid=278%2D1345

Mouser Electronics
Mouser has the biggest spools here for a great price, that makes sense
http://www.mouser.com

Ocean State Electronics
magnet wire at a good price
http://www.oselectronics.com

WIRE "Flex-Weave" Antenna Wire
"Flex-Weave" is a hybrid aerial wire that consists of 168 strands of woven #36 solid copper wires that provide high strength and extreme flexibility. The most popular version of "Flex-Weave" is the 'equivalent' of #14 AWG wire size. It can be 'used' for unsupported spans up to 200 ft (100-150 ft in areas with high ice and wind loading).
http://www.radio-ware.com/products/fw.htm

WIRE "QuietFlex" Antenna Wire by Antennas & More: Insulated, Strong, Flexible and Durable
"QuietFlex" Antenna Wire by Antennas & More: "QuietFlex" #14 AWG Wire has more than 41 Strands tightly twisted together under its Flexible Insulation making it both Strong, Flexible and Durable.
http://www.antennasmore.com/wire&.htm

Scanning, Ham Radio and Public Safety Resources
- Links to the various webpages with resources for the Ham Radio Operator and Scanning Enthusiast. Resources such as; Monitoring Police and Fire Communications, What Antennas to use, Secret Scanner Frequencies, Radio Programming Software, Radio Mods and Operating

Tips, Professional resources for Public Safety Management, Guidance and Self-Help.
http://myweb.accessus.net/~090/resources-ps.html

Amidon Ferrite rods, bars, plates, and tubes.
https://www.amidoncorp.com/

Bytemark Ferrite rods, bars, plates, and tubes.
http://www.bytemark.com/products/rod1.htm

9480. File - UploadingFilesLinksPhotos.txt

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-01 16:46:46 UTC
From: loopantennas@yahoogroups.com
Topic: 457 Message: 9480

If you have a link relevant to the group, please post it in the Links section. If you just put it in a message, it will get lost in the shuffle after a few days. The coverage of the list is pretty broad.

All members can upload Links, Files, and Photos.

A few guidelines:

Try to place them in the proper folder, if it exists. If not, you can either just put it in the root folder and eventually I'll move it into the proper place, or create a folder.

When creating a folder or uploading a file or photo, please don't use spaces or punctuation. You can either use caps for the first letter of each word, or use underscore as a space.

Like this: "4x8Loop" or "4x8_loop" or "Steves_4x8_Loop"

Not like this: "Steve's 4 x 8 Loop." That goes for Folder names and File names.

A special note about the Photos section: Please crop in to the important parts. For photos, JPG saves smaller and looks better, for line drawings GIF is smaller and looks better. Please do not use TIFF/TIF or BMP files, the file size is way too big and I may delete without notice.

Feel free to ask if you need help figuring out how to crop and resample. Irfanview is a fairly easy to use program that loads just about any file, you can crop and resample from there: http://www.irfanview.com

Or for more complex stuff, another free program is GIMP: http://www.gimp.org

Attachments are now allowed, but please use judiciously. Rather than going out with the messages, they will be stored on the list but you'll get a link with the message.

A last note: if you see something in any folder or in the messages that looks like spam or simply inappropriate, don't post on the list- email me directly and tell me about it and I'll take care of it with a minimum of fuss.
loopantennas-owner@yahoogroups.com

Thanks,
Steve Greenfield

9481. Re: Question

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-04 20:06:37 UTC
From: jurgen.brac
Topic: 9476 Message: 9481

> loop antenna to receive frequencies (150-350)kHz long wave SWR=1

What do you need that SWR=1 for ?

Jurgen

9482. Re: 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-09 18:42:21 UTC
From: Kuby
Topic: 8285 Message: 9482

Wow, a Loop-Group and so few with information to share....

It must be that 160/80m Loops are so complicated and take so much work to put up that there are so few HAMs using them.

****
Has anyone 'modeled' or "USE" a full wave 160m loop? Using 450 ladder-line or coax?

My desire is to install a square 160m loop with ~75' of 450 ladder. The loop will almost be a prefect E/W-N/S square with the ladder-line coming off mid-east leg.

I'd like to know what the pattern will be with the loop 15', 20', 25', 30', 35' off the ground for the various bands? What the optimal height for this Loop for DX distances or USA distances.

I intend to install an Ugly-balun to see the cause-n-affects.

Does anyone have a 160m loop up? How high off the ground? How fed?
How does it work? Pro's & con's in using/building?

From what I've heard there may be some compromise in TX but it is a screamer on RX over all wires antennas (except multi-wave Rhombic).

--- In loopantennas@yahoogroups.com, <n6jsx@...> wrote:
>
> Anyone have a 160m loop up? How high off the ground? How fed?
>
> How does it work? Any pro's, con's methods in using/building?
>
> Anyone model a 160m loop using 450 ladder line feed?
>

9483. Re: [loopantennas] Re: 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-09 19:10:37 UTC
From: Jim Bo
Topic: 8285 Message: 9483

Kuby,

Search the group and see my input ref UGLY balun. Not only are they UGLY, they don't work unless you have a method of measuring what they are actually doing.
----- Original Message -----
From: Kuby
To: loopantennas@yahoogroups.com
Sent: Sunday, December 09, 2012 10:42 AM
Subject: [loopantennas] Re: 160m Loop: pro's, con's, model's, build

Wow, a Loop-Group and so few with information to share....

It must be that 160/80m Loops are so complicated and take so much work to put up that there are so few HAMs using them.

****
Has anyone 'modeled' or "USE" a full wave 160m loop? Using 450 ladder-line or coax?

My desire is to install a square 160m loop with ~75' of 450 ladder. The loop will almost be a prefect E/W-N/S square with the ladder-line coming off mid-east leg.

I'd like to know what the pattern will be with the loop 15', 20', 25', 30', 35' off the ground for the various bands? What the optimal height for this Loop for DX distances or USA distances.

I intend to install an Ugly-balun to see the cause-n-affects.

Does anyone have a 160m loop up? How high off the ground? How fed?
How does it work? Pro's & con's in using/building?

From what I've heard there may be some compromise in TX but it is a screamer on RX over all wires antennas (except multi-wave Rhombic).

--- In loopantennas@yahoogroups.com, <n6jsx@...> wrote:
>
> Anyone have a 160m loop up? How high off the ground? How fed?
>
> How does it work? Any pro's, con's methods in using/building?
>
> Anyone model a 160m loop using 450 ladder line feed?
>

9484. Re: 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-09 20:10:00 UTC
From: Kuby
Topic: 8285 Message: 9484

I've had quit the contrary, high SUCCESS with UB's. I'm even trying to get the math formula for optimizing UB's for specific bands or range of multi-bands. We all have opinions - mine come from 'real' UB use.

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> Kuby,
>
> Search the group and see my input ref UGLY balun. Not only are they UGLY, they don't work unless you have a method of measuring what they are actually doing.

9485. Re: [loopantennas] Re: 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-09 21:44:02 UTC
From: Jim Bo
Topic: 8285 Message: 9485

Have you measured one with an analyzer??

It is not an opinion, it was measured. I have the data/scans if you are interested.

What is your "real" data say?

Jim

----- Original Message -----
From: Kuby
To: loopantennas@yahoogroups.com
Sent: Sunday, December 09, 2012 12:10 PM
Subject: [loopantennas] Re: 160m Loop: pro's, con's, model's, build

I've had quit the contrary, high SUCCESS with UB's. I'm even trying to get the math formula for optimizing UB's for specific bands or range of multi-bands. We all have opinions - mine come from 'real' UB use.

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> Kuby,
>
> Search the group and see my input ref UGLY balun. Not only are they UGLY, they don't work unless you have a method of measuring what they are actually doing.

9486. Re: 160m Loop: pro's, con's, model's, build

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-12 23:32:49 UTC
From: Kuby
Topic: 8285 Message: 9486

Congrats you've successfully killed this topic....
Meaningful Topic data be damn....

You've won - I'm gone.... I'll find a more meaning full forum to acquire info....

--- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@...> wrote:
>
> Have you measured one with an analyzer??
>
>
>
> It is not an opinion, it was measured. I have the data/scans if you are interested.
>
> What is your "real" data say?
>
> Jim
>
>
> ----- Original Message -----
> From: Kuby
> To: loopantennas@yahoogroups.com
> Sent: Sunday, December 09, 2012 12:10 PM
> Subject: [loopantennas] Re: 160m Loop: pro's, con's, model's, build
>
>
>
> I've had quit the contrary, high SUCCESS with UB's. I'm even trying to get the math formula for optimizing UB's for specific bands or range of multi-bands. We all have opinions - mine come from 'real' UB use.
>
> --- In loopantennas@yahoogroups.com, "Jim Bo" <jbollit@> wrote:
> >
> > Kuby,
> >
> > Search the group and see my input ref UGLY balun. Not only are they UGLY, they don't work unless you have a method of measuring what they are actually doing.
>

9487. Loop Antenna Queries

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-19 03:37:10 UTC
From: Michelle
Topic: 9487 Message: 9487

Hello, I am doing a project on loop antennas and we are currently trying to construct one ourselves. We are following instructions from this site http://www.iw5edi.com/ham-radio/?how-to-build-a-tuned-loop-antenna,118

However, we substituted wood for PVC and our wires are the ones that comes in a pair and are encased in plastic. "Sound Physician Super OFC Silver Speaker Interconnect AWG-215.

We do not know the capacitance of the tuning capacitor we should use as the ones in the site says to use "a tuning capacitor salvaged from an old radio" which we do not have. Also since we modified some of the variables of the ones in the site, do you think it would affect the antenna?

Here are some pictures of the product now.
http://tinyurl.com/cjdvowx
http://tinyurl.com/cblz2s7
http://tinyurl.com/bolywnj

Thank you!

9488. Re: [loopantennas] Loop Antenna Queries

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-19 09:19:56 UTC
From: Benoît Mangin
Topic: 9487 Message: 9488

Have you got something to measure loop inductance ?

de f8gry/ben

De : Michelle <mikkidapito@...>
À : loopantennas@yahoogroups.com
Envoyé le : Mercredi 19 décembre 2012 4h37
Objet : [loopantennas] Loop Antenna Queries

Hello, I am doing a project on loop antennas and we are currently trying to construct one ourselves. We are following instructions from this site http://www.iw5edi.com/ham-radio/?how-to-build-a-tuned-loop-antenna,118

However, we substituted wood for PVC and our wires are the ones that comes in a pair and are encased in plastic. "Sound Physician Super OFC Silver Speaker Interconnect AWG-215.

We do not know the capacitance of the tuning capacitor we should use as the ones in the site says to use "a tuning capacitor salvaged from an old radio" which we do not have. Also since we modified some of the variables of the ones in the site, do you think it would affect the antenna?

Here are some pictures of the product now.
http://tinyurl.com/cjdvowx
http://tinyurl.com/cblz2s7
http://tinyurl.com/bolywnj

Thank you!

9489. Re: [loopantennas] Loop Antenna Queries

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-19 16:44:13 UTC
From: kevin asato
Topic: 9487 Message: 9489

Using wood or PVC is not a problem. It is just a frame to hold the coil of wire in place. I prefer wood as I can use smaller/thinner pieces to save space.

Capacitor specifications are listed in the article as: "The capacitor that is used is the standard AM tuning capacitor with a range of 10 to 365pf." (There is also mention of using a dual-section capacitor to aid tuning.) Anything close will work. The plastic insulation of the speaker wire may also have an additional capacitive effect between turns of wire which will ultimately affect the L/C ratio (frequency response) of your loop so the number of turns of wire you use on your loop may differ from the article. Feel free to experiment. This is much like cooking where you have to adjust the recipe to work with what ingredients you have and your taste preferences. More turns of wire will peak up the lower frequencies. Less turns will get you into the shortwave frequencies. Have fun!

73,
kevin
kc6pob

From: Michelle <mikkidapito@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, December 18, 2012 7:37 PM
Subject: [loopantennas] Loop Antenna Queries

Hello, I am doing a project on loop antennas and we are currently trying to construct one ourselves. We are following instructions from this site
http://www.iw5edi.com/ham-radio/?how-to-build-a-tuned-loop-antenna,118

However, we substituted wood for PVC and our wires are the ones that comes in a pair and are encased in plastic. "Sound Physician Super OFC Silver Speaker Interconnect AWG-215.

We do not know the capacitance of the tuning capacitor we should use as the ones in the site says to use "a tuning capacitor salvaged from an old radio" which we do not have. Also since we modified some of the variables of the ones in the site, do you think it would affect the antenna?

Here are some pictures of the product now.
http://tinyurl.com/cjdvowx
http://tinyurl.com/cblz2s7
http://tinyurl.com/bolywnj

Thank you!

9490. RE: [loopantennas] Loop Antenna Queries

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-19 20:04:02 UTC
From: William Young
Topic: 9487 Message: 9490

The foregoing advice is very good. Also, you may want to visit http://emclab.mst.edu/inductance/index.html . There you can choose the shape of the coil or loop. Click on the shape you want, and it will take you to a site where you can enter dimensions, wire radius, number of turns and permeability(enter 1 for air core windings). Then click on "L", and the inductance in nanoHenry's will be displayed. Move the decimal point three places to the left for microHenry's. Then go to http://www.daycounter.com/Calculators/LC-Resonance . There you will find an LC resonance calculator. The typical tuning capacitor from an old BC radio is 350pF - 400 pF. Some of these had an additional smaller section for the oscillator tank circuit of 180 pF - 200 pF or so. It might be interesting if you can find one of these to arrange to switch select one or the other or both. That way you might be able to tune from say 300 kHz to beyond 3 mHz with the same loop winding. I might add that if you have a good receiver with a 50 Ohm antenna input you can calculate how many microHy's are required for 50 Ohms at maybe 1 mHz and using the calculators referenced above construct a winding with enough turns for 50 Ohms at 1 mHz. Then wind that many turns spaced about 0.25 inch from the tuned winding and drive the receiver antenna input with the new winding. I arrived at the 0.25 inch spacing using LTSPICE modeling and a coefficient of coupling equation from the 1943 F. E. Terman Radio Engineer's Handbook.It works. Also, you can mount both windings on a lightweight wooden "cruciform" frame and use a a stereo phone plug as a bearing and connector. Then you have 360 degree rotation. But you may no longer have the classic pattern with two broad lobes. Try any or all of the above and build what works for you. Bill Young WD5HOH
To: loopantennas@yahoogroups.com
From: kc6pob@...
Date: Wed, 19 Dec 2012 08:44:13 -0800
Subject: Re: [loopantennas] Loop Antenna Queries

Using wood or PVC is not a problem. It is just a frame to hold the coil of wire in place. I prefer wood as I can use smaller/thinner pieces to save space.

Capacitor specifications are listed in the article as: "The capacitor that is used is the standard AM tuning capacitor with a range of 10 to 365pf." (There is also mention of using a dual-section capacitor to aid tuning.) Anything close will work. The plastic insulation of the speaker wire may also have an additional capacitive effect between turns of wire which will ultimately affect the L/C ratio (frequency response) of your loop so the number of turns of wire you use on your loop may differ from the article. Feel free to experiment. This is much like cooking where you have to adjust the recipe to work with what ingredients you have and your taste preferences. More turns of wire will peak up the lower frequencies. Less turns will get you into the shortwave frequencies. Have fun!

73,
kevin
kc6pob

From: Michelle <mikkidapito@...>
To: loopantennas@yahoogroups.com
Sent: Tuesday, December 18, 2012 7:37 PM

Subject: [loopantennas] Loop Antenna Queries

Hello, I am doing a project on loop antennas and we are currently trying to construct one ourselves. We are following instructions from this site
http://www.iw5edi.com/ham-radio/?how-to-build-a-tuned-loop-antenna,118

However, we substituted wood for PVC and our wires are the ones that comes in a pair and are encased in plastic. "Sound Physician Super OFC Silver Speaker Interconnect AWG-215.

We do not know the capacitance of the tuning capacitor we should use as the ones in the site says to use "a tuning capacitor salvaged from an old radio" which we do not have. Also since we modified some of the variables of the ones in the site, do you think it would affect the antenna?

Here are some pictures of the product now.
http://tinyurl.com/cjdvowx
http://tinyurl.com/cblz2s7
http://tinyurl.com/bolywnj

Thank you!

9491. Re: Loop Antenna Queries

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 15:55:17 UTC
From: Greg Ella
Topic: 9487 Message: 9491

For Medium Wave (AM Broadcast Band) This antenna uses a 365 pf variable capacitor. You can find one for a good price at www.midnightscience.com. When you are done building your loop, if you find that it does not tune all the way down to 540 KHz, add one turn to the loop. Conversely, if it does not tune all the way up to 1700 KHz, remove one turn. When you have the correct number of turns, the 365 pf variable capacitor should tune the entire AM broadcast band.

Good Luck,

Greg Ella

--- In loopantennas@yahoogroups.com, "Michelle" <mikkidapito@...> wrote:
>
> Hello, I am doing a project on loop antennas and we are currently trying to construct one ourselves. We are following instructions from this site http://www.iw5edi.com/ham-radio/?how-to-build-a-tuned-loop-antenna,118
>
> However, we substituted wood for PVC and our wires are the ones that comes in a pair and are encased in plastic. "Sound Physician Super OFC Silver Speaker Interconnect AWG-215.
>
> We do not know the capacitance of the tuning capacitor we should use as the ones in the site says to use "a tuning capacitor salvaged from an old radio" which we do not have. Also since we modified some of the variables of the ones in the site, do you think it would affect the antenna?
>
> Here are some pictures of the product now.
> http://tinyurl.com/cjdvowx
> http://tinyurl.com/cblz2s7
> http://tinyurl.com/bolywnj
>
> Thank you!
>

9492. Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 16:33:33 UTC
From: Greg Ella
Topic: 9492 Message: 9492

I have just created an album in the photo section and posted a photo of a strange antenna at the Denver International Airport.

I initially thought that this antenna was two crossed vertical loops mounted 90 degrees to each other. A closer look shows, as can be seen in the picture, that there are only three "halves" to the loop, instead of the four "halves" that you would have with two crossed loops. The three "halves" are symmetrical, 120 degrees apart when viewed from above. I don't think that this is a single "eggbeater" element, because when you zoom all the way in you can see that the sections appear to be insulated from each other.

This loop array is mounted above eight horizontal radials (only six visible in the photo). This could be a ground plane, but again, zooming in you see that each element appears to be mounted in an insulated connector. So this may be an array of horizontal crossed dipoles.

I visually guesstimate that the loop is at least 3 feet in diameter, and that each horizontal element is at least 12 feet long. It could be larger. It is mounted on top of a tall mast (at least 50 ft high), with no reference points to compare it to.

This antenna is located along the main entrance road to the airport. It is all by itself, well away from the tower, terminal, runways or any other antennas or structures. There is a landscaped rock area around the base of the mast, but no building or equipment shed.

I am a private pilot and am familiar with various antenna systems for VOR, ILS, NDB, voice comms, etc. I have never seen such an antenna before. It definitely appears to be of high quality commercial construction. This really has my curiosity going. Any information would be greatly appreciated.

Thanks,

Greg Ella

9493. Seasons Greetings !!!!

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 16:35:27 UTC
From: brian nsl
Topic: 9493 Message: 9493

Hi,
Seasons greetings and a healthy 2013 to all
members of the group.
72, Brian, GØNSL.

9494. Re: Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 16:57:58 UTC
From: kugellagers
Topic: 9492 Message: 9494

Could that just be the capitance hat for its NDB beacon AP 260 or its TIS station WPDI548 on 540?

John
];')

Lakewood, Colorado
Hammarlund SP-600 JX-37
Rycom 1307A-GR w/W1VLF LPF
Tecsun PL-380 w/7.5" Loopstick
Quantum Phaser
30' Low-noise vertical
26' vertical on 35' mast
27' Low-noise vertical

--- In loopantennas@yahoogroups.com, "Greg Ella" <gregella53@...> wrote:
>
> I have just created an album in the photo section and posted a photo of a strange antenna at the Denver International Airport.
>
> I initially thought that this antenna was two crossed vertical loops mounted 90 degrees to each other. A closer look shows, as can be seen in the picture, that there are only three "halves" to the loop, instead of the four "halves" that you would have with two crossed loops. The three "halves" are symmetrical, 120 degrees apart when viewed from above. I don't think that this is a single "eggbeater" element, because when you zoom all the way in you can see that the sections appear to be insulated from each other.
>
> This loop array is mounted above eight horizontal radials (only six visible in the photo). This could be a ground plane, but again, zooming in you see that each element appears to be mounted in an insulated connector. So this may be an array of horizontal crossed dipoles.
>
> I visually guesstimate that the loop is at least 3 feet in diameter, and that each horizontal element is at least 12 feet long. It could be larger. It is mounted on top of a tall mast (at least 50 ft high), with no reference points to compare it to.
>
> This antenna is located along the main entrance road to the airport. It is all by itself, well away from the tower, terminal, runways or any other antennas or structures. There is a landscaped rock area around the base of the mast, but no building or equipment shed.
>
> I am a private pilot and am familiar with various antenna systems for VOR, ILS, NDB, voice comms, etc. I have never seen such an antenna before. It definitely appears to be of high quality commercial construction. This really has my curiosity going. Any information would be greatly appreciated.
>
> Thanks,

>
> Greg Ella
>

9495. Re: [loopantennas] Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 17:36:10 UTC
From: John Popelish
Topic: 9492 Message: 9495

On 12/22/2012 11:33 AM, Greg Ella wrote:
> I have just created an album in the photo section and
> posted a photo of a strange antenna at the Denver
> International Airport.
>
> I initially thought that this antenna was two crossed
> vertical loops mounted 90 degrees to each other. A
> closer look shows, as can be seen in the picture, that
> there are only three "halves" to the loop, instead of the
> four "halves" that you would have with two crossed loops.
> The three "halves" are symmetrical, 120 degrees apart
> when viewed from above. I don't think that this is a
> single "eggbeater" element, because when you zoom all the
> way in you can see that the sections appear to be
> insulated from each other.
>
> This loop array is mounted above eight horizontal radials
> (only six visible in the photo). This could be a ground
> plane, but again, zooming in you see that each element
> appears to be mounted in an insulated connector. So this
> may be an array of horizontal crossed dipoles.

(snip)

I am guessing that this is a form of directable dipole antenna (the hoops being expanded folded dipoles.) If the three half hoops are independently fed, and phased, the radiation pattern could be shifted to have a major lobe in any compass direction. Perhaps the radials are also individually phased, to set the vertical beam angle, as the beam is rotated.

It is a very high tech looking radiator. I would love to see the manufacturer's specifications for it.

--
Regards,

John Popelish

9496. Re: Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 19:16:47 UTC
From: Greg Ella
Topic: 9492 Message: 9496

NDB beacon AP appears to be way south, below Centennial, at 39.452, -104.846. This antenna I have posted shows on Google Maps satellite view at 39.834894, -104.72322. Incidentally, you can zoom in to street view here and see the antenna in Google Maps street view. This is about 1000 ft South of the approach end of runway 7. It is not in line with any runway. When an NDB is placed near an airport it is usually on the extended centerline of a runway and about four miles out, to serve as a localizer for ADF approaches.

This could be their TIS antenna. I will have to see if FCC database shows that stations antenna location.

Greg Ella

--- In loopantennas@yahoogroups.com, "kugellagers" <kugellager@...> wrote:
>
> Could that just be the capitance hat for its NDB beacon AP 260 or its TIS station WPDI548 on 540?
>
> John
>];')
>
> Lakewood, Colorado
> Hammarlund SP-600 JX-37
> Rycom 1307A-GR w/W1VLF LPF
> Tecsun PL-380 w/7.5" Loopstick
> Quantum Phaser
> 30' Low-noise vertical
> 26' vertical on 35' mast
> 27' Low-noise vertical
>
> --- In loopantennas@yahoogroups.com, "Greg Ella" <gregella53@> wrote:
> >
> > I have just created an album in the photo section and posted a photo of a strange antenna at the Denver International Airport.
> >
> > I initially thought that this antenna was two crossed vertical loops mounted 90 degrees to each other. A closer look shows, as can be seen in the picture, that there are only three "halves" to the loop, instead of the four "halves" that you would have with two crossed loops. The three "halves" are symmetrical, 120 degrees apart when viewed from above. I don't think that this is a single "eggbeater" element, because when you zoom all the way in you can see that the sections appear to be insulated from each other.
> >
> > This loop array is mounted above eight horizontal radials (only six visible in the photo). This could be a ground plane, but again, zooming in you see that each element appears to be mounted in an insulated connector. So this may be an array of horizontal crossed dipoles.
> >

> > I visually guesstimate that the loop is at least 3 feet in diameter, and that each horizontal element is at least 12 feet long. It could be larger. It is mounted on top of a tall mast (at least 50 ft high), with no reference points to compare it to.
> >
> > This antenna is located along the main entrance road to the airport. It is all by itself, well away from the tower, terminal, runways or any other antennas or structures. There is a landscaped rock area around the base of the mast, but no building or equipment shed.
> >
> > I am a private pilot and am familiar with various antenna systems for VOR, ILS, NDB, voice comms, etc. I have never seen such an antenna before. It definitely appears to be of high quality commercial construction. This really has my curiosity going. Any information would be greatly appreciated.
> >
> > Thanks,
> >
> > Greg Ella
> >
>

9497. Re: Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 19:46:06 UTC
From: kugellagers
Topic: 9492 Message: 9497

I am pretty sure this is their TIS antenna as my KML placemark for WPDI548 in my Google Earth version of my AM BCB logs puts my dot at 39.835230 and -104.722762 which is about 170 ft NE of the antenna mast in Google Earth which just about matches the coordinates you give below. The coordinates I got were originally from the FCC web site and were tweaked a little by me when I made my placemark.

I think that pretty much solves the use of the mystery antenna.

John
];')

Lakewood, Colorado
Hammarlund SP-600 JX-37
Rycom 1307A-GR w/W1VLF LPF
Tecsun PL-380 w/7.5" Loopstick
Quantum Phaser
30' Low-noise vertical
26' vertical on 35' mast
27' Low-noise vertical

--- In loopantennas@yahoogroups.com, "Greg Ella" <gregella53@...> wrote:
>
> NDB beacon AP appears to be way south, below Centennial, at 39.452, -104.846. This antenna I have posted shows on Google Maps satellite view at 39.834894, -104.72322. Incidentally, you can zoom in to street view here and see the antenna in Google Maps street view. This is about 1000 ft South of the approach end of runway 7. It is not in line with any runway. When an NDB is placed near an airport it is usually on the extended centerline of a runway and about four miles out, to serve as a localizer for ADF approaches.
>
> This could be their TIS antenna. I will have to see if FCC database shows that stations antenna location.
>
> Greg Ella
>
> --- In loopantennas@yahoogroups.com, "kugellagers" <kugellager@> wrote:
> >
> > Could that just be the capitance hat for its NDB beacon AP 260 or its TIS station WPDI548 on 540?
> >
> > John
> >];')
> >
> > Lakewood, Colorado
> > Hammarlund SP-600 JX-37
> > Rycom 1307A-GR w/W1VLF LPF
> > Tecsun PL-380 w/7.5" Loopstick

> > Quantum Phaser
> > 30' Low-noise vertical
> > 26' vertical on 35' mast
> > 27' Low-noise vertical

9498. Re: [loopantennas] Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 19:53:06 UTC
From: Don
Topic: 9492 Message: 9498

Here is a link to a manufacturer of a like antenna:

<http://www.valcom-guelph.com/products/V-147-CL2-TH.html>

Don KPC6NDB
Upland, CA
34.10 -117.63 1250ft
R-75 w/250Hz 2x R-71A w/250Hz R-70
SDR-IQ SR-AF & LPF DSP599zx
MFJ-784B HD-1418 AF-1 MSB-1
PA0RDT Mini-Whip x2 @ 15ft
LFL1010 ALA100L x2

On 22-Dec-12 08:33, Greg Ella wrote:
> I have just created an album in the photo section and posted a photo of a strange antenna at the Denver International Airport.
>
> I initially thought that this antenna was two crossed vertical loops mounted 90 degrees to each other. A closer look shows, as can be seen in the picture, that there are only three "halves" to the loop, instead of the four "halves" that you would have with two crossed loops. The three "halves" are symmetrical, 120 degrees apart when viewed from above. I don't think that this is a single "eggbeater" element, because when you zoom all the way in you can see that the sections appear to be insulated from each other.
>
> This loop array is mounted above eight horizontal radials (only six visible in the photo). This could be a ground plane, but again, zooming in you see that each element appears to be mounted in an insulated connector. So this may be an array of horizontal crossed dipoles.
>
> I visually guesstimate that the loop is at least 3 feet in diameter, and that each horizontal element is at least 12 feet long. It could be larger. It is mounted on top of a tall mast (at least 50 ft high), with no reference points to compare it to.
>
> This antenna is located along the main entrance road to the airport. It is all by itself, well away from the tower, terminal, runways or any other antennas or structures. There is a landscaped rock area around the base of the mast, but no building or equipment shed.
>
> I am a private pilot and am familiar with various antenna systems for VOR, ILS, NDB, voice comms, etc. I have never seen such an antenna before. It definitely appears to be of high quality commercial construction. This really has my curiosity going. Any information would be greatly appreciated.
>
> Thanks,
>
> Greg Ella
>

>
>
> ------------------------------------
>
> If you've got links, post them in the Links section!
> http://groups.yahoo.com/group/loopantennas/links
>
> Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> http://groups.yahoo.com/group/loopantennas/files
>
> You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> http://ph.groups.yahoo.com/group/loopantennas/photos
>
> And please trim all this when replying!Yahoo! Groups Links
>
>
>
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2013.0.2805 / Virus Database: 2637/5978 - Release Date: 12/22/12
>
>

9499. Re: [loopantennas] Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 21:10:45 UTC
From: John Popelish
Topic: 9492 Message: 9499

On 12/22/2012 02:53 PM, Don wrote:
> Here is a link to a manufacturer of a like antenna:
>
> <http://www.valcom-guelph.com/products/V-147-CL2-TH.html>

So this is just a fancy vertical whip antenna?

--
Regards,

John Popelish

9500. Pixel vs. Wellbrook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 18:04:47 UTC
From: James
Topic: 9500 Message: 9500

My QTH is located about 1/2 to 1 mile from all TV, most FM, all Public Safety Radio transmitters. In the other direction, I have 4 AMBC stations. In effect, the perfect storm of overload. For example, I believe 91.5 and 96.5 FM can mix in an amplifier and create issues at 5 MHz. I have evaluated 7 different antennas systems with the following results:

1) 20 ft LW simply hanging on the end of a RG-59 feedline - pretty poor on all but local AM BC

2) 35 ft LW with 9:1 transformer - better but not great

3) Wellbrook AL-1530 Loop - good receive but its preamp impacted by local BC stuff

4) Wellbrook AL-330S Loop - good receive (not as good as 1530 at VLF-LF) Preamp better than 1530 but still impacted by local BC

5) Same as #4 but Type 31 Ferrite Choke added at premp feedpoint, coax grounded at 30 ft from Preamp - better overload performance

6) Clifton Labs Z1501D Whip with Same mods as #5 - best in all ways of #1 - 6 above but still some overload

7) Pixel PRO-1B "Moebius" Loop - only add-on was ground at 30 ft point but by far the best antenna. No overload whatsoever

By overload, I mean apparent effects on the antenna's LNA, not the receiver. Compression, IMD, errant mixing or whatever showed as odd stuff in my Perseus.

9501. RE: [loopantennas] Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 18:48:37 UTC
From: Frank Withers
Topic: 9492 Message: 9501

google Denver Airport and see what comes up its surprising

To: loopantennas@yahoogroups.com
From: gregella53@...
Date: Sat, 22 Dec 2012 16:33:33 +0000
Subject: [loopantennas] Strange Loop Antenna

I have just created an album in the photo section and posted a photo of a strange antenna at the Denver International Airport.

I initially thought that this antenna was two crossed vertical loops mounted 90 degrees to each other. A closer look shows, as can be seen in the picture, that there are only three "halves" to the loop, instead of the four "halves" that you would have with two crossed loops. The three "halves" are symmetrical, 120 degrees apart when viewed from above. I don't think that this is a single "eggbeater" element, because when you zoom all the way in you can see that the sections appear to be insulated from each other.

This loop array is mounted above eight horizontal radials (only six visible in the photo). This could be a ground plane, but again, zooming in you see that each element appears to be mounted in an insulated connector. So this may be an array of horizontal crossed dipoles.

I visually guesstimate that the loop is at least 3 feet in diameter, and that each horizontal element is at least 12 feet long. It could be larger. It is mounted on top of a tall mast (at least 50 ft high), with no reference points to compare it to.

This antenna is located along the main entrance road to the airport. It is all by itself, well away from the tower, terminal, runways or any other antennas or structures. There is a landscaped rock area around the base of the mast, but no building or equipment shed.

I am a private pilot and am familiar with various antenna systems for VOR, ILS, NDB, voice comms, etc. I have never seen such an antenna before. It definitely appears to be of high quality commercial construction. This really has my curiosity going. Any information would be greatly appreciated.

Thanks,

Greg Ella

9502. Re: Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 19:52:48 UTC
From: old.hilly
Topic: 9492 Message: 9502

Greg, from your description of the device and it's location, coupled with the lack of any sort of nearby building and the landscaping at the base, could this be some sort of "modern sculpture" installed to "beautify" the aproaches to the airport? Could someone have sat down at a drawing board and designed this thing as part of a competition? There could also have been an interesting description as to what the 3 half-lobes might represent, the ground-plane could represent the land surface and the 3 curved bits could represent the 3 original Native Tribes of the area? Or could the designer have thought "well, this will get them thinking!"?
Merry Christmas from Australia!

9503. Re: [loopantennas] Pixel vs. Wellbrook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-22 23:23:09 UTC
From: toddroberts2001@aol.com
Topic: 9500 Message: 9503

Thanks for the test results.
Did you try shortening the whip on the Z1501D
to see if that cured any overload?

73 - Todd WD4NGG

9504. Re: Pixel vs. Wellbrook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-23 11:44:32 UTC
From: James
Topic: 9500 Message: 9504

--- In loopantennas@yahoogroups.com, toddroberts2001@... wrote:
>
> Thanks for the test results.
> Did you try shortening the whip on the Z1501D
> to see if that cured any overload?
>
> 73 - Todd WD4NGG
>

the 1501 only suffered from I believe was ingress of FM (88-108) from the 5 or more stations down the street. That was manifested as a wide hump @ ~ 5 MHz with modulation "buried" in it.

9505. Re: [loopantennas] Re: Pixel vs. Wellbrook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-23 12:12:08 UTC
From: Jack Smith
Topic: 9500 Message: 9505

Most Z1501D's and all Z1501F's have a low pass filter on the input stage providing about 15 dB roll off at 88 MHz. Without the LF filter, these antennas are usable to above 100 MHz. (As a special product, I can build Z1501's without the LP filter.)

I can't recall exactly when I added the LP filter to the D PCB, but not very many were sold without it and it has proven to be quite effective at eliminating FM mixing, even in dense urban areas.

The filter component values were chosen to preserve sensitivity while providing useful FM protection but it's possible to increase the FM roll off with some component changes. I don't recommend this be undertaken without the proper test gear, but any customer with an FM problem can contact me and I'll work with them. The current filter balances LF and shortwave performance against FM suppression, and increasing FM suppression will almost certainly reduce sensitivity in some other frequency bands. This reduction may well be acceptable however.

As an aside, the main problem in developing a useful FM band input filter relates to the rod antenna and whip amplifier impedance levels. Shunt capacitance (as in a pi filter configuration) isn't acceptable as every pF of extra shunt C hurts sensitivity. A conventional filter design also requires impossible to realize inductor values. Consequently, it's not a simple matter to add a "brick wall" FM band input filter.

Also, the new "F" version antenna uses a different input stage design, a dual gate FET instead of the J310 single gate of the D version. The dual gate device is somewhat better in FM interference rejection as well.

The Pixel loop amplifier (also a Clifton Laboratories design) has a very effective FM band input low pass filter (40 dB or more attenuation at 88 MHz) but that was much simpler since the impedance levels are (a) in the 50 ohm range and (b) more or less constant with frequency.

For a rough idea of AM and FM signal levels, you can use the signal predictor at http://www.v-soft.com/ZipSignal/ -- enter your ZIP code and the web site will calculate AM and FM field intensity levels. It's not 100% accurate, of course, but it remains quite useful.

Jack K8ZOA
www.cliftonlaboratories.com

On 12/23/2012 6:44 AM, James wrote:
>
>
>

> --- In loopantennas@yahoogroups.com
> <mailto:loopantennas%40yahoogroups.com>, toddroberts2001@... wrote:
> >
> > Thanks for the test results.
> > Did you try shortening the whip on the Z1501D
> > to see if that cured any overload?
> >
> > 73 - Todd WD4NGG
> >
>
> the 1501 only suffered from I believe was ingress of FM (88-108) from
> the 5 or more stations down the street. That was manifested as a wide
> hump @ ~ 5 MHz with modulation "buried" in it.
>
>

9506. Re: Pixel vs. Wellbrook

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-23 12:29:55 UTC
From: James
Topic: 9500 Message: 9506

Thanks for the reply Jack. This 1501 is pretty new and was a great unit except for the FM issue. I have made FS measurements here at my house and the FM and TV energy was incredible. So my FM issue is unusual. I have moved your whip to a more remote location and it is great.

I have 8, 10, 13, 21, 31 HDTV channels and a handle of low power TV on the hill. WDKX, WCMF, WXXI, WPXY and others live < 1/2 mile away (Pinnacle Hill) too. So my location is atypical.

--- In loopantennas@yahoogroups.com, Jack Smith <Jack.Smith@...> wrote:
>
> Most Z1501D's and all Z1501F's have a low pass filter on the input stage

9507. Re: Strange Loop Antenna

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-23 15:08:44 UTC
From: Greg Ella
Topic: 9492 Message: 9507

This is definitely the Valcom antenna shown in the link Don provided. This also explains the landscaped circular area visible in the Google satellite view, as a ground screen. Probably their TIS antenna based on kugellagers' post. Thanks all for helping me solve this mystery.

Greg Ella

--- In loopantennas@yahoogroups.com, Don <stb55@...> wrote:
>
> Here is a link to a manufacturer of a like antenna:
>
> <http://www.valcom-guelph.com/products/V-147-CL2-TH.html>
>
> Don KPC6NDB
> Upland, CA
> 34.10 -117.63 1250ft
> R-75 w/250Hz 2x R-71A w/250Hz R-70
> SDR-IQ SR-AF & LPF DSP599zx
> MFJ-784B HD-1418 AF-1 MSB-1
> PA0RDT Mini-Whip x2 @ 15ft
> LFL1010 ALA100L x2
>
> On 22-Dec-12 08:33, Greg Ella wrote:
> > I have just created an album in the photo section and posted a photo of a strange antenna at the Denver International Airport.
> >
> > I initially thought that this antenna was two crossed vertical loops mounted 90 degrees to each other. A closer look shows, as can be seen in the picture, that there are only three "halves" to the loop, instead of the four "halves" that you would have with two crossed loops. The three "halves" are symmetrical, 120 degrees apart when viewed from above. I don't think that this is a single "eggbeater" element, because when you zoom all the way in you can see that the sections appear to be insulated from each other.
> >
> > This loop array is mounted above eight horizontal radials (only six visible in the photo). This could be a ground plane, but again, zooming in you see that each element appears to be mounted in an insulated connector. So this may be an array of horizontal crossed dipoles.
> >
> > I visually guesstimate that the loop is at least 3 feet in diameter, and that each horizontal element is at least 12 feet long. It could be larger. It is mounted on top of a tall mast (at least 50 ft high), with no reference points to compare it to.
> >
> > This antenna is located along the main entrance road to the airport. It is all by itself, well away from the tower, terminal, runways or any other antennas or structures. There is a landscaped rock area around the base of the mast, but no building or equipment

shed.
> >
> > I am a private pilot and am familiar with various antenna systems for VOR, ILS, NDB, voice comms, etc. I have never seen such an antenna before. It definitely appears to be of high quality commercial construction. This really has my curiosity going. Any information would be greatly appreciated.
> >
> > Thanks,
> >
> > Greg Ella
> >
> >
> >
> > ------------------------------------
> >
> > If you've got links, post them in the Links section!
> > http://groups.yahoo.com/group/loopantennas/links
> >
> > Post files here. If the file comes from a website, please put it in the Links rather than uploading the file.
> > http://groups.yahoo.com/group/loopantennas/files
> >
> > You can now view images at higher resolution in Photos. Upload JPG and GIF into Photos. Please convert BMP or TIF to JPG or GIF before uploading.
> > http://ph.groups.yahoo.com/group/loopantennas/photos
> >
> > And please trim all this when replying!Yahoo! Groups Links
> >
> >
> >
> >
> >
> > -----
> > No virus found in this message.
> > Checked by AVG - www.avg.com
> > Version: 2013.0.2805 / Virus Database: 2637/5978 - Release Date: 12/22/12
> >
> >
>

9508. Edginton QW Loop beacon-test on 160 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-23 18:11:22 UTC
From: wb5wpa
Topic: 9508 Message: 9508

For the next couple of weeks, a test of a 160 meter Ben Edginton Quarter-Wave loop antenna will be underway.

The frequency will be 1900 kHz LSB up until about 5:30 PM CST and then 2.0 MHz LSB after that until about 10 PM CST.

The loop is 16' high x 40' long, stands vertically about 6' off the ground putting the highest part of the antenna about 22' above ground.

The loop is oriented roughly N-S (actually about 8 deg E of N).

Power level is 100 W max, with five transmitted tones varying from 100 Watts down to 1 Watt in 5 dB steps followed by voice ID.

The transmit interval is every 2 minutes, with the beacon 'message' being about 30 secs in length.

More details here as well as updates to the schedule:
http://www.qrz.com/db/WB5WPA

53, Jim WB5WPA

P.S. I hope this posting is allowed in this forum, if not, please disregard. Thanks in advance.

P.P.S. Preliminary testing has been on-going with this antenna and equipment since mid November.

9509. Loop Nulls

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-24 01:49:02 UTC
From: STEVE MCDONALD
Topic: 9508 Message: 9509

Has there been any published data regarding 'depth of null' vs 'loop aperture' concerning small circular receiving loops?
It has always been my gut-feeling that the smaller loops (< 4') had deeper and sharper nulls than larger loops (4-10')
but don't recall reading anything definitive.

Steve / VE7SL

9510. Re: [loopantennas] Loop Nulls

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-24 01:55:20 UTC
From: Jack Smith
Topic: 9508 Message: 9510

I put some null depth data in my comparision of Pixel and Wellbrook. Not much difference between the two antennas for null depth. There's a huge problem with re-radiation from nearby conductors, however, in my case the ham radio tower and antennas. As the frequency increases above the middle of the AM broadcast band, re-radiation severely distorts my loop nulls. And, of course once you are dealing with sky wave signals the loop nulls become highly variable at best.

Document at
http://www.cliftonlaboratories.com/Documents/Loop%20vs%20Loop%20Final-Final.pdf

Does not address the large aperature question, but as far as I know my data is one of very few measured null plots for small loops in a real life environment.

Jack K8ZOA

On 12/23/2012 8:49 PM, STEVE MCDONALD wrote:
>
>
> Has there been any published data regarding 'depth of null' vs 'loop
> aperture' concerning small circular receiving loops?
> It has always been my gut-feeling that the smaller loops (< 4') had
> deeper and sharper nulls than larger loops (4-10')
> but don't recall reading anything definitive.
>
> Steve / VE7SL
>
>

9511. RE: [loopantennas] Edginton QW Loop beacon-test on 160 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-24 03:06:34 UTC
From: Jim Best
Topic: 9508 Message: 9511

FYI,

I copied your propagation test on 2.000 Mhz here in Cheyenne Wyoming..It appeared to be the 100 watt tones

were very weak at about S-2. However my antenna is 80/40 meter trap dipole, receiver is Kenwood TS-870.

Voice transmissions were not readable at this QTH. Reported at 1945 MDT, 12/23/12.

Good luck

WU7 G Jim

For the next couple of weeks, a test of a 160 meter Ben Edginton Quarter-Wave loop antenna will be underway.

The frequency will be 1900 kHz LSB up until about 5:30 PM CST and then 2.0 MHz LSB after that until about 10 PM CST.

The loop is 16' high x 40' long, stands vertically about 6' off the ground putting the highest part of the antenna about 22' above ground.

The loop is oriented roughly N-S (actually about 8 deg E of N).

Power level is 100 W max, with five transmitted tones varying from 100 Watts down to 1 Watt in 5 dB steps followed by voice ID.

The transmit interval is every 2 minutes, with the beacon 'message' being about 30 secs in length.

More details here as well as updates to the schedule:
http://www.qrz.com/db/WB5WPA

53, Jim WB5WPA

P.S. I hope this posting is allowed in this forum, if not, please disregard. Thanks in advance.

P.P.S. Preliminary testing has been on-going with this antenna and equipment since mid November.

9512. Re: [loopantennas] Loop Nulls

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-24 04:31:02 UTC
From: STEVE MCDONALD
Topic: 9508 Message: 9512

Thanks Jack ....I have printed this out for careful reading. I am fairly familiar with re-radiation and nearby towers affecting null depth and direction but am more curious about the null sharpness / depth vs aperture and if there is any relationship or not.

> I put some null depth data in my comparision of Pixel and Wellbrook.

9513. Re: Edginton QW Loop beacon-test on 160 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-24 05:14:24 UTC
From: wb5wpa
Topic: 9508 Message: 9513

Thanks for the report, Jim

I had a report from east of Alexandria in Louisiana about
an hour ago ... individual was using a Degen 1103 portable
and copying the voice and tones ... that distance was only
about 300 miles though compared to the trip up to Cheyenne
Wyoming!

Thanks again for the report.

Jim WB5WPA

--- In loopantennas@yahoogroups.com, "Jim Best" <james9194@...> wrote:
>
>
>
> FYI,
>
> I copied your propagation test on 2.000 Mhz here in Cheyenne
> Wyoming..It appeared to be the 100 watt tones
>
> were very weak at about S-2. However my antenna is 80/40 meter
> trap dipole, receiver is Kenwood TS-870.
>
> Voice transmissions were not readable at this QTH. Reported at
> 1945 MDT, 12/23/12.
>
> Good luck
>
> WU7 G Jim
>
>
>
> For the next couple of weeks, a test of a 160 meter Ben Edginton
> Quarter-Wave loop antenna will be underway.
>
> The frequency will be 1900 kHz LSB up until about 5:30 PM CST
> and then 2.0 MHz LSB after that until about 10 PM CST.
>
> The loop is 16' high x 40' long, stands vertically about 6' off
> the ground putting the highest part of the antenna about 22'
> above ground.
>
> The loop is oriented roughly N-S (actually about 8 deg E of N).
>
> Power level is 100 W max, with five transmitted tones varying

> from 100 Watts down to 1 Watt in 5 dB steps followed by voice ID.
>
> The transmit interval is every 2 minutes, with the beacon
> 'message' being about 30 secs in length.
>
> More details here as well as updates to the schedule:
> http://www.qrz.com/db/WB5WPA
>
> 73, Jim WB5WPA
>

9514. RE: [loopantennas] Re: Edginton QW Loop beacon-test on 160 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-24 05:50:41 UTC
From: William Young
Topic: 9508 Message: 9514

To Jim WB5WPA, Tonight(12/23/2012) just before 10:00 PM, CST I heard some of your tones, some of them at about S3 or so. I didn't have your entire message in front of me at the time, so I may have heard voice, but couldn't copy it. I have the details now and will try tomorrow evening. I am receiving you on an RX320D(TenTec) with a one foot square rotateable loop with two windings: one at about 50 Ohms driving the receiver and the other tuned and magnetically coupled to the first. My QTH is Harris County, Texas just slightly northwest of Houston. Bill Young WD5HOH
To: loopantennas@yahoogroups.com
From: jwin95@...
Date: Mon, 24 Dec 2012 05:14:24 +0000
Subject: [loopantennas] Re: Edginton QW Loop beacon-test on 160 Meters

Thanks for the report, Jim

I had a report from east of Alexandria in Louisiana about

an hour ago ... individual was using a Degen 1103 portable

and copying the voice and tones ... that distance was only

about 300 miles though compared to the trip up to Cheyenne

Wyoming!

Thanks again for the report.

Jim WB5WPA

--- In loopantennas@yahoogroups.com, "Jim Best" <james9194@...> wrote:

>

>

>

> FYI,

>

> I copied your propagation test on 2.000 Mhz here in Cheyenne

> Wyoming..It appeared to be the 100 watt tones

>

> were very weak at about S-2. However my antenna is 80/40 meter

> trap dipole, receiver is Kenwood TS-870.

>

> Voice transmissions were not readable at this QTH. Reported at

> 1945 MDT, 12/23/12.

>

> Good luck

>

> WU7 G Jim

>

>

>

> For the next couple of weeks, a test of a 160 meter Ben Edginton

> Quarter-Wave loop antenna will be underway.

>

> The frequency will be 1900 kHz LSB up until about 5:30 PM CST

> and then 2.0 MHz LSB after that until about 10 PM CST.

>

> The loop is 16' high x 40' long, stands vertically about 6' off

> the ground putting the highest part of the antenna about 22'

> above ground.

>

> The loop is oriented roughly N-S (actually about 8 deg E of N).

>

> Power level is 100 W max, with five transmitted tones varying

> from 100 Watts down to 1 Watt in 5 dB steps followed by voice ID.

>

> The transmit interval is every 2 minutes, with the beacon

> 'message' being about 30 secs in length.

>

> More details here as well as updates to the schedule:

> http://www.qrz.com/db/WB5WPA

>

> 73, Jim WB5WPA

>

9515. Re: Edginton QW Loop beacon-test on 160 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-24 17:20:17 UTC
From: wb5wpa
Topic: 9508 Message: 9515

Thank you for the report Bill. Nice to see an in-state report far to the south! (QTH here of course being North-Central Texas/DFW area.)

Interesting antenna you describe using too.

I have set up to transmit on 1900 kHz again for the day until about 6 PM this evening (there are nets that meet on 1900) and then will QSY to 2 MHz again.

It would be interesting, Bill, if you get a chance to compare the signal strengths from the group that meets on 1990 kHz (every night starting about 7 PM) and in particular, how my signal compares with the W5VYY station as he is only a couple miles to my east and he runs a full-wave horizontal loop up about 75 feet (contrasted with the beacon QW vertical 16'x40' loop) and the W5VYY station tuns full legal power (whereas the beacon is 100 W max).

Could make for a useful comparison, the cloud-warmer FWLoop vs the low-radiation-angle vertical tuned QWLoop ...

73, Jim WB5WPA

--- In loopantennas@yahoogroups.com, William Young <lpwjy@...> wrote:
>
>
> To Jim WB5WPA, Tonight(12/23/2012) just before 10:00 PM, CST I heard some of your tones, some of them at about S3 or so. I didn't have your entire message in front of me at the time, so I may have heard voice, but couldn't copy it. I have the details now and will try tomorrow evening. I am receiving you on an RX320D(TenTec) with a one foot square rotateable loop with two windings: one at about 50 Ohms driving the receiver and the other tuned and magnetically coupled to the first. My QTH is Harris County, Texas just slightly northwest of Houston. Bill Young WD5HOH
> To: loopantennas@yahoogroups.com
> From: jwin95@...
> Date: Mon, 24 Dec 2012 05:14:24 +0000
> Subject: [loopantennas] Re: Edginton QW Loop beacon-test on 160 Meters
>
>
>
> --- In loopantennas@yahoogroups.com, "Jim Best" <james9194@> wrote:
>
> >
> >
> >

> > For the next couple of weeks, a test of a 160 meter Ben Edginton
> > Quarter-Wave loop antenna will be underway.
>
> > The frequency will be 1900 kHz LSB up until about 6:00 PM CST
> > and then 2.0 MHz LSB after that until morning.
> >
> > The loop is 16' high x 40' long, stands vertically about 6' off
> > the ground putting the highest part of the antenna about 22'
> > above ground.
> >
> > The loop is oriented roughly N-S (actually about 8 deg E of N).
> >
> > Power level is 100 W max, with five transmitted tones varying
> > from 100 Watts down to 1 Watt in 5 dB steps followed by voice ID.
>
> > The transmit interval is every 2 minutes, with the beacon
> > 'message' being about 30 secs in length.
>
> > More details here as well as updates to the schedule:
> > http://www.qrz.com/db/WB5WPA
>
> >
>
> > 73, Jim WB5WPA
>

9516. RE: [loopantennas] Re: Edginton QW Loop beacon-test on 160 Meters

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-24 17:34:54 UTC
From: William Young
Topic: 9508 Message: 9516

Jim, OK, I will listen tonight and try to make the comparison. I was born in Sherman, Texas and lived in nearby Bonham until I was 9 years old in the spring of 1949. There was a ham across the street from us named McDougal(I think). 73 Bill Young WD5HOH

To: loopantennas@yahoogroups.com
From: jwin95@...
Date: Mon, 24 Dec 2012 17:20:17 +0000
Subject: [loopantennas] Re: Edginton QW Loop beacon-test on 160 Meters

Thank you for the report Bill. Nice to see an in-state

report far to the south! (QTH here of course being North-

Central Texas/DFW area.)

Interesting antenna you describe using too.

I have set up to transmit on 1900 kHz again for the day until

about 6 PM this evening (there are nets that meet on 1900) and

then will QSY to 2 MHz again.

It would be interesting, Bill, if you get a chance to compare

the signal strengths from the group that meets on 1990 kHz

(every night starting about 7 PM) and in particular, how my

signal compares with the W5VYY station as he is only a couple

miles to my east and he runs a full-wave horizontal loop up

about 75 feet (contrasted with the beacon QW vertical 16'x40'

loop) and the W5VYY station tuns full legal power (whereas the

beacon is 100 W max).

Could make for a useful comparison, the cloud-warmer FWLoop

vs the low-radiation-angle vertical tuned QWLoop ...

73, Jim WB5WPA

--- In loopantennas@yahoogroups.com, William Young <lpwjy@...> wrote:

>

>

> To Jim WB5WPA, Tonight(12/23/2012) just before 10:00 PM, CST I heard some of your tones, some of them at about S3 or so. I didn't have your entire message in front of me at the time, so I may have heard voice, but couldn't copy it. I have the details now and will try tomorrow evening. I am receiving you on an RX320D(TenTec) with a one foot square rotateable loop with two windings: one at about 50 Ohms driving the receiver and the other tuned and magnetically coupled to the first. My QTH is Harris County, Texas just slightly northwest of Houston. Bill Young WD5HOH

> To: loopantennas@yahoogroups.com

> From: jwin95@...

> Date: Mon, 24 Dec 2012 05:14:24 +0000

> Subject: [loopantennas] Re: Edginton QW Loop beacon-test on 160 Meters

>

>

>

> --- In loopantennas@yahoogroups.com, "Jim Best" <james9194@> wrote:

>

> >

> >

> > For the next couple of weeks, a test of a 160 meter Ben Edginton

> > Quarter-Wave loop antenna will be underway.

>

> > The frequency will be 1900 kHz LSB up until about 6:00 PM CST

> > and then 2.0 MHz LSB after that until morning.

> >

> > The loop is 16' high x 40' long, stands vertically about 6' off

> > the ground putting the highest part of the antenna about 22'

> > above ground.

> >

> > The loop is oriented roughly N-S (actually about 8 deg E of N).

> >

> > Power level is 100 W max, with five transmitted tones varying

> > from 100 Watts down to 1 Watt in 5 dB steps followed by voice ID.

>

> > The transmit interval is every 2 minutes, with the beacon

> > 'message' being about 30 secs in length.

>

> > More details here as well as updates to the schedule:

> > http://www.qrz.com/db/WB5WPA

>

> >

>

> > 73, Jim WB5WPA

>

9517. Loop diameter and frequency?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-26 14:02:27 UTC
From: Scott Ehrlich
Topic: 9517 Message: 9517

I am about to build a magnetic loop with soft copper coil and dual stracor capacitor for the secondary loop.
I plan to work 7 - 30 mhz qrp with a Yaesu FT 817ND.

The local hardware store has a 10 foot coil in different inner diameters - 1/4 inch, 1/2 inch, 3/8 inch, etc.

The antenna will be used indoors only, likely on the second floor.

I am wondering two major things -

Does the diameter of the secondary really matter between 3 feet in diameter and 4 feet?

Does the inner diameter of 1/4 inch, 1/2 inch, etc really matter? I'd be tempted to get the largest diameter they have in stock.

I have ordered the capacitor - I know I could make one, but I found one for $25 including shipping.

For the coupling loop, I plan to use some good commercial-quality catv coax (rg58?), stripping off the outer coat and braided shielding.

Answers to the 3 or 4 foot diameter loop and inner diameters would be appreciated.

The 3 foot would be easiest, as the length (circumference) needs to be 9.6 feet (correct?) and the package comes as 10 feet (circumference) anyway.

Thanks.

Scott, WY1Z

9518. Re: Loop diameter and frequency?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-26 18:10:46 UTC
From: James
Topic: 9517 Message: 9518

IIRC the circumference of your loop should be no more than 1/3 wavelength for your highest frequency, longer being better for the low end. I honestly don't remember where I got that from but it is stuck in my mind from a few years ago when I made a similar antenna for < 20W duty.

9519. Re: Loop diameter and frequency?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-26 18:14:18 UTC
From: James
Topic: 9517 Message: 9519

--- In loopantennas@yahoogroups.com, "James" <jlill@...> wrote:

This was easier to find than I imagined

http://www.antennex.com/preview/Dec03/Dec603/Loopantennas.htm

9520. Re: Loop diameter and frequency?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-26 18:18:08 UTC
From: James
Topic: 9517 Message: 9520

a "cookbook" of info here

http://www.alexloop.com/artigo13.html

9521. Re: [loopantennas] Re: Loop diameter and frequency?

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-26 21:49:47 UTC
From: John Popelish
Topic: 9517 Message: 9521

On 12/26/2012 01:14 PM, James wrote:
>
>
> --- In loopantennas@yahoogroups.com, "James" <jlill@...> wrote:
>
> This was easier to find than I imagined
>
> http://www.antennex.com/preview/Dec03/Dec603/Loopantennas.htm

I like the comment at the end about 3 D loops (not flat),
and their possibilities. Has anyone built a baseball seam loop?

--
Regards,

John Popelish

9522. Complementary Push-Pull Active Antenna Amplifiers

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-26 22:18:24 UTC
From: Chris Trask
Topic: 9522 Message: 9522

Some recent discussions about active monopole antennas gave me an incentive to polish off some ideas I had to further advance the state of the art, which resulted in a revision of the paper that I wrote some four years ago:

http://www.home.earthlink.net/~christrask/Paper007.html

Chris Trask
N7ZWY / WDX3HLB
http://www.home.earthlink.net/~christrask/

9523. Here is your W5VYY-WB5WPA comparison shot

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-27 01:44:45 UTC
From: Sam Morgan
Topic: 9523 Message: 9523
Attachments: 1 described; binary payloads are missing from this source WARC

Evening Jim
I just got a shot of your W5VYY & Edington Loop signal comparison.

the blue line shows the signal peaks
the yellow was the instant I took the snap shot
the Big signal on the left is W5VYY
and the peaks right are the tones from your Edington loop

the bottom dotted yellow horizontal line is the S6 level
the purple side is the 2.8khz bandwidth of VFO B
and the green side is the 2.8khz bandwidth side of VFO B

again my receive conditions are:
my receiver is a K3
my antenna is a 7' tall Hi-Q 6/160 screwdriver loop at 20'
with 16 radials each 13' long

QRZ says you are located:
Bearing 62.3? ENE (from K5OAI)
Distance 252.5 mi (406.4 km)

hope this helps you see the comparison you were asking about the other day

not sure the attachment will come through to the list, but I'll give it a shot
--

GB & 73
K5OAI
Sam Morgan

9524. Re: [loopantennas] Here is your W5VYY-WB5WPA comparison shot [1 Attachment]

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-27 01:54:20 UTC
From: Sam Morgan
Topic: 9523 Message: 9524

> the bottom dotted yellow horizontal line is the S6 level
> the purple side is the 2.8khz bandwidth of VFO B
> and the green side is the 2.8khz bandwidth side of VFO B
correction, make that:
and the green side is the 2.8khz bandwidth side of VFO *A*

On 12/26/2012 7:44 PM, Sam Morgan wrote:
> Evening Jim
> I just got a shot of your W5VYY & Edington Loop signal comparison.
>
> the blue line shows the signal peaks
> the yellow was the instant I took the snap shot
> the Big signal on the left is W5VYY
> and the peaks right are the tones from your Edington loop
>
> the bottom dotted yellow horizontal line is the S6 level
> the purple side is the 2.8khz bandwidth of VFO B
> and the green side is the 2.8khz bandwidth side of VFO B
>
> again my receive conditions are:
> my receiver is a K3
> my antenna is a 7' tall Hi-Q 6/160 screwdriver loop at 20'
> with 16 radials each 13' long
>
> QRZ says you are located:
> Bearing 62.3? ENE (from K5OAI)
> Distance 252.5 mi (406.4 km)
>
> hope this helps you see the comparison you were asking about the other day
>
> not sure the attachment will come through to the list, but I'll give it a shot
>

--

GB & 73
K5OAI
Sam Morgan

9525. Introducing myself

Yahoo group: loopantennas (2008 — 2012)
Date: 2012-12-27 22:10:48 UTC
From: pu2clr
Topic: 9525 Message: 9525

Hello everybody.
My name is Ricardo.
After almost 30 years away from electronics I returned to this hobby.
I am a ham radio and also I like DX and SWL.

I ended up developing some projects about Antenna Magnetic Loop and Antenna Tuner.
So, I would like to share with you some videos on Youtube posted by me about my last projects:

Automatic Antenna Tuner for QRP controlled by Android and Arduino - Part 2
http://youtu.be/cZjbZRGTyVc

Automatic Antenna Tuner for QRP with Android and Arduino - Part 1
http://youtu.be/55bQ9xVWzuM

Magnetic Loop Antenna and infrared controlled by Arduino
http://youtu.be/b3hUpQvO38k

Best regards.
Thanks.